

**100<sup>th</sup>**  
**ANNUAL REPORT**  
**2022-2023**

**PART-II**



**University of Delhi**

## CONTENTS

<b>DEPARTMENTS.....</b>	<b>1</b>
<b>Faculty of Applied Social Science and Humanities.....</b>	<b>1</b>
Finance and Business Economics .....	1
<b>Faculty of Arts.....</b>	<b>6</b>
Arabic.....	6
Buddhist Studies .....	9
English .....	10
Germanic and Romance Studies .....	16
Hindi .....	17
Library and Information Science .....	19
Linguistics.....	23
Modern Indian Languages and Literary Studies .....	26
Persian.....	30
Philosophy .....	31
Psychology.....	33
Punjabi .....	36
Sanskrit .....	38
Slavonic & Finno-Ugrian Studies.....	45
Urdu .....	47
<b>Faculty of Ayurvedic &amp; Unani Medicine.....</b>	<b>53</b>
All India Institute of Ayurveda .....	53
Ayurvedic & Unani Tibbia College & Hospital .....	56
<b>Faculty of Commerce and Business.....</b>	<b>59</b>
Department of Commerce.....	59
<b>Faculty of Education.....</b>	<b>65</b>
Department of Education .....	65
<b>Faculty of Homoeopathic Medicine.....</b>	<b>72</b>
Nehru Homeopathic Medical College & Hospital .....	72
<b>Faculty of Inter-Disciplinary and Applied Sciences .....</b>	<b>74</b>
Biochemistry .....	74
Biophysics.....	79
Electronic Science .....	81
Genetics .....	85

Microbiology.....	88
Physical Education & Sports Sciences.....	92
Plant Molecular Biology .....	93
<b>Faculty of Law.....</b>	<b>102</b>
Campus Law Centre .....	103
Law Centre-I.....	108
Law Centre-II.....	110
<b>Faculty of Management Studies.....</b>	<b>114</b>
<b>Faculty of Mathematical Sciences .....</b>	<b>119</b>
Computer Science .....	119
Mathematics.....	122
Operational Research.....	133
Statistics.....	137
<b>Faculty of Medical Sciences .....</b>	<b>141</b>
Anaesthesiology & Critical Care (MAMC).....	141
Anatomy (MAMC) .....	143
Biochemistry (LHMC) .....	145
Biochemistry (MAMC) .....	148
Biochemistry (UCMS) .....	150
Community Medicine (MAMC).....	152
Dental Sciences (MAMC).....	153
Dental Sciences (UCMS).....	158
Dermatology, Venereology & Leprosy (MAMC) .....	159
Forensic Medicine (MAMC) .....	161
Medicine (UCMS) .....	163
Microbiology (VPCI).....	164
Ophthalmology (LHMC) .....	167
Ophthalmology (MAMC) .....	169
Orthopaedics (LHMC) .....	172
Orthopaedics (UCMS) .....	173
Paediatrics (MAMC) .....	175
Paediatrics (UCMS) .....	176
Pathology (UCMS) .....	180
Pharmacology (UCMS) .....	183
Pharmacology (MAMC) .....	184

Physiology (LHMC) .....	187
Physiology (MAMC) .....	189
Physiology (UCMS) .....	191
Physiology (VPCI) .....	193
Psychiatry (MAMC) .....	194
Pulmonary Medicine (VPCI) .....	196
Radiology, Radiotherapy, Radiodiagnosis & Radiation Medicine (LHMC).....	199
Surgery (MAMC) .....	200
Surgery (UCMS) .....	202
University College of Medical Sciences (UCMS).....	203
V.P. Chest Institute .....	207
<b>Faculty of Music and Fine Arts .....</b>	<b>214</b>
Department of Music .....	214
<b>Faculty of Sciences .....</b>	<b>218</b>
Anthropology .....	218
Botany .....	226
Chemistry .....	241
Environmental Studies .....	259
Geology .....	266
Physics and Astrophysics.....	274
Zoology .....	300
<b>Faculty of Social Sciences.....</b>	<b>305</b>
Adult, Continuing Education and Extension.....	305
African Studies.....	306
East Asian Studies.....	309
Economics.....	311
Geography .....	317
History .....	319
Political Science.....	326
Sociology .....	331
Social Work .....	333
<b>ACADEMIC CENTRES .....</b>	<b>344</b>
Agricultural Economics Research Centre .....	344
Centre for Detector and Related Software Technology .....	345
Centre for Entrepreneurship and Career Oriented Program.....	347



Centre for Environmental Management of Degraded Ecosystems .....	348
Centre for Genetic Manipulation of Crop Plants .....	350
Centre for Global Studies.....	351
Centre for Innovation in Infectious Disease Research, Education and Training .....	353
Centre for Inter-Disciplinary Studies for Mountain & Hill Environment.....	355
Centre for Professional Development in Higher Education.....	356
Cluster Innovation Centre .....	359
Delhi School of Journalism.....	362
Delhi School for Skill Enhancement & Entrepreneurship Development .....	364
Delhi School of Translation Affairs .....	367
Dr. B. R. Ambedkar Centre for Biomedical Research.....	368
Institute of Cyber Security and Law .....	374
Institute of Informatics and Communication .....	375
Institute of Lifelong Learning .....	376
Inter-disciplinary Centre For Plant Genomics .....	376
University Science Instrumentation Centre .....	379
Women's Studies and Development Centre for Advances Studies .....	379
<b>COLLEGES .....</b>	<b>381</b>
Acharya Narendra Dev College .....	381
Aditi Mahavidyalaya.....	389
Ahilya Bai College of Nursing.....	393
Amar Jyoti Institute of Physiotherapy .....	395
Aryabhatta College .....	399
Atma Ram Sanatan Dharma College .....	405
Bhagini Nivedita College.....	410
Bharati College .....	413
Bhaskaracharya College of Applied Sciences .....	418
College of Art .....	424
College of Nursing, Army Hospital (Research and Referral) .....	425
College of Vocational Studies .....	429
Daulat Ram College.....	432
Delhi College of Arts & Commerce .....	440
Deen Dayal Upadhyaya College .....	446
Deshbandhu College .....	453
Dr. Bhim Rao Ambedkar College.....	458

Durgabai Deshmukh College of Special Education (Visual Impairment) .....	462
Dyal Singh College .....	465
Dyal Singh Evening College.....	471
Florence Nightingale College of Nursing .....	474
Gargi College .....	475
Hansraj College.....	483
Hindu College .....	490
Holy Family College of Nursing.....	496
Indira Gandhi Institute of Physical Education & Sports Sciences .....	498
Indraprastha College for Women .....	501
Institute of Home Economics.....	507
Institute of Human Behaviour & Allied Sciences.....	514
Janki Devi Memorial College .....	519
Jesus and Mary College .....	526
Kalindi College .....	532
Kamala Nehru College.....	537
Keshav Mahavidyalaya .....	542
Kirori Mal College.....	547
Lady Irwin College .....	550
Lady Shri Ram College for Women .....	555
Lakshmibai College .....	565
Maharaja Agrasen College.....	569
Maharshi Valmiki College of Education .....	574
Maitreyi College .....	576
Mata Sundri College For Women .....	582
Miranda House.....	588
Motilal Nehru College .....	597
Motilal Nehru College (Evening) .....	600
Pandit Deen Dayal Upadhyaya National Institute for persons with Physical disabilities.....	605
P.G.D.A.V. College .....	608
P.G.D.A.V. College (Evening) .....	612
Rajdhani College.....	618
Rajkumari Amrit Kaur College of Nursing.....	622
Ramanujan College.....	625
Ramjas College .....	631

Ram Lal Anand College.....	638
Satyawati College .....	645
Satyawati College (Evening) .....	649
School of Open Learning .....	651
Shaheed Bhagat Singh College .....	653
Shaheed Bhagat Singh College (Evening) .....	658
Shaheed Rajguru College of Applied Sciences For Women .....	660
Shaheed Sukhdev College of Business Studies .....	664
Shivaji College.....	669
Shri Ram College of Commerce .....	675
Shyam Lal College.....	678
Shyam Lal College (Evening) .....	686
Shyama Prasad Mukherji College for Women .....	688
Sri Aurobindo College .....	693
Sri Aurobindo College (Evening) .....	704
Sri Guru Gobind Singh College of Commerce .....	708
Sri Guru Nanak Dev Khalsa College .....	714
Sri Guru Teg Bahadur Khalsa College .....	716
Sri Venkateswara College.....	723
St. Stephen's College .....	729
Swami Shraddhanand College .....	735
Vivekananda College.....	737
Zakir Husain Delhi College .....	743
Zakir Husain Delhi College (Evening) .....	747
<b>GENERAL FACILITIES.....</b>	<b>752</b>
Alumni Affairs .....	752
Culture Council .....	752
Delhi University Computer Centre .....	754
Delhi University Library System .....	759
Delhi University Social Centre Co-Ed School.....	764
Delhi University Women's Association .....	765
Directorate of Hindi Medium Implementation .....	766
Equal Opportunity Cell .....	766
Foreign Students Registry .....	768
Gandhi Bhawan.....	768

Garden Committee .....	769
International Guest House .....	770
National Cadet Corps .....	771
National Service Scheme .....	772
Non-collegiate Women's Education Board .....	773
Students' Welfare Office .....	774
University Guest House .....	774
World University Service Health Centre .....	775
<b>UNIVERSITY HOSTELS/HALLS .....</b>	<b>777</b>
Ambedkar-Ganguly Students House for Women .....	777
Aravali Post Graduate Men's Hostel .....	778
Central Institute of Education Hostel.....	778
D.S. Kothari Hostel.....	780
Geetanjali Hostel.....	781
Gwyer Hall.....	782
International Students's House .....	784
International Student's House for Women.....	787
Jubilee Hall .....	788
Mansarovar Hostel .....	789
Meghdoot Hostel.....	790
North Eastern Student's House for Women.....	791
Post Graduate Men's Hostel .....	792
Rajiv Gandhi Hostel for Girls .....	793
Saramati Post Graduate Men's Hostel .....	794
Social Work Hostel.....	795
Under Graduate Hostel for Girls.....	796
University Hostel for Women.....	797
V.K.R.V. Rao Hostel .....	798
WUS University Hostel .....	800
<b>Annual Accounts .....</b>	<b>801</b>

## DEPARTMENTS

### FACULTY OF APPLIED SOCIAL SCIENCE AND HUMANITIES

#### Finance and Business Economics

##### Brief History

The Department of Finance and Business Economics was established in 2019 by merging two Departments, i.e., Department of Business Economics and Department of Financial Studies. The Department offers two flagship MBA programmes [MBA in Business Economics and MBA in Finance], two Ph.D programmes (Ph.D in Business Economics and Ph.D in Finance) as well as three Undergraduate courses running in colleges of the University of Delhi, viz., BA(Hons) Business Economics, Bachelor of Management Sciences [BMS] and BBA in Finance and Investment Analysis [BBA(FIA)].

Founded in the year 1973, the University of Delhi's Department of Business Economics pioneered the Master's Program in Business Economics, MBA (Business Economics) (erstwhile Masters in Business Economics). The programme combines the fundamentals of economic analysis with the practical aspects of policy and the business world.

The MBA (Finance) programme, earlier known as Master of Finance and Control, launched by the erstwhile Department of Financial Studies way back in 1987. Based on the lines of MS (Finance) offered internationally, MBA (Finance) was one of a kind niche course in finance, designed and developed to cater to the needs of the fast-growing corporate world. Since its inception, the Department has been grooming financial professionals who are well – equipped to serve the dynamic Indian finance industry.

##### Major Activities and Achievements

Department's flagship programme of MBA (Finance) (erstwhile Master of Finance and Control (MFC) and MBA (Financial Management)), is a niche course in finance designed and developed to cater to the ever – changing needs of the corporate world. The Department was recently welcomed into the CFA University Affiliation Program. Only academic institutions that embed a significant portion of the CFA Program Candidate Body of Knowledge (CBOK) including the Code of Ethics and Standards of Professional Conduct—into their curriculum are eligible to participate in the University Affiliation Program.

The Department was ranked 26<sup>th</sup> in IIRF (Indian Institutional Ranking Framework) in the best government B-schools across India with its illustrious history of 50 years.

The Department organised the Annual Convention of MBA (Finance) Programme on October 15, 2022. The Theme of this year Convention was, “Financial Services & FinTech - The Road Ahead”.

##### Publications

##### Research Articles

Sehgal, S., Rakhyani, S., & Deisting, F. (2022). Does betting against beta strategy work in major Asian Markets. *Pacific-Basin Finance Journal*, 75

Sharma, G., Sehgal, S., & Mishra, A., (2022). Does Financial Integration Impact Performance of Equity Anomalies?, *Cogent Economics & Finance*, 10(1)

Sehgal, S., Vashshit, V., & Jain, T. (2022). Bond Rating Determinants and Modelling: Evidence from India. *Managerial Finance*, 49(3), 529-554.

Sehgal, S., Mishra, R.K., & Jaiswal, A. (2022). On the Macroeconomic Determinants of Financial Distress. *Indian Economic Review*, 56(2), 435-461.

Saini, S. & Sehgal, S. (2022). Monetary Policy and Stock Market Interaction: International Evidence. *Indian Economic Journal*, 71(3), 612-634.

Nashier, T., and Gupta, A. (2023). Ownership Concentration and Firm Performance in India. *Global Business Review*, 24(2), 353-370.

Maggo, V., and Gupta, Y. (2023). A Quantitative Study on Analysing the Determinants of Out-of-School in Urban India. *International Journal of Research - GRANTHAALAYAH*, 11(1), 144-152.

Sunil Kumar. (2022). Tariff commitments under the RCEP Agreement and India's Issue. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 13(5), 53-60.

Sharma, C., and Mishra, R.K. (2022). On the Good and Bad of Natural Resource, Corruption and Economic Growth Nexus, *Environmental and Resource Economics*, 82(4), 889-922.

Chaudhary, A., Sahoo, S., & Dawar, V. (2022). Inside the black box of institutional investors in an emerging market: the role of sell side analyst outputs. *Qualitative Research in Financial Markets*, 14(5), 637-656.

Sinha, A., Sedai, A.K., Nepal, R., and Kumar, A. (2022). Are Autocracies bad for the environment? Global Evidence from two centuries of data. *The Energy Journal*, 44(2), 47-77.

Sree Lakshmi, R., Sinha, A., and Mandal, S.K. (2022). Covid 19 related uncertainty, investors sentiment and stock return in India, *Economic and Political Weekly*, 57(35), 53-61.

Thukral, S., & Singh, M. (2023). An exploratory study on producer's perspective towards E-waste management: A case of emerging markets: Cleaner Waste System. *Elsevier*, 5, 155.

### **Books/Chapter in Books**

Singh, Saurabh. (2023). Being Realistic with the Digital Marketing Analytics: Conversion Optimization Rate, (pp.179-198). *Uttar Pradesh: Blue Rose Publications*.

### **Seminars/Conferences organized by the Department**

Mr. Himanshu Gawri Mr. Khagesh Batra Mr. Prateek Jain Mr. Chaianya Shashwat Ms. Sonali Hansda Mr. Anuj Rahul Joshi, Corporate, N.A., Genesis 2022, 20-08-2022

Mr. Hemraj S. Joshi, Chief Manager -Investments, Max Life Insurance Company Ltd, N.A., Philomathes: Awareness Session on Investments, 03-09-2022

Mr. Naman Taneja, Key Accounts Manager, Signify, N.A., Philomathes: Financial Aspects of Product Development, 24-09-2022

Mr. Yash Arora, Managing Partner, NexMile Professionals, N.A., Philomathes: Leaders are born not developed ... a myth, 13-10-2022

Mr. Sandeep Kumar Ms. Gunjeet Kaur Mr. Sumit Bhatia Mr. Navendu Shekhar Ms. Nidhi Vinod Mr. Tushar Sachdeva Mr. Amit Kataria Ms. Sugandha Jain Ms. Kalpana Sachdeva Mr. Siddhartha Srivastava Ms. Sonal Arora Mr. Ramit Bedi Ms. Tina Kalra Ms. Jyoti Bhatt, Corporate, N.A., Thrive'22: HR Summit, 15-10-2022

Mr. Shantanu Dhar Dr. Priti Sambhalwal Ms. Ruchi Dhawan Sharma Mr. Rakesh Sinha Dr. Ashok Kumar Sangwan Ms. Roshni Chhabra Mr. Rajiv Niathani Mr. Pranav Sinha Mr. Rishabh Chopra, Corporate, N.A., HR Conclave, 19-11-2022

Mr. Nishal Joseph Mr. Fela Chawngthu Mr. Navdeep Kumar Ms. Mitali Lambah Ms. Maitreyi Ganguly Mr. Sanjay Thawakar Mr. Amogh Gupta Mr. Rohit Chaddha Ms. Bhavya Sud Mr. Gautam Bahri Mr. Prateek Jain, Corporate, N.A., Imprints 2022, 05-11-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Amitabh Gupta: Market Reaction to Appointment of Women Directors on Boards of Indian Companies with Faceezah Peerbhai presented in World Finance Banking Symposium, Miami, USA, December 16-17, 2022.

Dr. Saurabh Singh: A research paper titled – “A Study On Disruptive Financial Technology: Insights From Bibliometric Analysis Of Fintech Literature” presented in XVIII International Conference on "Business Leadership in VUCA World: Driving Growth Through Effective Integration of People, Technology and The Environment"(17-18 Feb 2023).

Organised One Week Workshop on Data Science (Python) at Shaheed Bhagat Singh College, University of Delhi (24th Feb – 2nd Mar 2023)

Dr. Sonal Thukral: Presented a paper titled “Foreign Market Entry Modes of Family Firms: A Review and Research Agenda” at the SGH Warsaw School of Economics organised by the Academy of International Business (AIB) on the theme “International Business Resilience under Global Disruptions” in Warsaw, Poland on July 5-9, 2023

Lectures/Resource Person: Co-chaired a session in the International Virtual Conference on ‘Digitalization: A Move Towards Economic Growth’ conference organised by Department of Commerce, Dyal Singh College, Kurukshetra University on April 21st 2023

### **National/International MoUs Signed**

Memorandum of Understanding (MoU) was signed between Faculty of Applied Social Sciences and Humanities (FASSH). University of Delhi and Institute for Studies in Industrial Development, New Delhi on November 24, 2022, to promote collaboration between parties for research, compilation and dissemination of knowledge in the field of business economics, finance and issues related to industrial development. The collaboration will facilitate research programmes, including for doctoral research in the

fields of Business Economics, Finance and Industrial Development. As the cooperation develops, it is envisaged that collaborative activities may be extended to other areas.

### **Placement Details (Number and percentage of students placed)**

MBA (Finance) - 2022

Final Placements 37 placed out of 49 (76%)

11 companies visited for campus recruitment

Summer Placements - 47 placed out of 48 (98%)

24 companies visited for campus recruitment

MBA (Business Economics) - 2022

Final Placements 68 placed out of 70 (97%)

19 companies visited for campus recruitment

Summer Placements - 46 placed out of 79 (58%)

17 companies visited for campus recruitment.

### **Extension and Outreach Activities**

#### **Tree Plantation**

The Department of Finance and Business Economics conducted a Tree Plantation Event in South Campus in association with Lions Club, Delhi on August 20, 2022. Prof. Sanjay Sehgal, Head of the Department, Prof. Girdhar Kumar Pandey, Chairman, Garden Committee, South Campus, Mr. G.L. Musafir, President, Lions Club, Mr. V. Swaminathan, Secretary, Lions Club and Mr. Harish Arora, Treasurer, Lions Club, Mr. Navnish Jain, Project Chairperson, and Mr. Aashish Jain, Project Coordinator planted various varieties of saplings at South Campus.

#### **Yoga Day**

The Yoga Day was celebrated in the Department of Finance and Business Economics, University of Delhi South Campus on June 21, 2022 at 11.00 a.m. Faculty Members and non-teaching staff of the Department participated in the Yoga Session. Breathing exercises like, pranayam like, kalapalbhati, anulomvilom, Bhastrika and Bhramari were performed by the participants. The participants also performed yogasanas like, surya namaskar, tadasana, vrikshasana, adha mukho savasana, trikonasana, naukasana, bhujangasana, etc.

#### **Wetland Day Celebration**

On the occasion of World Wetland Day, Prof. Yamini Gupta of the Department of Finance and Business Economics participated in the Wetland Day celebrated at Yamuna Biodiversity Park in Delhi on February 2, 2023 along with 53 students of MBA (Business Economics) and Dr. Sunil Kumar. The theme of the Event was "Time for Wetland Restoration". Experts from educational institutions, industrialists, nature lovers and about 300 participants from various institutions such as Delhi University, Colleges of Delhi University and other educational institutions participated in the event. Prof. Yamini Gupta highlighted the magnitude of the value of ecosystem services generated by wetlands (\$47 trillion) in the context of the \$5 trillion economy India is hoping to become by 2023-24.

### **Faculty Strength: 15**



**Number of Ph.D. Degrees Awarded**

Ph.D. (Finance): 4 Ph.D. (Business Economics): 2

**Other Significant Information**

Research work on Ecological Benefits of Aravali Biodiversity Park

A study by Prof. Yamini Gupta has found that more than 2,00,000 fully grown trees (15 years and older) at Delhi Development Authority's Aravalli Biodiversity Park in Vasant Kunj have so far been able to store around 9,107 tonnes of CO<sub>2</sub> – worth Rs.12.35 crore. The study assessed the carbon sequestration capacity of trees – the process of removal and storing atmospheric carbon dioxide.

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## **FACULTY OF ARTS**

### **Arabic**

#### **Brief History**

Dating back to 1922, the Department of Arabic is one of the oldest departments at the University of Delhi. Initially located at St. Stephen College, it later moved to the Arts Faculty Building. Renowned scholars such as Shamsul Ulama Maulana Abdur Rahman and Maulana Saeed Ahmad Akberabadi contributed significantly to the prestige of the department. The department, instrumental in promoting Indo-Arabic literature, has produced distinguished scholars and received recognition, with alumni earning the President's Certificate of Honor in Arabic.

#### **Major Activities and Achievements**

The department organized a One-day Scholars' National Seminar on "Arabic Studies: Indo- Arab culture, Language & literature" on 22nd December, 2022.

A Foreign Delegate a Jordanian Professor Dr. Naji al-Qbailat, Director, Centre for languages, Al-Balqa Applied University, Amman, Jordan visited the Department to strengthen bilateral relation between University of Delhi and Al-Balqa Applied University, Amman, Jordan, by MoU' on 21st January, 2023.

K. A. Fariq Memorial Lecture-15, on "Contribution of Awadh to Arabic Language" on 15th March, 2023.

The Department organized a Two-day International Seminar "Indian Culture and Civilization in the writings of Arabs and Non-Arabs" on 15-16 March 2023.

"RSMPPS" Research Scholars Monthly paper presentation programmes, organized by the Department on regular basis on every last Thursday of the month "Paper presentations on the scholars' particular topics" during April 2022-March 2023.

Moreover three extension invited Lectures were conducted during this academic year as follows:

"Trends and movements of Modern Arabic Literature" delivered by Prof. Mujeebur Rahman JNU.

"Modern Arabic poetry" delivered by Prof. Fauzan Ahmad J.M.I.

"Translation (Arabic-English) Methods & trends" delivered by Prof. Habibullah Khan J.M.I.

The three senior faculties of the department were felicitated and honored with awards by Ibn Sina Academy Aligarh.

#### **Honours/Distinctions**

The following three senior faculties of the Department were felicitated and honored with awards by Ibn Sina Academy Aligarh:

Prof. Nauman Khan, Prof. Hasanain Akhtar, Prof. Naimul Hasan

## **Publications**

### **Research Articles**

Akhtar, S. H., & Jamiah-Allahbad, I. (2022). Wahdah-al-Ummah. October, ISSN 2348-5057.

Akhtar, S. H. (2022-2023). George Judah Aur Unki Taaleef “Al-Imam Ali, Sautul Adalah-al-Insamiah”. Salooni, December-February, ISSN 2348-2567.

Hasan, N. (2022). Role of Dictionaries in foundation of personality of scholars. Majallah al-Dirasat al-Arabia: Journal of Arabic Studies, An Annual Research Journal of Arabic Language & Literature, ISSN 2231-1912.

Akhtar, M. (2021-2022). Mohammad Husain Haikl Ki Tahriron Mein Hindustani Tahzeeb Wa Thaqafat Ki Akkasi. Shama-e-Hayat, ISSN 2395-1230.

### **Books/Chapter in Books**

Akhtar, M. (2022). Abdul Hameed Judah al-sahair wa Ishamatuhu fi al-Qissah al-arabiah. Markazi Publication. ISBN 978-93-91105-57-0.

Akhtar, M. (2022). Maaz Suma-tul-Qiyam fi Rewayat Abdul Hameed Judah al-Sahair. Markazi Publication. ISBN 978-93-91105-65-5.

Akhtar, M. (2022). Maulana Manazir Ahsan Geelani Apni Nigareshaat ke Aaiene Mein. In Maulana Manazir Ahsan Geelani, Hayaat, Khidmaat Aur Afkaar. Institute of Objective Studies. ISBN 978-93-84973-38-4.

Akram, M. (2022). International Standard Terminologies on Unani Medicine. World Health Organization. ISBN 978-92-4-006495-9 (electronic version), 978-92-4-006496-6 (print version).

### **Research Projects**

Ayub, M. (2021). Hindustan Mein Arabi Sahafal (Al-Sihafa Al-Arabic Fial-Hind) ka Urdu Tarjuma. National Council for Promotion of Urdu Language (NCPUL). Duration: 24 months. Budget: ₹1,05,000.

### **Seminars/Conferences organized by the Department**

The Department organized a Two-day International Seminar “Indian Culture and Civilization in the writings of Arabs and Non-Arabs” on 15-16 March 2023.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Hasnain Akhtar, participated in a National Seminar held on 21-22 December in the Department Of Arabic, JMI on the topic "Different aspects of research in Arabic".

Prof. Naimul Hasan, Two-day International Seminar on the topic: “India Culture and Civilization in the writings of Arabs and Non-Arabs”, Organized by the Department of Arabic, University of Delhi, on 15-16 March 2023.

Dr. Mujeeb Akhtar, Participated and Presented a Paper titled: “Iza-atu-umoom-al-Hind wa Dauruha fi Irsa-e-Daa'im-al-Sehafah-al-Arabiah fi-al-Hind” In a Two-Day National Seminar Organized By The Department of Arabic, University of Mumbai held on March 1-2, 2023.

Dr. Mohammad Akram, Participated & Presented a paper on : “Ilmul Ma’ajim Ladal Arab’ in a Two-day International Conference Organized by centre for Arabic & African Studies J.N.U on 29-30 November 2023.

Dr. Mohammad Akram, Participated & presented a paper titled: Mashahid fi Tuhfatinnuzzar um Hazaratilhind wa Thaqafatiha in an International Seminar Organized by Department of Arabic University of Delhi 15-16 March 2023.

Dr. Mohammad Akram, Participated in AAINA: Discussion of Prasar Bharati All India Radio Doordarshan Broadcast on 17 November 2022. 10:00 pm (Recorded on 9th Nov 2022) (30 Minutes).

Dr. Mohammad Akram, Participated in AAINA: Discussion of Prasar Bharati All India Radio Doordarshan Broadcast on 9 March 2023. 10:00 pm (Recorded on 7th March 2023) (30 Minutes).

Dr. Mohammad Akram, Delivered a Lecture as a resource person in CME programme held in Department of Kulliyat Faculty of Medicine A.M.U. Aligarh (U.P) on 31 May 2022. Delivered a lecture on the topic “Life of Prophet Muhammad” in an International seerah programme organized by Al-Falah Foundation New York, on 23 October 2022, In New Delhi.

Dr. Asghar Mahmood, presented a paper on the topic, “رواية عمر يظهر في القدس تصوير عن أدب إسلامي” in Two-day International Seminar on “Journey of Arabic Literature: Development of its Different Genres through the ages” organized by Center for Arabic & African Studies JNU on 29-30 Nov, 2022.

Dr. Asghar Mahmood delivered and invited Lecture on the topic “Importance of Learning Arabic Language.” In the Department of Arabic, Govt. degree college Thanna Mandi, University of Jammu J&K.

**Faculty Strength: 9**

**Number of Ph.D. Degrees Awarded: 4**

**Number of M.Phil. Degrees Awarded: 8**

**Other Significant Information:**

launch an online/offline Arabic Journal/ magazine.

Organize an International Seminar on contribution of DU Alumnae in promotion of Arabic Language & Literature.

Organize Fariq Memorial Lecture in March, 2024.

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## **Buddhist Studies**

### **Brief History**

Established in 1957 by the Government of India under the supervision of the Department of Philosophy, the Department of Buddhist Studies gained independence in 1962, functioning as a full-fledged department at the University of Delhi. In 1989, it received Department Special Assistance (DSA). Expanding its academic scope in 2006, the department inaugurated the Center for Advanced Studies.

### **Major Activities and Achievements**

Center for Advanced Studies and E- Pathshala Programs.

### **Honours/Distinctions**

A faculty in the department has been presented - Presidential Award by President of India 2018 and Honoured as Young Pali scholar by President of India 2016.

### **Publications**

#### **Research Articles**

Sharma, N. (2022). Vaishvik Sandharbh main Mathura Boudh Murtikala: Ek Sanskritik Dharohar. Nagfaani, 18(12), 22-24.

Sharma, N. (2022). Mathura Janapada Ka Boudh Itihass. Shodh Ritu, 20(5), 23-24.

Sharma, N. (2022). Nari Asmita Ke Vivid Aayam: Etihassik Perpaksheye. Nagfaani, 24(7), 43-67. S

Sharma, N. (2022). Application of Applied Buddhism and Its Impact on Personal Daily Life. Shodh Ritu.

Sharma, N. (2022). Boudh Dharm Darshan. Shodh Ritu.

Sangai, G. (2022). Samatha and Vipassana Meditation: Its Importance in Buddhism and Human Well-being. Worldwide International Interdisciplinary Research Journal.

Susmita. (2022). Relevance of Buddhism in the Age of Globalization. Global Thought, 24, 154-157.

Susmita. (2022). Pali Vangmaya Mein Prayukta Theravada Avam Bibhajjayavad Shobdon Ke Tatparya Ka Anusheelan. Dharmdoot, 88.

#### **Books/Chapter in Books**

Sharma, N. (2023). Sambodhi. Mahaboudhi Society. ISBN 978-93-93-9329105-09.

Susmita. (2023). Dashbodhisattupattikatha. Nav Nalanda Mahavihaar. ISBN 978-93-83205-53-0.

#### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr. Nirja Sharma, attended an International Seminar 21-22 January 2023 at Malaysia Organized by University of Malaya, Malaysia & N.S C.B, Indian Cultural Center, High Commission of India presented paper Malaysia m boudh sanskriti : Ek Addhyan.

Dr. Nirja Sharma key note speaker in two days national seminar at S.D. College, 20-21 August 2022 on the occasion Azadi ka Amrit Mahotsava by Uttar Pradesh Bhasha Sansthan, presented paper on the topic "1857 ke Sangram main patrakarita ki bhoomika'.

Dr. Nirja Sharma Attended 10 Aks young scholar's an International Seminar 1st & 2nd July 2022 on "Emergening Trends in Korean Studies in India : Dynamism and Diversification" and preented paper onthe topic "Role of Buddhism to Unification of Korea" organized by centre for Korean studies, school of language, literature and culture studies, Jawaharlal Nehru University, New Delhi, India.

Dr. Nirja Sharma chaired a session in the International Conference on the topic on "Relevance of Buddhism in the contemporary World" on 24-25th March, 2022 at Satyawati College (Eve.) Organized by Department of Buddhist Studies, University of Delhi & IQAC.

Dr. Nirja Sharma attended in the International Conference on the topic on "Relevance of Buddhism in the contemporary World" on 24-25th March, 2022 at Satyawati College (Eve.) Organized by Department of Buddhist Studies, University of Delhi & IQAC.

Dr. Galdhan Sangai, Special Lecture on the topic 'Role of Indian Padmasambhava in Dissemination of Buddhism in Tibet in national seminar, Aryabhata College 13-14, December 2022.

Dr. Susmita, presented paper on the topic "Relevance of Buddhism to Alleviate Global Ecological Problems", in the Seminar Buddhism and Environmental Crisis in the age of Globalization, India International Centre, New Delhi, 19th March 2023.

**Placement Details (Number and percentage of students placed): 26.**

**Faculty Strength: 12**

**Number of Ph.D. Degrees Awarded: 26**

**Number of M.Phil. Degrees Awarded: 6**

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## **English**

### **Brief History**

Established in the same year as the University of Delhi, in 1922, the Department of English offers degrees at the MA and PhD levels. The MPhil program, which was previously offered, was discontinued across the university in 2022. The department is actively involved in overseeing undergraduate teaching at the 79 affiliated Colleges. Since 1970, it has been operational from two campuses: the main campus at the Arts Faculty, North Delhi, and the South Campus, Dhaula Kuan, South Delhi. Additionally, the Department supervises the MA (English) Program at the Non-Collegiate Women's Education Board. Intensive mentoring is provided to students both within and beyond the classroom through a diverse range of forums.

The department's calendar is enriched with ongoing lectures, film screenings, symposia conference, and colloquia on multiple themes.

### **Major Activities and Achievements**

In 2012, the Department of English, University of Delhi, achieved global recognition, being ranked among the top 100 English departments worldwide by the QS World University rankings—the only one from India in this category. A constituent department of the University of Delhi since its inception, the department currently administers M.A. and Ph.D. degree programs, overseeing undergraduate English teaching in the University's affiliated Colleges. Demonstrating a commitment to women's empowerment, the Department extends the M.A. in English program to female students through the Non-Collegiate Women's Education Board, with special attention given to students from marginalized sections of society. While upholding canonical areas of literary studies since its inception, the Department proactively responds to the emerging demands and challenges of academia and society over the years.

### **Honours/Distinctions**

Prof. Anil K. Aneja: Received the Helen Keller Award by NCPEDP LTI-Mindtree in 2022.

Prof. Rimli Bhattacharya: Awarded a Visiting Fellowship at Potsdam University, Germany.  
Prof. Ira Raja: Appointed to the Potsdam Postcolonial Chair for Global Modernities at Potsdam University, Germany, 2022.

Prof Ujjwal Jana: Granted the Hungarian State Scholarship for collaborative research at Eötvös Loránd University, Budapest, Hungary, for the academic year 2022-2023. Also received the Hungarian State Scholarship for collaborative research at Debrecen University, Hungary, in the academic year 2021-2022.

Dr. Swetha Antony: Serving as a Research Affiliate for the project on ADHD Graphic Medical Narratives with Indiana University, Southeast, New Albany, USA, from 8 November 2022 to 31 October 2023.

Dr. Bharti Arora: Named a Charles Wallace India Trust Fellow at Edinburgh University, UK, in 2022.

### **Publications**

#### **Research Articles**

Kumar, Raj, 'A Haunting Tragedy: Gender, Caste and Class in the 1866 Famine of Orissa': a Book-review article in *Sociological Bulletin*, Sage Publications, 30 June 2023 (online)

Aneja, Anil. "Dismantling the Normative: Jonathan Swift & Gulliver Travels (1726)" *International Journal of Creative Research Thoughts (IJCRT)* Vol. 11, Issue.3, March, 2023

Mondal, Arijit and Ujjwal Jana. "Mapping the Poetics of Memory: A Critical Reading of Manoranjan Byapari's Interrogating my Chandal Life as Cultural Archive" *Contemporary Voice of Dalit*, 2023

Sethulakshmi, S and Ujjwal Jana. "A Review of Critical Disaster Studies. By Jacob A.C. Remes and Andy Horowitz.." *Interdisciplinary Literary Studies*. Vol. 24, No. 3, 2022, pp. 463-466.

Jana, Ujjwal and Tanushree Dutta. "Text as an Archive: A Critical Reading of Estherine Kire's When the River Sleeps." *Skase Journal of Literary and Cultural Studies*, Vol. 4, No. 3, pp. 61-69.

Dubey, Yogesh K. "Locating the Inner Voice of Macbeth in the Three Witches." *The Journal of Oriental Research Madras*, Vol No. XCIII - VII, 2022. (First Author).

Dubey, Yogesh K. "Shakespeare's Women in Much Ado About Nothing." *ANVESAK*, Vol No. 52 No.2(1), 2022, P. 150 - 157.

Dubey, Yogesh K. "Masculist Separatism: A Tool of Gender Subversion Under the Taliban." *Journal of Education: Rabindra Bharti University*, Vol No. XXIV, 2022, P. 255 - 260.

Qadeer, Haris. "That One". Urdu Studies, guest edited by Mehr A Farooqi, 2022.

Singh, Vinod K. "Male Chauvinism in Ram-lore: A Reassessment." *Madhya Pradesh Journal of Social Sciences*. 2022 (27.1). Pp. 133-36. ISSN. 0973-855X.

Singh, Vinod K. "From NPE (1986) to NEP (2020): The Relevance of English Education Today." *Bengal, Past & Present*. 2022 (140.1) 200-03. ISSN. 00058807.

Singh, Vinod K. "Shakespeare's Political Wisdom: A Study from Indian Perspective." *Anvesak*. 2022 ( 52.2 I). Pp. 146-49. ISSN. 03784568.

Rani, Geeta. "Murderer of Martyrs: Father Son Relationship in *All My Sons*" *IJCRT*, Vol No.10, Issue 11, November 2022.

## **Books/Chapter in Books**

### **Books**

Devadawson, Christel R, R W Desai, Rajiva Verma (eds.) *Essays on English and Indian Literature: Precolonial to Postcolonial*, Delhi: Aakar. 2022 (forthcoming, proofs passed)

Jana, Ujjwal. Editor, *Digital Culture in Humanities: Contemporary Trends*, New Delhi:ABS Books, 2023

### **Chapters in Books**

Panja, Shormishtha. "Heroic Maverick: Lebedeff and the Theatre of Bengal," forthcoming in Gerasim Lebedeff and the *Dawn of Indian National Renaissance* ed. Yaroslav Vassilikov, Press of the Museum of Anthropology and Ethnography, Russian Academy of Sciences, St. Petersburg, Russia

Devadawson, Christel R. 'Rival Shakuntalas': Nehru, Jayaprakash Narayan and Shankar's India,' in *Precolonial to Postcolonial English and Indian Literature*, ed Rupin Desai, Christel Devadawson and Rajiva Verma, Aakar: Delhi 2022, 145-162

Devadawson, Christel R. 'Visual Advocacy and the Gandhi icon,' in *Gandhi, Advocacy Journalism and the Media*, ed David Bulla, New York: Peter Lang 2022, 225-236

Kumar, Raj, 'Madhusudan Das: Addressing the Dalit Question' in *The Undying Legacy of Madhusudan Das*, edited by Jugal Kishore Mishra, Kalinga Institute of Social Sciences, Bhubaneswar, 2022.



Kumar, Raj, 'A Few Words for Dr Jitamitra Singh Deo', in *Maraguda to Mahanadi*, edited by Fanindam Deo et al, Khadial Gabeshana Pratistan, Kharia, 2022, pp. 121-123.

Kumar, Raj, 'In Memory of Gail Omvedt' in *Gail Omvedt: First Ambedkarite Woman Writer*, edited by Mohandass Namishray, Apollo Publishers, Delhi, 2022, pp.136-141.

Kumar Raj, 'The 'Other' Indians: Reading Dalit Discourse in Joseph Macwan's Angaliyat' in *Dalit Writings: emerging perspectives*, edited by Santosh Gupta and Bandana Chakrabarty, Rawat Publications, Jaipur, 2022, pp.21-36.

Kumar Raj, 'Muli's Life History as Dalit Testimonio' in *Subalternities in India and Latin America: Dalit Autobiographies and the Testimonio*, edited by Sonya Surabhi Gupta, Routledge, London, 2022, pp. 96-110.

Bhattacharya, Rimli. 'Wood and Water: Resonances from the Indian Ocean'. Book chapter in Southern Print Histories, eds. Charne Lavery and Sarah Nuttal, University of Witwatersrand Press, Johannesburg, South Africa (forthcoming in late 2022)

Islam, Mohaiminul and Ujjwal Jana. "Disability Life Writing in India." *Crip Authorship: Disability as Method*, edited by Mara Mills and Rebecca Sanchez, New York, USA: New York University Press, 2023, pp.210-218.

Jana, Ujjwal. "Forgiving Three Times & Indian Folk Narratives". Sahitya Akademi, 2022

Jana. Ujjwal. "From Imitation to Ingenuity: Bengali Theatre from 1795-1857." *Indian Aesthetics: Convergences and Divergences*. DK Printworld, 2022

Dubey, Yogesh K. "Afghanistan: A Graveyard of Women's Rights." Dictating the Rules of Engagement for Contemporary Women. Cambridge Scholars Publishing, 2022.

Singh, Vinod K. "Indian Idea of Kingship." *Indian Vision of Political Thinking*. Eds. Sanjeev Kumar Sharma & Ansuiya Nain. Indian Political Science Association, 2022; pp. 65-83. (Co-author S K Sharma)

Pou, K.B. Veio. "Christmas in the Moon Place" in Jerry Pinto & Madhulika Liddle (Eds.) *Indian Christmas: Essays, Memories, Hymns*, New Delhi: Speaking Tiger Books, 2022, pp.141-152.

Pou, K.B. Veio. "Literary Traditions", in Jelle J.P Wouters Tanka B. Subba (Eds.) *The Routledge Companion to Northeast India*, London/New York: Routledge, 2023, pp. 307-311.

Pou, K.B. Veio. "Popular Culture" (co-author with Rhelo Kenye), in Jelle J.P Wouters Tanka B. Subba (Eds.) *The Routledge Companion to Northeast India*, London/New York: Routledge, 2023, pp. 370-374.

Arora, Bharti. "Negotiating Gendered Contexts of the Nation State: A Reading of Amrita Pritam's Select Fiction." In *Amrita Pritam: The Writer Provocateur*, edited by Hina Nandrajog and Prem Kumari Srivastava. Routledge, 2023.

Arora, Bharti. "Gandhi and Peasant Organizations in Colonial India: A Reading of Satinath Bhaduri's Dhorai Charit Manas" In *Gandhi in India's Literary and Cultural Imagination*, edited by Nishat Zaidi and Indrani Das Gupta. Routledge, 2022.

## **Research Projects**

Rimli Bhattacharya (from India), NEH Collaborative Research Grant for the Victoria Memorial Hall (VMH) project: From 2021 to 2023. Principal Investigators Romita Ray (project director), Syracuse University; Tim Barringer, Yale University; Jayanta.

Chattarji, Subarno. Minor Research Grant, Faculty Research Project under Institute of Eminence Scheme, University of Delhi, 2021-2022. Project title: "Representing War and Conflict in India."

Chattarji, Subarno. Working on a Special issue on "War and Representation in India" for Revue LISA/LISA e-journal (<https://journals.openedition.org/lisa/>), published by the University of Le Mans and Rennes University Press, France.

Jana, Ujjwal. Indian Principal Investigator, Scheme for Promotion of Academic and Research Collaboration (SPARC) project on "Indian-European entanglements: exploring transcultural relationships through Digital Humanities", with Ghent Centre for Digital humanities- Ghent University, Belgium funded by Ministry of Education, Govt of India, 2023

Jana, Ujjwal. Awarded Hungarian state scholarship in the academic year 2021-2022 funded by Tempus Foundation of Government of Hungary to pursue collaborative Research Project in the Institute of English and American Studies, Debrecan University, Hungary, 2022

Jana, Ujjwal. Awarded Hungarian State scholarship for 2022-2023, funded by Tempus Foundation of the Government of Hungary to carry out collaborative research at the ELTE Department of English Studies, EötvösLoránd University, Budapest Hungary, 2022

Qadeer, Haris. Visiting Fellowship to King's College, London (Charles Wallace India Trust) 2022

## **Seminars/Conferences organized by the Department**

International Conference on English Studies in India: Centenary Perspectives (Feb.28-March.2, 2023) by Department of English, University of Delhi in collaboration with Indira Gandhi National Centre for the Arts, Indian Council of Social Science Research & Oxford University Press

## **Seminar/Conference Presentations (National/International) by Faculty Members**

Devadawson, Christel R. "The Duty to See," and Related Possibilities in Visual Studies", at English Studies in India, Centenary Perspectives, Deptt of English, University of Delhi, February 2023

Kumar, Raj. 'Dalit Studies: a New Discipline' in an International Seminar organized by the Department of English, University of Delhi on 02 March 2023.

Kumar, Raj. 'Caste, Class and Gender: an understanding of Dalit women's subjectivities' in an international conference organized by Manav Rachna International Institute of Research and Studies, Faridabad, Haryana on 28 January 2023.

Kumar, Raj. 'Literature, Marginality and Resilience' in a national webinar organized by the Faculty of Humanities, Sir Deenabandhu Chhoturam University of Science and Technology, Murthal, Haryana on 15 October 2022.

Kumar, Raj. 'Gandhi in Indian Literature' in a seminar organized by Janaki Devi Mahavidyalaya, University of Delhi on 30 September 2022.

Kumar, Raj. 'From Being to Becoming: Dalit Articulations through Ages and Across Genres' in a national conference organized by Satyawati College (Evening), University of Delhi on 13 April 2022.

Aneja, Anil. Keynote Address at National Conference on 'From Disabled Bodies to Able Subjects' organized by Dept. of English, Zakir Husain Delhi College Evening, University of Delhi, March 20, 2023

Aneja, Anil. Keynote Address at National Conference on "Shifting Contours of Representation of Disability" organized by Dept. of English, SGND Khalsa College, University of Delhi, March 17, 2023

Singh, Vinod K. "कहा कबिन पर कहत न जाना" in International Conference on "Role and Contribution of Saints and Sages in the History of India," Indian Council of Historical Research, New Delhi & BAPS Swaminarayan Research Institute, New Delhi (January 2023)

Singh, Vinod K. "Checks and Balances: Evil Vs. Conscience in Shakespeare," in International Seminar on "Shakespeare and the Subconscious." Department of English, University of Delhi (April 2022)

Negi, Pooja. Paper presented on "Tracing the Roots and Routes of Kinnauri Folk Culture" in the International Conference on "Transition & Transmission in Oral Tradition" organised by Department of Folkloristics and Tribal Studies, School of Social and Behavioral Sciences (from 20th to 22nd January) Central University of Karnataka, Kalaburagi, India.

### **Extension and Outreach Activities**

The department takes care to provide support to students who require additional help.

**Faculty Strength:** 26

**Number of Degrees Awarded Ph.D.:** 6, **M.Phil.:** 23

### **Other Significant Information**

The department has introduced MA admissions on the department seats. Further, sections and the tutorial system has been introduced in the department at the MA level. Number of PhD seats has been increased and the PhD course work has been modified.

To commemorate the centenary year in 2022-23, the Department of English, University of Delhi, in collaboration with Indira Gandhi National Centre for the Arts, Indian Council of Social Science Research & Oxford University Press, organized a 3-day international conference titled English Studies in India: Centenary Perspectives from 28th February, 2023 to 2nd March, 2023. The conference was inaugurated by the Chief Guest, Dr. Subhas Sarkar, Hon'ble Union Minister of State for Education and presided over by Prof. Yogesh Singh, Hon'ble Vice Chancellor, University of Delhi. The keynote address was given by Prof. Sachchidanand Joshi, Member Secretary, Indira Gandhi National Centre of Arts (IGNCA), Ministry of Culture, Government of India followed by a special address by Mr. Sumanta Datta, Managing Director, Oxford University Press. Some of the sub-themes of the Conference include Renaissance and 17th Century studies in India, 18th and 19th Century literatures, Modernism and Beyond, India in Colonial Imagination, Indian Writing in English and Translation, Journey of the Department till 2000, New Directions in English

Studies and the Department of English. Eminent scholars, critics and writers participated as the speakers/resource persons at the Conference. The last session of the Conference was a special session titled 'English Studies in India: The Authors' Voice' and featured renowned writers.

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## **Germanic and Romance Studies**

### **Brief History**

Established in 1948 as the Department of Modern European Languages, the Department of Germanic and Romance Studies emerged in 1988. Focused on cultural studies with an interdisciplinary perspective and a broader European dimension, the department introduced MA programs in French, German, and Hispanic Studies in 1988. The department has continually evolved, restructuring programs, introducing new courses, and maintaining a strong emphasis on European cultural studies.

### **Major Activities and Achievements**

Annual International Seminar: Islands in Literature, Literary Islands, Island Literature, 2 – 4 March 2023

### **Honours/Distinctions**

Prof. Minni Sawhney: Elected member of Board of International Association of Hispanists 2023-2026.

### **Publications**

#### **Research Articles**

Shekhar, A. (2022). Impresiones, encuentros y reflexiones: la India para los literatos hispánicos [Impressions, encounters and reflections: India for Hispanic writers]. *SpanishBolo*, 2(2).

#### **Books/Chapter in Books**

Sawhney, M. (2022). La figura del renegado en el teatro de Cervantes. In *Actas de la Asociación Internacional de Hispanistas*.

Sawhney, M. (2022). Estilos, estrategias e identidades: Elmer Mendoza y la creación de una saga detectivesca. Vernon Press.

Sawhney, M. (2022). Surmounting borders: The corridos of Jenni Rivera. In *Centering Borders in Latin American and South Asian Contexts: Aesthetics and Politics of Cultural Production*. Routledge

### **Seminars/Conferences organized by the Department**

Islands in Literature, Literary Islands, Island Literature, 04-03-2023

### **National/International MoUs Signed**

University of Delhi and University of Vienna

University of Delhi and University of Wuppertal  
University of Delhi and University of Turin

### **Other Inter-Institutional Collaborations**

University of Delhi and Institut Français India

**No. of Students under Exchange Programme: 2**

### **Extension and Outreach Activities**

MA Dissertation Seminar, 25-26 April 2023

**Faculty Strength: 24**

**Number of Ph.D. Degrees Awarded: 3**

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## **Hindi**

### **Brief History**

The Hindi Department at Delhi University stands as one of the country's esteemed academic institutions. Established in 1948 under the collaborative efforts of the Sanskrit Department, the two departments initially functioned as a unified entity. The distinguished Sanskrit scholar Mahamahopadhyaya Pandit Laxmidhar Shastri served as the founding Head of the Sanskrit cum Hindi Department. Subsequently, in 1952, the Hindi Department gained independence, operating autonomously under the leadership of Dr. Nagendra, a renowned scholar proficient in English, Hindi, and Sanskrit.

### **Major Activities and Achievements**

The University of Delhi's Department of Hindi holds a prominent position among the nation's academic departments. It actively fosters, innovates, sustains, and promotes high standards of academic excellence. Adapting to changing times and the rapid expansion of knowledge and requirements, the department consistently maintains a superior level of research in accordance with UGC norms.

### **Publications**

#### **Books/Chapter in Books**

Tiwari, V. (Ed.). (2023). Vichar Ka Aaina: Rammanohar Lohia. Lokbharti. ISBN 978-81-959656-6-3.

Tiwari, V. (Ed.). (2023). Pratinidhi Kahaniyan: Shivmurthi. Rajkamal. ISBN 978-81-19028-47-4.

Patel, R. (2022). Chhayawad: Vichar aur Vishleshan. National. ISBN 978-939217507-7. pp. 1-171.

## **Research Projects**

IOE, 10 Months, Nai Kahani mein Stree Mukti Ke Panch Prashna, 200000 .

ICSSR, March, 2023 to March, 2025, Sahitya Ke Hastakshap Ke Nirman or Vikas mein Anuwad Ki Bhoomika Ka Samaj Bhashavaigyanik Adhyayan, 1000000.

## **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Vinod Tiwari; Muktibodh : Sahitya Ka Jeevan-Vivek; Chhattisgarh Sahitya Academy; Ministry of Culture; Raipur, 11th September, 2022

Prof. Vinod Tiwari; Premashram Upanyas Ke Sau Saal, Deptt. of Hindi; Deshbandhu College, DU, 22nd September, 2022

Prof. Vinod Tiwari; Kabir, Meer aur Ishq; Organisation of Aakar Magazine, Kanpur; 09th Oct., 2022

Prof. Ramnarayan Patel; Dr. Baldev Prasad Mishra Ka Rachana-Sansar, National, Nandganv Sahitya evam Sanskriti, Parishad, Rajnandganv (C.G.); 12 Sep. 2022

Prof. Ramnarayan Patel; Chhattisgarhi Bhasha-Sahitya Aur Patrakarita, National, Pt. R.S.S. University, Raipur; 23 Feb. 2023

Prof. Ramnarayan Patel; Samkaleen Hindi Kavita, National, Govt. K.G. Arts & Sc. College, Raigarh (C.G.); 25 Feb. 2023

Prof. Manju Mukul Kamble; Sahitya mein Dalit Mukti Ke Sawal, Kirorimal College, DU; 21st September, 2022

Prof. Manju Mukul Kamble; Vishwa mein Hindi Ki Stithi; JDM; 14th September, 2022

Prof. Sneha Lata Negi; Dalit Sahitya, Kala va Sanskriti; Loktantra ke ayine mein, invited as speaker organized by Dalit Lekhak Sangh; 21st August, 2022

Prof. Sneha Lata Negi; Seminar including Poetry Recitation storytelling, meet the authors, book exhibition, invited as speaker organized by the fourth edition of Arunachal Lit. Festival (ALF) at Namsai; 3-5th November, 2022

**Faculty Strength: 34**

**Number of Ph.D. Degrees Awarded: 45**

**Number of M.Phil. Degrees Awarded: 16**

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## **Library and Information Science**

### **Brief History**

Established in 1946 within the Faculty of Arts, the Department of Library and Information Science, spearheaded by (late) Dr. S. R. Ranganathan, Prof. S. Dasgupta, and Sir Maurice Gwyer, holds the distinction of being the country's first Library Science Department and an Associated Project of UNESCO. Offering education beyond B.L.I.Sc., it has granted degrees in MLISc, MPhil, and PhD to 4049 students over 75 years. A pioneer in Library Education, the department continually adapts to changing needs, introducing new study areas in 1972 and revising syllabi in 2004 and 2009. Equipped with cutting-edge ICT infrastructure, it maintains a distinguished reputation globally, boasting alumni in prominent positions. The department provides facilities like library access, hostel accommodations, medical facilities, and scholarships. Annual visits to reputed Libraries/Documentation Centres ensure practical exposure, mandatory for BLISc students.

### **Major Activities and Achievements**

First Department in India to start a Diploma course in Library Science in 1946.

The initial department in the British Commonwealth to launch the M.Lib.Sc. program in 1949, it also pioneered the introduction of a doctoral program in 1951, with the first Ph.D. being awarded in 1957. During that era, it stood as the singular department across the entire British Commonwealth offering a Ph.D. in Library Science.

First, to start M.Phil. Programme in Library and Information Science in 1978.

First to introduce two new papers in M.Lib.Sc. in 1972 on (i) Library Systems Analysis & Elements of Statistical Methods, and (ii ) Computer Application in Library in M.Lib.Sc.

First, to introduce the concept of workshop-cum-library, which, later in 1999, was converted into state-of-the-art Computer Lab.

Delhi University Library System (DULS) has started the post-MLISc Internship Training Programme for the students of the Department, wherein the students get a chance to work for six months in Delhi University Library at a stipend of Rs. 7,500/- to 11,500/- p.m.

Department pursued re-opening the entry for LIS professionals at the levels of Library Clerk, Semi-Professional-Assistant, which were blocked since 1986.

First, to introduce exclusive paper on Marketing of LIS Products and Services and Management Consultancy subject in M.L.I.Sc. Course in 2004.

First, to introduce Information Literacy Applications in LIS subject in M.L.I.Sc.Course in 2009.

First Department in India to start a Diploma course in Library Science in 1946.

### **Honours/Distinctions**

Prof. R K Bhatt: DLA- Shanta Vashist Outstanding Leadership Library Award 2022.

LIS Lifetime Achievement Award presented at the International Conference on Recent Trends, Challenges, and Opportunities in Libraries, Uttaranchal University, Dehradun, 24-25 March 2023.  
Prof. K P Singh: Vishwa Hindi Sahitya Parishad- Vishwa Bhageshwari Samman-2023.  
ANECDOTE Indian Librarian Pride Award (ILPA-2022)  
Prof. M. Madhusudhan: Outstanding Academic Excellence Award by Social Development Federation, Dayalbagh, Agra, (India),2023.  
Research Excellence Award by Social Development Federation, Dayalbagh, Agra (India),2022.  
Life Time Achievement Award by Madras Library Association (MALA), Chennai, (India),2022.

## **Publications**

### **Research Articles**

Shukla, A., & Bhatt, R.K. (2022). Citation analysis of doctoral theses in the field of commerce and financial studies awarded by University of Delhi: A study. *Library Herald*, 60(2).

Mondal, H.K., & Bhatt, R.K. (2022). Use of e-resources by research scholars and postgraduate students of University of Dhaka, Bangladesh: A study. *Library Herald*, 60(3).

Lamba, M., & Madhusudhan, M. (2023). Exploring OCR errors in full-text large documents: A study of lis theses and dissertations. *Library Philosophy and Practice*, 1-13.

Singh, B.P., & Madhusudhan, M. (2023). Mobile Apps-based Applications in Libraries and Information Centres: A systematic review of the literature and future research agendas. *International Journal of Librarianship (IJoL)*, 8(3), 83-102.

Borah, R., & Madhusudhan, M. (2023). Altmetric Mapping of Highly-Cited Articles on Plagiarism in India. *International Journal of Library and Information Services*, 12(1), 1-15.

Lamba, M., & Madhusudhan, M. (2022). Topic Modelling and its Application in Libraries: a review of specialized literature. *World Digital Libraries*, 15(2), 105-120.

Singh, K.P., & Rai, S. (2023). Library herald (1991-2021): A bibliometric study. *Library Herald*, 60(1), 77-88.

Singh, K.P., & Ansari, M.U. (2022). Information products and services: Marketing testing and test marketing., *IASLIC Bulletin*, 67(2), 67-79.

Singh, K.P., (2022). Trajectory of the platinum jubilee of library and information department, university of delhi: Setting a new agenda for academic excellence, *WE-A Multidisciplinary & Multilingual Peer-Reviewed Research Journal*, 3(1), 1-14.

Singh, K.P., & Singh, P. (2022). Journal of information system and technology management (2018-2022): A Bibliometric Study. *WE-A Multidisciplinary & Multilingual Peer-Reviewed Research Journal*, 3(1), 65-70.

Singh, K.P., (2022). Hundred Years of University of Delhi (1922-2022): A Glorious Journey from Take On to Take Off. *University News*, 60(30), 1-15.



Singh, K.P., & Ansari, M.U. (2022). Towards understanding Creative Commons Concept for Sharing Information on Public Domain, *Indian Journal of Information Library and Society*, 35(1-2), 132-141.

Shehu, A.B., & Singh, K.P. (2022). A study of the Application of Information and Communication Technology in the Universities Libraries of North-Central Nigeria. *Library Philosophy and Practice*.

Singh, K.P., & Sinha, N. (2022). Information Seeking Behavior of School Students in Delhi: A Comparative Study. *International Journal of Digital Content Management*, 3(5), 12-25. doi: 10.22054/dcm.2022.14017

Himanti & Kumar, M. (2023). Data Mining to Find Out the Patterns in the Data of Circulation Section Log of July, 2022 of Jamia Millia Islamia University Library Using Python. *Library Philosophy and Practice*.

Kumar, M., & Kumar, V. (2023). Plagiarism Awareness Among Post-Graduate Students and Research Scholars of the Jawaharlal Nehru University and University of Delhi, Delhi: A Comparative Study. *Library Philosophy and Practice*.

Singh, S., & Kumar, M. (2022). Role of Remote Access Solutions For Accessing Library Resources: A Panacea for Sustainable Access to Legal Databases During Pandemic. *Library Herald*, 60(3), 106-124.

Sharma, S., & Kumar, M. (2023). Awareness and Use of Anti-plagiarism methods by Faculty members and Research Scholars of Select Central Universities of Uttar Pradesh, India. *Library Herald*, 61(2), 55-75.

Jain, P. & Meera. (2022). A Bibliometric Analysis of Research Output of National Council of Educational Research and Training. *IASLIC Bulletin*, 63(3), 131-145.

Meera & Ruchi. (2022). Authorship Behaviour in the Article Appeared in Library Philosophy and Practice. *Journal of Information Management*, 9(2), 105-113.

Uniyal, A., & Meera. (2022). Research Productivity in the field of Science and Technology of Govind Ballabh Pant Agricultural University, Uttarakhand: A Scientometric Study. *International Journal of Advance and Innovative Research*, 9(2), 170-179.

Yadav, M., & Yadav, S. (2022). Application of Growth Models in Knowledge Management Literature: A Bibliometric Study based on LISA Database during 1975-2019. *KELPRO Bulletin*, 26(1), 29-47.

Mahawariya, K., & Yadav, M. (2022). Collection and Services of Government Libraries in Delhi. *DESIDOC Journal of Library and Information Technology*, 42(2), 88-97.

Kumar, M., & Meera. (2022). Online Examination and Students Travail during COVID 19: A study of Department of Library and Information Science, University of Delhi. *Library Herald*, 60(2), 27-36.

### **Books/Chapter in Books**

Bhatt, R. K., & Babber, P. (2022). *Marketing Management and Marketing Consultancy in Libraries*. Delhi: Sarada Publication.

Singh, B. P., Madhusudhan, M., & Pandey, P. (Eds.). (2023). *Libraries Unplugged: Harnessing the Power of Mobile Services*. Agra: Social Development Federation.

Lamba, M., & Madhusudhan, M. (2022). *Text Mining for Information Professionals: An Uncharted Territory*. Switzerland: Springer International Publishing.

Singh, K. P. (2022). *Flying Colours of Inaugural Ceremony of Centenary Celebrations of University of Delhi*. Delhi: AKS Publishing House.

Singh, K. P. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Kumar, M. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Meera. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Bhatt. R. K. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

#### **Journal(s) Published by the Department**

Bhatt. R. K. (Ed.). (2022). *Journal of Library and Information Science*, 47(1-2).

#### **Placement Details (Number and percentage of students placed)**

More than 40 i.e. 20% students have secured jobs and internships in government and private sectors in the field of library and information science.

#### **Extension and Outreach Activities**

B111: Internship Programme  
B106: Literature Survey and field survey  
Library Tours in Delhi  
Educational Tour outside Delhi

#### **Faculty Strength: 9**

**Number of Ph.D. Degrees Awarded: 15, M.Phil. Degrees Awarded: 25**

#### **Other Significant Information**

Faculty Members participated and cooperated in organizing 2 conferences:

International Conference on Infrastructure, Information and Innovation for building new Bharat (2022)

One Yoga for One Nation organized by Gandhi Bhawan

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## Linguistics

### Brief History

Established in 1963, the Department of Linguistics initially offered a diploma course and expanded to introduce master's and doctoral programs in 1966. Recognizing its strength in theoretical and applied linguistics, the department was accorded the status of Centre for Advanced Studies in Linguistics by the UGC from 2010-11. Notable professors such as (Late) Prem Singh, (Late) A.K. Sinha, K.V. Subbarao, R.K. Agnihotri, Ravinder Gargesh, R.C. Sharma, Tista Bagchi, who superannuated from the Department after distinguished service, and a focus on Tibeto-Burman and Indo-Aryan languages contribute to the department's academic standing.

### Major Activities and Achievements

The faculty has been very active during the year and had a total of 12 publications during the span period in international/ national journals and books published by reputed international publishers. The faculty also presented 19 conference papers at national and international conferences/ seminars or invited talks. The department organised 1 demo-cum-workshop and 1 talk by an international scholar. Prof. Tanmoy Bhattacharya was re-appointed as an associate editor of the international journal *Linguistic Variation* (John Benjamins).

### Honours/Distinctions

Prof. Tanmoy Bhattacharya re-appointed as an associate editor of the international journal *Linguistic Variation* (John Benjamins).

### Publications

#### Research Articles

Bhattacharya, T. (2022). Unfolding (of) theories, not programmes (programs?). *Indian Journal of Critical Disability Studies*, 2(1), 66–71.

Bhattacharya, T., & Ghai, A. (2022). Editorial. *Indian Journal of Critical Disability Studies*, 2(1), 1.

Bhattacharya, T. (2023). Multilinguality as mirroring the primal scene of language acquisition. *SSRN*, 2, 1-6.

Bhatia, S., & Bhat, R. (2023). Copular agreement in hindi-urdu. *Glossa: a journal of general linguistics*, 1(8), 1-40.

Bhatia, S., & Hussain, S. (2023). Preverbal syntactic complexity leads to local coherence effects. *Language, Cognition and Neuroscience*, 3(38), 359–389.

Mamta & Priyadarshini, I. (2022). Grammatical errors made by dyslexic school children of Delhi. *Research Review International Journal of Multidisciplinary*, 11(7), 112-122.

Mamta & Singh, R. (2022). Awareness on dyslexia among government primary school teacher of Dimapur (Nagaland). *Research Review International Journal of Multidisciplinary*, 12(7), 154-161.

Sharma, V.M.S. (2023). Phonotactics of erukala. *Musi*, 9(25), 29-32.

Phani Krishna, P., Arulmozi, S., Male, S. R., & Mishra, R. K. (2023). Are Older Bilinguals' Better in Metaphor Generation? *Journal of Psycholinguistic Research*, 52(4), 1183–1204. doi.org/10.1007/s10936-022-09929-w

### **Books/Chapter in Books**

Bhattacharya, T. (2022). Language and culture. In J.J.P. Wouters & T. B. Subba (Eds.), *The routledge companion to northeast india* (pp. 284-291). Routledge India.

Bhattacharya, T. (2022). Language and migration. In J.J.P. Wouters & T. B. Subba (Eds.). *The Routledge Companion to Northeast India* (pp. 284-291). Routledge India.

Bhattacharya, T., & Sharma, J. (2022). *A morphosyntactic account of agreement in Mara*. In A. Nevins, A., P. Mark de Vos & J. Willer-Gold (Eds.), *Angles of Object Agreement*, Oxford University Press. 10.1093/oso/9780192897749.003.0004

### **Research Projects**

As, PI: Dr. P. Phani Krishna, Institute of Excellence, University of Delhi, 2022-2023, Documentation of Ethno-Medicinal Plants Used by Juray: A Particularly Vulnerable Tribal Group of South Odisha, 2 Lakhs.

As, PI: Dr. Sakshi Bhati, Department of Science and Technology, GoI, 2022-2023, Processing of Agreement Dependencies in Indo-Aryan Languages, 30 Lakhs.

### **Seminars/Conferences organized by the Department.**

Tobii Team, Sr. Manager (Sales), Eye Tracking and Attention Computing, NA, Eye Tracking and Language Research, 07-12-2022

Arpita Bose, Associate Professor, University of Reading, UK, University of Reading, UK, Acquired language disorders in South-Asian languages: Importance of language-specific diagnostic markers, 07-12-2022.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Tanmoy Bhattacharya: Dec. 29, 2022, “Understanding Syntax” Invited workshop with school teacher, at Human Resource Development Centre, The Delhi Public School Society, Greater Noida.

Prof. Tanmoy Bhattacharya: Nov. 26, 2022 “The syntax of agreement in Pnar” in SALA-36 & LSN-43 international conference, Kathmandu (with Imontre Sutnga)

Prof. Tanmoy Bhattacharya: Nov. 26, 2022, “Revisiting Caryāgītikoṣa: An early rise of addressee agreement”, Plenary talk, in SALA-36 & LSN-43 international conference, Kathmandu (invited)

Prof. Tanmoy Bhattacharya: 21 Feb 2023 “Multilinguality as mirroring the primal scene of language acquisition”, Inaugural talk delivered at the Decolonising Higher Education: Multilingual Pedagogy and Epistemic Justice symposium at JNU, 21 Feb. 2023 [<https://www.jnu.ac.in/node/159895413>]

Dr. Sakshi Bhatia: 2022. The Role of Linguistic Diversity at the Grammar-Parser Interface: The view from Hindi. Refresher Course: ‘Towards Linguistic Diversity’ UGC-HRDC, University of Rajasthan, Jaipur, India.

Dr. Sakshi Bhatia: 2022. Copular Agreement in Hindi-Urdu: From Agreement to Licensing. Offered as a MiniCourse in the YJHD Lecture Series, Jawaharlal Nehru University, Delhi, India.

Dr. V.M.Subramanya Sharma (2023, August): delivered 7 lectures (8,10,11,12,16,17,18 August) on historical linguistics and IGT at the Dept of Linguistics, School of Language Development, Telugu University, Hyderabad.

Dr. N. Susheel Kumar: 11 March 2023 “Gender and Number system of Thoti language”, 11th ELKL, Berhampur University, Odisha.

Dr. N. Susheel Kumar: 13-15 July 2022, “Plural marker of Thoti: An endangered tribal language of Telegana” at Dept. of English, GLA University, Mathura, National Education Policy 2020 and the conservation of the endangered languages of India seminar.

S. Satyanath: (Feb 2-5, 2023) Producing a Sociolinguistically informed language description. NEILS12, Gauhati University, Assam.

S. Satyanath: (December 14-16, 2022) Using variationist approach to address an unresolved historical puzzle. Plenary Talk. NWAV-AP 07, Chulalongkorn University, Bangkok, Thailand.

S. Satyanath: (Nov.25, 2022) Looking beyond the 60s: Sociolinguistics research trends in India. Plenary Talk. ICOLSI-44, Centurion University, Bhubaneswar, Odisha.

S. Satyanath: (August 27, 2022) Diverse urban geographies and complex outcomes: Rethinking urbanism and urbanization. Plenary Talk, The 19th Annual Conference of the International Association of Urban Language Studies, Nanjing, China.

Dr. P Phani Krishna : 29<sup>th</sup> and 30<sup>th</sup>, May,2022, Participated as an expert in Bharatiya Bhasha Asmiti on the topic “The Concept of Bharatiya Bhasha Parivar”.

Dr. P Phani Krishna: 06<sup>th</sup> February 2023, delivered a lecture in the Online Refresher Course in Langue and Linguistics organised by UGC-HRDC, Osmania University.

Dr. P Phani Krishna: 30<sup>th</sup> and 31<sup>st</sup>, December 2022, “Language, Education and Discrimination: A case of Juary Speakers of South Odisha” in a conference titled “National and Global Concerns in Teacher Education”, University of Hyderabad.

Dr. P Phani Krishna:21<sup>st</sup> September 2022, Delivered Lecture on “They do not but they know: How Blind People Learn, Understand and Perceive the world and Language around them” in P.G. Department of Linguistics, Berhampur University, Odisha.

Dr. P Phani Krishna: 11 March 2023, presented a paper titled “Documentation of Ethno-Medical Plants used by Juray”, 11<sup>th</sup> ELKL, Berhampur University, Odisha.

Dr. P Phani Krishna: 2<sup>nd</sup> June 2022, “The Existence and Mapping of Colour Terms in Dravidian Language”, V-VSS 2022, Florida

### **Other Inter-Institutional Collaborations**

Dr. Sakshi Bhatia engaged in Collaborative Research with Massachusetts Institute of Technology, USA, since Oct. 2022.

Dr. Sakshi Bhatia engaged in Collaborative Research with University of Reading, UK, since May 2022.

3. Dr. P. Phani Krishna engaged in Collaborative Research with University of Huddersfield, UK, since May 2022.

### **Extension and Outreach Activities**

Critical Disability Studies reading group met for its 61st meeting on 19 March 2022.

**Faculty Strength: 7**

**Number of Ph.D. Degrees Awarded: 2**

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## **Modern Indian Languages and Literary Studies**

### **Brief History**

Established in 1961, the Department of Modern Indian Languages and Literary Studies runs master programs and certificate-diploma-advanced diploma courses in 11 Indian languages. The department's research initiatives in Comparative Indian Literature, Translation Studies, and Indian Folklore have drawn attention nationally and internationally. The Master program in Comparative Indian Literature is notable for its unique design in India's multi-lingual and multi-cultural context.

### **Major Activities and Achievements**

National Webinar on ‘Tribal Life’ of India: Insiders’ And Outsiders’ Perspectives, 01 – 03, April 2022.

A Film reading and learning program during 6-10 June, 2022. Read A Film “Life in Long Shot: A Chat with Charlie”

Life of an Artist- Read a Film program on 24th June, 2022. Screening and Discussion of "Amadeus" (1984).

A series of workshop for language teachers were conducted during the month of December, 2022.

Special Lecture delivered by Dr. Pradipta Shyam Chowdhury, University of North Bengal. Title of the lecture “Negotiating Sisterhood and Solidarity in the Third World Feminist Context” on 27th January, 2023.

Preparation of New Syllabi for Open Elective Courses: Languages for M.A. CIL.

Designing the Undergraduate Curriculum of Languages for 2nd Year and 3rd Year.

Preparation of New Syllabi for Intensive Courses in Indian Languages: Advanced Diploma.

Workshops were conducted to design the New Curriculum of Languages.

Framing new Syllabi for Postgraduate Programmes as per NEP 2020 during 2023.

### **Honours/Distinctions**

Dr Venkata Ramaiah Gampa - Ugadi Puraskaram from Department of Telugu, Madras University in 2023.

### **Publications**

#### **Research Articles**

Shukla, A., & Bhatt, R.K. (2022). Citation analysis of doctoral theses in the field of commerce and financial studies awarded by University of Delhi: A study. *Library Herald*, 60(2).

Mondal, H.K., & Bhatt, R.K. (2022). Use of e-resources by research scholars and postgraduate students of University of Dhaka, Bangladesh: A study. *Library Herald*, 60(3).

Lamba, M., & Madhusudhan, M. (2023). Exploring OCR errors in full-text large documents: A study of theses and dissertations. *Library Philosophy and Practice*, 1-13.

Singh, B.P., & Madhusudhan, M. (2023). Mobile Apps-based Applications in Libraries and Information Centres: A systematic review of the literature and future research agendas. *International Journal of Librarianship (IJoL)*, 8(3), 83-102.

Borah, R., & Madhusudhan, M. (2023). Altmetric Mapping of Highly-Cited Articles on Plagiarism in India. *International Journal of Library and Information Services*, 12(1), 1-15.

Lamba, M., & Madhusudhan, M. (2022). Topic Modelling and its Application in Libraries: a review of specialized literature. *World Digital Libraries*, 15(2), 105-120.

Singh, K.P., & Rai, S. (2023). Library herald (1991-2021): A bibliometric study. *Library Herald*, 60(1), 77-88.

Singh, K.P., & Ansari, M.U. (2022). Information products and services: Marketing testing and test marketing., *IASLIC Bulletin*, 67(2), 67-79.

Singh, K.P., (2022). Trajectory of the platinum jubilee of library and information department, university of delhi: Setting a new agenda for academic excellence, *WE-A Multidisciplinary & Multilingual Peer-Reviewed Research Journal*, 3(1), 1-14.

Singh, K.P., & Singh, P. (2022). Journal of information system and technology management (2018-2022): A Bibliometric Study. *WE-A Multidisciplinary & Multilingual Peer-Reviewed Research Journal*, 3(1), 65-70.

Singh, K.P., (2022). Hundred Years of University of Delhi (1922-2022): A Glorious Journey from Take On to Take Off. *University News*, 60(30), 1-15.

Singh, K.P., & Ansari, M.U. (2022). Towards understanding Creative Commons Concept for Sharing Information on Public Domain, *Indian Journal of Information Library and Society*, 35(1-2), 132-141.

Shehu, A.B., & Singh, K.P. (2022). A study of the Application of Information and Communication Technology in the Universities Libraries of North-Central Nigeria. *Library Philosophy and Practice*.

Singh, K.P., & Sinha, N. (2022). Information Seeking Behavior of School Students in Delhi: A Comparative Study. *International Journal of Digital Content Management*, 3(5), 12-25. doi: 10.22054/dcm.2022.14017

Himanti & Kumar, M. (2023). Data Mining to Find Out the Patterns in the Data of Circulation Section Log of July, 2022 of Jamia Millia Islamia University Library Using Python. *Library Philosophy and Practice*.

Kumar, M., & Kumar, V. (2023). Plagiarism Awareness Among Post-Graduate Students and Research Scholars of the Jawaharlal Nehru University and University of Delhi, Delhi: A Comparative Study. *Library Philosophy and Practice*.

Singh, S., & Kumar, M. (2022). Role of Remote Access Solutions For Accessing Library Resources: A Panacea for Sustainable Access to Legal Databases During Pandemic. *Library Herald*, 60(3), 106-124.

Sharma, S., & Kumar, M. (2023). Awareness and Use of Anti-plagiarism methods by Faculty members and Research Scholars of Select Central Universities of Uttar Pradesh, India. *Library Herald*, 61(2), 55-75.

Jain, P. & Meera. (2022). A Bibliometric Analysis of Research Output of National Council of Educational Research and Training. *IASLIC Bulletin*, 63(3), 131-145.

Meera & Ruchi. (2022). Authorship Behaviour in the Article Appeared in Library Philosophy and Practice. *Journal of Information Management*, 9(2), 105-113.

Uniyal, A., & Meera. (2022). Research Productivity in the field of Science and Technology of Govind Ballabh Pant Agricultural University, Uttarakhand: A Scientometric Study. *International Journal of Advance and Innovative Research*, 9(2), 170-179.

Yadav, M., & Yadav, S. (2022). Application of Growth Models in Knowledge Management Literature: A Bibliometric Study based on LISA Database during 1975-2019. *KELPRO Bulletin*, 26(1), 29-47.

Mahawariya, K., & Yadav, M. (2022). Collection and Services of Government Libraries in Delhi. *DESIDOC Journal of Library and Information Technology*, 42(2), 88-97.



Kumar, M., & Meera. (2022). Online Examination and Students Travail during COVID 19: A study of Department of Library and Information Science, University of Delhi. *Library Herald*, 60(2), 27-36.

### **Books/Chapter in Books**

Bhatt, R. K., & Babber, P. (2022). *Marketing Management and Marketing Consultancy in Libraries*. Delhi: Sarada Publication.

Singh, B. P., Madhusudhan, M., & Pandey, P. (Eds.). (2023). *Libraries Unplugged: Harnessing the Power of Mobile Services*. Agra: Social Development Federation.

Lamba, M., & Madhusudhan, M. (2022). *Text Mining for Information Professionals: An Uncharted Territory*. Switzerland: Springer International Publishing.

Singh, K. P. (2022). *Flying Colours of Inaugural Ceremony of Centenary Celebrations of University of Delhi*. Delhi: AKS Publishing House.

Singh, K. P. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Kumar, M. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Meera. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

Bhatt. R. K. (Ed.). (2022). *Proceedings of the International Conference on Infrastructure, Information and Innovation for Building New Bharat*. AKS Publishing House.

### **Journal(s) Published by the Department**

Bhatt. R. K. (Ed.). (2022). *Journal of Library and Information Science*, 47(1-2).

### **Research Projects**

PI: Venkata Ramaiah Gampa, IOE, University of Delhi, 2022-23, Convergence and Divergence: Telugu literature in New Media, 200000

### **Seminars/Conferences organized by the Department**

National Webinar on 'Tribal Life' Of India: Insiders' And Outsiders' Perspectives, 10-04-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof Amitava Chakraborty: Welcome Address, International Seminar on "Islamic Consumerism in Bangladesh

Secularization, Islamization and Globalization in South Asia”, TUFISCO, Tokyo University of Foreign Studies, Department of Anthropology, Jahangirnagar University, and Japan Chapter of International Society of Bengal Stud September, 2022

Prof Amitava Chakraborty: Valedictory Lecture, International Seminar on "Fight for Rights of Bengali Muslim Women in Post-Partition Era", International Society of Bengal Studies, Women's Studies Centre, Jadavpur University, Kolkata, Dept of Anthropology

Jahangirnagar University, Savar, Dhaka, Dept of Sociology & Gender Studies, Central Women's University, Dhaka, 3rd April, 2022

### **Other Inter-Institutional Collaborations**

Workshop - Introducing Classical Tamil Literature to the Research Scholars of Delhi

University in collaboration with Central Institute of Classical Tamil (CICT), Tamil Nadu

**Placement Details (Number and percentage of students placed): 10**

### **Faculty Strength**

Professor: 5, Associate Professor: 4, Assistant Professor: 4

**Number of Ph.D. Degrees Awarded: 19, M.Phil. Degrees Awarded: 8**

### **Other Significant Information**

The Department has contributed towards preparing new syllabi for UG, PG Courses and language teaching in accordance with NEP 2020.

The Department is the Nodal institution for teaching 18 Indian languages and AEC, GE courses in various colleges of the University of Delhi System.

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## **Persian**

### **Brief History**

The Department was established in 1922 with the founding of the University of Delhi itself. Although the Department of Persian has been operational in the University since its inception, it officially came into existence on the University campus in 1957. At that time, it was part of the combined departments of Arabic, Persian, and Urdu. The Department of Urdu gained independent status in 1959. Subsequently, the remaining departments were bifurcated into separate departments of Arabic and Persian in 1978. The primary focus of the department is Indo-Persian Literature, and today it boasts approximately 60 awarded PhDs, the majority of which delve into Indo-Persian Literature. Additionally, more than 60 MPhil dissertations have been completed on significant topics. The literary and academic activities of the department extend beyond the mere teaching and learning of the Persian language and literature. To facilitate the exchange of ideas,

periodic gatherings and meetings with distinguished academicians are organized. The department currently comprises 6 permanent faculty members, 3 guest faculties, and 3 office staff members.

### **Programs offered:**

PhD MPhil (last batch), M.A. (Morning & Evening), Post M.A. Diploma in Advanced Translation/Interpretation, Post M.A. Diploma in Paleography, Advanced Diploma in Modern Persian

### **Awards and honours**

Padmashri awarded to Prof. Amir Hasan Abidi and Prof. Rehana Khatoon

### **Proposed two National Seminars of the following topics**

“Role of Persian Language in Transmitting Indian Culture and Knowledge to the Persianate World” to be held on 01-02 February 2023 by the Department of Persian, to commemorate Centenary Celebration of University of Delhi.

“Socio-Cultural Aspects in Indo-Persian Literature” to be held on 24-25 February 2023 by the Department of Persian.

### **Any other important activity (For Academic Departments)**

Research Scholar’s Monthly meeting was held on 21st June 2022 to 27<sup>th</sup> March 2023 and more than 40 scholars and faculty presented the papers.

Department has journal for many years in the name of Persian Research Journal (ISSN: 2395-3667)

### **Extension and Outreach Activities**

Critical Disability Studies reading group met for its 61st meeting on 19 March 2022.

### **Faculty Strength: 7**

### **Number of Ph.D. Degrees Awarded: 2**

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## **Philosophy**

### **Brief History**

The Department of Philosophy, one of the oldest in the University of Delhi, began as a combined Department of Philosophy and Psychology in 1953. It gained autonomous status in 1962. The red brick colonial structure in the main Humanities Block has been a central hub for philosophical discourse. The department continues its legacy as a hub for academic inquiry.

## Major Activities and Achievements

Pursuing research project, studying classical reading of Indian philosophy and trying to reach highest wisdom with the help of methodologies and doctrines of early texts.

## Publications

### Research Articles

Kalotra, G. (2021). Ānvīkṣikī: An investigation into indian logic. Kala Sarovar, 24(5), 198–204.

### Books/Chapter in Books

Kalotra, G. (2020). Spiritual lineage of mahatma gandhi. In A. Riyaz & S. Hoque (Eds.), *Reassessing Gandhian Thought* (pp. 73-83). Shivalik Prakashan.

Kalotra, G. (2021). Observing the philosophy of rasa and aswāda during lockdown. In Bhatt, S (Ed), *Life During Lockdown: Lived Experiences and Leanings Lessons*. Papyrus Scrolls Publications.

### Research Projects

ICPR, 2022, Lineage and Metaphysics of Kaśmīra Shaivism: Re-visiting Mālinītantra, Śivadr̥ṣṭi and Tripurārahashya, 300000

### Seminars/Conferences organized by the Department

Prof. Shashi Prabha Kumar, Professor, ICPR, Bhāratīya Dārśanika Divas-I, 17-05-2021

Prof. Lateef Shah Hussain Kazmi and Prof. Ajay Verma, Professor, ICPR, Bhāratīya Dārśanika Divas-II, 15-12-2022

### Seminar/Conference Presentations (National/International) by Faculty Members

Delivered Online Lecture in National Webinar on Bhavna in Sports: The Ethics of Silence as a Resource Person for KMV College Jalandhar (Punjab) on 29th January 2022

Delivered Online Lecture on Reading Indian Philosophical Traditions as a Resource Person for KMV College Jalandhar (Punjab) on 28th June 2021

Delivered Lecture on Prof. Sangam Lal Pandey's Concept of Advaita Philosophy in 16th MP & CG Darshan Parishad 20-21 March 2021.

Paper Presented and under the process of publication entitled: वविज्ञानवमत्मिवभाव नावविज्ञानव ामावैर्भातवकीवप्रक्रियाःव कवनार्ावनकवविश्लिव accepted for 16th MP & CG Darshan Parishad 20-21 March 2021

Presented paper in Refresher Course entitled: "Thinking Indian Philosophy as a Social Worker: An Investigation into Vinoba's Self", organized by CPDHE (UGC-HRDC) University of Delhi, Delhi from 28th November 2017 to 19th December 2017.

Presented paper entitled: Resurrection Through Revolution: “Mahatma Phule”’s Ghulamgiri Re- visited” in ICPR National Seminar organized by the Department of Philosophy, University of Delhi from 11 to 13 April, 2016.

**Placement Details (Number and percentage of students placed)**

Dr. Neetanjali Khari working as permanent faculty in SPM Collage, DU

**Faculty Strength:** 14

**Number of Ph.D. Degrees Awarded:** 1,

**Number of M.Phil. Degrees Awarded:** 1 waiting for viva

**Other Significant Information**

Implemented six new subjects/syllabi within the Department of Philosophy, focusing on Indian Philosophy.

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**Psychology**

**Brief History**

The Master's level program in Psychology was introduced in 1957 within the Department of Philosophy and Psychology. In 1964, the Department of Psychology became an independent entity, housing two units: one at North Campus offering M.A. in Psychology and Ph.D., and another at South Campus established in 1981 offering M.A. in Applied Psychology. Recognizing its significance, the University Grants Commission (UGC) identified the Department for the Department of Special Assistance (DSA) in 1989 and the Special Assistance Program (SAP) in 2016. This designation supports research in Cognitive Psychology and Applied Social areas under DSA, and in Institution building, working with vulnerabilities, health, and well-being areas under SAP. The Department boasts a team of 14 faculty members. It is equipped with laboratories and technical staff to provide comprehensive support. The curriculum includes mandatory practicums, field training, and dissertations. Teaching methods are interactive, incorporating lectures, seminars, presentations, and student-centric approaches such as discussions, experiential learning, participative learning, peer mentoring, and problem-solving. Furthermore, the Department houses a student-led Internship-and-Placement Cell, emphasizing practical experiences for students.

**Major Activities and Achievements**

NEP Syllabus for B.A. Honors Psychology and Applied Psychology and B.A. Program was approved by Academic Council.

Special Lecture was conducted by Prof. Girishwar Misra, on “The Context and Key Features of Qualitative Research Methods” on 13.07.2023 and on “Thematic Analysis” on 25.07.2023.

Special Lecture was conducted by Prof. Anand Prakash (Manav Rachna University) on “Narrative Analysis” on 27.07.2023

Special Lecture was conducted by Dr. Vatsala Saxena (Dr. B.R. Ambedkar University, Delhi) for students of M.A. Psychology.

### **Honours/Distinctions**

Prof. Nandita Babu, Fellow of NAOP (National Academy of Applied Psychology)

### **Publications**

#### **Research Articles**

Fatima, M., & Babu, N. (2023). Cognitive and Affective Empathy in Autism Spectrum Disorders: A Meta-analysis. *Review Journal of Autism and Developmental Disorders*.

Kamboj, N., Saraswathy, K. N., Prasad, S., Babu, N., Puri, M., Sharma, A., Dhingra, S., Sachdeva, M. P., & Mahajan, C. (2023). Women infertility and common mental disorders: A cross-sectional study from North India. *PLOS ONE*, 18(1). <https://doi.org/10.1371/journal.pone.0280054>

Singh, N., Chaudhary, V., Khate, K., Bhattacharjee, D., Longkumer, I., Kataria, S., Kaur, G., Devi, N. K., Babu, N., & Saraswathy, K. N. (2023). Cognitive impairment viz-a-viz genetic and biochemical variations in one carbon metabolic pathway: A population-based study from North India. *Gene Reports*, 30. <https://doi.org/10.1016/j.genrep.2022.101720>

Sharma, A., Kamboj, N., Saraswathy, K., Puri, M., Babu, N., & Mahajan, C. (2023). Knowledge, attitude, and practice of infertility: A comparative study in infertile and fertile Indian women. *Journal of Biosocial Science*, 55(5), 947-959. doi:10.1017/S0021932022000347

Sharma, A., Mahajan, C., Saraswathy, K. N., Puri, M., & Babu, N. (2022). Struggling with Primary Infertility: Psychological Well-Being and Associated Factors in North Indian Women. *Journal of the Anthropological Survey of India*, 71(1), 68-83. <https://doi.org/10.1177/2277436X211073849>

Singhal, S., & Prakash, N. (2023). A Narrative Inquiry into the Meaning of Career Identity of Indian Emerging Adults amid Covid-19. *International Journal of Educational and Vocational Guidance*. <https://doi.org/10.1007/s10775-023-09590-2>

Prakash, N., & R, S. (2022). Qualitative Synthesis and Systematic Review: Precarious Employment, Pandemic, and Well-being. *International Journal of Creative Research Thoughts*, 10(3), 36-46.

Agarwal, S., & Prakash, N. (2022). When Silence Speaks: Exploring Reasons of Silent Treatment from Perspective of Source. *International Journal of Trend in Scientific Research and Development*, 6(3), 1458-1472.

Prakash, N. (2022). Psychological Costs and Benefits of Using Silent Treatment, *Quest Journal of Research in Humanities and Social Science*, 10(4), 49-54.

Kaushik, P., & Jena, S. P. K. (2022). Effect of cognitive behavioral intervention on electroencephalographic band powers of children with learning difficulty under eyes-closed and eyes-open conditions. *Arquivos de neuro-psiquiatria*, 80(3), 224-232. <https://doi.org/10.1590/0004-282X-ANP-2020-0503>

Singh, P., & Jena, S. P. K. (2022). Does Low Cognitive Load Lead to Delayed Performance. *Journal of Positive School Psychology*, 6(2), 1141-1149.

Mukund, B., & Jena, S. P. K. (2022). Qualitative analysis of school children's experience of receiving "Coping Cat program": A cognitive behavioral therapy program for high anxiety. *Psychology in the Schools*, 59(9), 1755–1775. <https://doi.org/10.1002/pits.22725>

Mahakud, G. C., Arora, S., & Kaur, J. (2022). Marital Adjustment and Quality of Life of Spouses of Alcoholics in Relation to their Socio-Economic Status. *Health and Population: Perspective and Issues*, 45(2), 79-85.

### **Research Projects**

DST-CSIR, 3 Years, Genetic and Epigenetic mechanisms of Homocysteine metabolic pathway in cognitive impairment: A population based case control study in Haryana by Prof. Nandita Babu (Co-PI), Major Grant

Rajiv Gandhi National Institute of Youth Development (RGNIYD), Ministry of Youth Affairs and Sports, Government of India, 2016- 2023, Developing Resilience and Entrepreneurship Skills in Underprivileged Youth Below Poverty Line by Prof. S.P.K. Jena (PI), Major Grant (Rs.4.6 lac)

Cognitive Science Research Initiative (CSRI) of Department of Science and Technology, Govt. of India, 2019-ongoing, To evaluate the effect of Neurofeedback Intervention Training Module (NITM) on emotional regulation, impulsivity and aggression in juvenile offenders by Prof. SPK Jena (Co-PI), Major Grant, National (Rs. 48, 99, 360/-)

Faculty Research Program (FRP) Grant – Institution of Eminence, University of Delhi, 2021-2022, Back to the Classroom: Understanding attitudes and emotions of Teaching Faculty as They Return to In-Campus In-Person Teaching Modality Post Pandemic by Dr. Nidhi Prakash (PI), Minor Grant,

Faculty Research Program (FRP) Grant – Institution of Eminence, University of Delhi, 2021-2022, Back to the Classroom: Understanding attitudes and emotions of Teaching Faculty as They Return to In-Campus In-Person Teaching Modality Post Pandemic by Dr. Nidhi Prakash (PI), Minor Grant,

### **National Seminar/Conference Presentations**

#### **(National/International) by Faculty Members**

Paper titled "Hikikomori and cyber bullying among young adults in India" presented by Dr. Subhash Meena (Co-Author) in 27th International & 58th National Conference of Indian Academy of Psychology (15-17 February, 2023) at Vigyan Bhawan, New Delhi.

#### **Placement Details (Number and percentage of students placed)**

For both North Campus M.A. Psychology and South Campus M.A. Applied Psychology Programmes included Total Number of Placement = 17

Placement Percentage = 9.7%

## **Faculty Strength Permanent Faculty**

North Campus: 11, South Campus: 4, Number of Ph.D. Degrees Awarded: 29

## **Other Significant Information**

Dr. Alka Bajpai: Resident Tutor, Ambedkar Ganguly Students' House for Women, Delhi University.

Dr. Gopal C. Mahakud: Nodal Officer, M.A. Applied Psychology Admission 2022-23,

Coordinator, B.A. (Hons) Applied Psychology Syllabus under NEP-2020.

Dr. Nidhi Prakash: Nodal Officer NAAC and IQAC Member, NEP Syllabus restructure B.A. (Hons), Psychology Member, NEP Syllabus restructure B.A. (Hons) Applied Psychology; Coordinator, Students' led Internship and Placement Cell .

Dr. SPK Jena Member:Governing Body, Institute of Home Economics, New Delhi,

Member, Saramati Hostel Committee, University of Delhi, South Campus.

Dr. Shailja Rana: Member, NEP Syllabus restructure B.A. (Hons) Psychology, Member, NEP Syllabus restructure B.A. (Hons) Applied Psychology, Member, NAAC Committee, Department of Psychology

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## **Punjabi**

### **Brief History**

Established in 1985 as an independent department, the Department of Punjabi at the University of Delhi has gained international recognition for its eminent faculty and notable alumni such as Prof. Harbhajan Singh, Prof. Attar Singh, Prof. Tarlok Singh Kanwar, Prof. Atamjit Singh, Prof. S. S. Noor. Offering programs at the Ph.D., M.A., Diploma, and Certificate levels, the department is expanding its courses to include Translation Studies, Media Studies, and Computational Linguistics under the leadership of Prof. Ravinder Kumar.

### **Major Activities and Achievements**

The Department of Punjabi has organized 17 National Level Seminars, Special Lectures. One of our student Mr. Deepak has won gold medal in National level Gatka competition held in Jalandhar, Punjab and gold medal in Gatka Championship held in Assam.

### **Publications**

### **Research Articles**

Singh, B. (2023). H.g wells da sankhep sabhyacharak te rajnitak itihās, Sirjana, 59.

Singh, B. (2022). Kwame anthony apiha di pustak cosmopolitism, Sirjana, 71.



Bala, R. (2022). Maulana roomi dian punjabi bhasha vich anuvadit rachnavan di padat. Sanvad, 16, 88–94.

Singh, N. (2022). Ajmer singh aulkah de natakan vich ling aadhrat bhashai vakhraven di nirmankaari.32 Parkh, 125-133.

Singh, Y. (2022). Punjab: jinnah rahan di main saar na jaana. Sanvad, 172-175.

Singh, Y. (2022). Parvas ate punjabi lok man. Kaav Shastar, 95-102.

Singh, Y. (2022). Shiv kumar di kaav sirjana da antar-davandh. Parkh, 86-92.

### **Books/Chapter in Books**

Kaur, J. (2023). Bandar naal behas kon kare: Chatan/achatan di shabdik lila. Punjab (pp. 173–178). Saptrishi Publication

### **Seminars/Conferences organized by the Department**

National Seminar on "Higher Education through the medium of Indian Languages: Challenges and Opportunities", 28-02-2023.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Ravinder Kumar, Head of the Department of Punjabi has Participated as a Speaker and Chief Guest in a program dedicated to International Mother's Day organized by Punjabi Lok Manch, Delhi (Regd.) on 08-05-2022.

Prof. Kulvir Gojra Presided the 'Sawan Kavi Darbar' organised by the Dyal Singh Evening College, DU, on 22nd July, 2022.

Dr. Ranju Bala, Assistant Professor has Participated in the one day online workshop on NEP- 2020 implementation Plan: Strategic Action Plan and Goals on the theme "Research, Innovation and Rankings" organised by CPDHE (UGC- HRDC) University of Delhi, Delhi on 31st August, 2022.

Prof. Ravinder Kumar, Dr. Nachhattar Singh and Dr. Ranju Bala have Participated in the Two-Day Anandshala (Blissinar) titled 'ALAP- Academic Leadership Alignment Programme' under NEP Implementation Pathways services (NIPS), organised by Bharatiya Shikshan Mandal and Research for Resurgence Foundation in association with AICTE at Prajnanam Auditorium, AICTE, New Delhi on 13 - 14 September 2022.

Prof. Ravinder Kumar has delivered a lecture on 'Rashtriya Shiksha Niti : Bharti bhasaye aur Anuvad' organised by Inderprasth Mahila College, University of Delhi On 27 September, 2022.

Dr. Rajni Bala recorded a talk on the topic 'Pritam Singh Safir: Eminent Punjabi Poet' at All India Radio on 15th September, 2022.

Dr. Rajni Bala, Dr. Nachhattar Singh and Dr. Ranju Bala have successfully completed one-week workshop on "Basic Computer Operations and Text Editing Tools" organized by Department of Sanskrit, University of Delhi, Delhi during September 01-08, 2022.

Dr. Ranju Bala has participated in the one-day online workshop on NEP- 2020 -Changing Role of Teachers organised by CPDHE (UGC- HRDC) University of Delhi, Delhi on 9th September, 2022.

Prof. Kulvir Gojra delivered a radio talk ‘ Social Media ate Sahit’ on Akashawant All India Radio, New Delhi on 10-10-2022.

Dr. Baljinder Singh delivered a lecture on "Kitaban Da Sansar aur Vidiarthian De Supne" at University College Dhilwan, Distt. Barnala, Punjab on 17.10.2022.

Prof. Ravinder Kumar, delivered a Lecture on ‘ Sabhiyachar ate Punjabi Sabhiyachar’ at Bharati college, University of Delhi on 6 February, 2023.

Prof. Ravinder Kumar,,participated as a Chief Guest in a ‘Discouse and Kavi Darbar’ on International Mother Language Day organised by Punjabi Prachani Sabha, Delhi on 21 February, 2023.

Prof. Ravinder Kumar, presided a session in the National level Seminar on ‘ Bharatiye Bhasaye evam Sahitiye’ organised by Bharati Bhasa Samiti, Dyal Sigh College, University of Delhi on 21 March, 2023.

**Placement Details (Number and percentage of students placed): 30**

**Faculty Strength: 8**

**Number of Ph.D. Degrees Awarded: 11, M.Phil. Degrees Awarded: 17**

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## **Sanskrit**

### **Brief History**

The history of the Sanskrit Department traces its roots back to the inception of the University itself, marking its first enrollment in a postgraduate program in 1924. Following the prevalent tradition of the time, Mahamahopadhyaya Pandit Lachchhmidhar Kalla, the most senior teacher in the University's constituent colleges, assumed the role of Teacher-in-charge of the Department.

Pandit Lachchhmidhar Kalla, a polymath well-versed in various foreign languages like Persian, Arabic, Greek, Latin, German, French, Russian, English, and several Indian languages, played a pioneering role in initiating research programs within the Department. Renowned for his two highly acclaimed books, 'The Birthplace of Kalidasa' and 'The Homeland of Aryans,' Pt. Kalla completed an archaeological apprenticeship under Sir John Marshal and was an elected member of the Royal Asiatic Society. Notably, he championed the 'Out of India Theory' against the 'Aryan Migration Theory.'

In 1949, Dr. N.N. Choudhuri joined the department as a reader and later assumed the position of Head of the Department in 1949. Dr. Choudhuri was subsequently promoted to the newly created substantive position of Professor in 1955.

The Department saw the addition of Prof. R V Joshi, an internationally acclaimed Sanskritist and author, recipient of the Sahitya Academy award, and 'Pravasi Bharatiya Samman.' Another luminary, Prof. Satyavrat Shastri, a Jnanpitha and Padma Bhushan awardee, chaired the Second Sanskrit Commission and

received numerous accolades, including the President of India Certificate of Honor, Mahamahopadhyaya, Vidyavachaspati, and more. Dr. S.S. Rana, Former Reader of the Department, served as the Dean of the Colleges, University of Delhi, for over 12 years and also as the Principal of Shivaji College, University of Delhi. Prof. Vachaspati Upadhaya, the former Professor and Head of the Department, served as the Vice-Chancellor of Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, for the longest period from 1994 to 2011. Prof. Satyapal Narang, Former Professor and Head of the Department, held the position of Director, Institut Français d'Indologie, Pondicherry. Over time, the Department has been led by 19 scholars, with the current head being Prof. Om Nath Bimali, appointed in April 2022.

### **Special Features and Contributions**

The Department is one of its kind where in almost all major areas of Sanskrit studies, like Veda, Darshana, Sahitya, Sanskrit Bhasha and Vyakarana, Dharmashastra, Epigraphy & Palaeography, Modern Sanskrit Literature, Itihasa and Purana, Bharatiya Jyotisha Shastra, etc are covered by faculty members with that expertise. The Department has more than 900 PG students and about 250 Research students. A bird's eye views of the researchers conducted in 67 years by the Department is as follows:

The Department has made remarkable contributions in the field of knowledge, like:

The Department Introduces the students to various branches of the Indian Knowledge system.

The Department promotes an inter-disciplinary approach and looks at the traditional knowledge domains in the light of the latest development of scientific, technological, literary, and philosophical theories.

It Focuses the editing, interpreting, and critically analyzing Sanskrit manuscripts.

It tries at rewriting the chronology of Sanskrit Literature using modern tools in the light of Textual, Archaeological, and Linguistic evidence.

Providing a conducive environment for learning that prepares the students to achieve all types of meaningfulness in their lives as responsible individuals as well as global citizens.

### **Courses offered**

The Department offers three levels of regular courses namely M.A., M. Phil., and Ph. D. It also runs two preliminary courses Certificate and Diploma in Sanskrit.

### **Faculty and other Staff**

Sanskrit, unlike other areas, consists of a group of subjects that pertain to various indigenous knowledge domains of India. Presently the department works through its 28 faculty members representing various areas of expertise. It has got four office staff members.

### **Major Activities and Achievements:**

The Department of Sanskrit, with collaboration of ICPR organizing a one-day seminar on 01.03.2023 in Room No-22, Faculty of Arts, University.

The Department of Sanskrit, South Delhi Campus, University of Delhi, Delhi is organizing a 5 day Department of Sanskrit, University of Delhi, Delhi - 110007 Five Days National workshop 18-22, March 2023 on “अभिराजयशो ि षणम् : स्वयं प्रणेतुराचाययस्य वदनारभवन्दात्” .

The Department of Sanskrit is celebrated One day Sanskrit Week held on 09.08.2022 in the Department of Sanskrit.

The Department of Sanskrit is organised One day workshop held on 01.03.2023 “अद्वैत दर्शन प्रस्थानों में ज्ञानमीमांस ”

### **Honours/Distinctions**

Prof. Meera Dwivedi Honoured by Kashmir Saiva Institute and IGNCA on Mahamaheshvaracharya Abhinava Gupta Jayanti samaroha at IGNCA on 11.6.2022.

Dr. Avadhesh Pratap Singh: Vikram Kalidas Award, Vikram University, Ujjain, Nov 2022

### **Journal Publications**

Singh, A. P. (2022). Dharama & Darshana: Ek Vishleshan. \*Shodho Naveet\*.

Dwivedi, M. (2022). Bhagavadgītā me traigunya-mīmāṃsā. \*Sanskrit Vimarsha, Central Sanskrit University\*. ISSN 0975-1769, pp. 118-130.

Dwivedi, M. (2022). Chhandah-samikṣā me nirūpita avaṣṭambha-vyavasthā. \*Shodha-prabhā\*. Published by Shri Lal Bahadura Shastri Rashtriya Sanskrit vidyapith, Delhi, ISSN-0974-8946, pp. 51-64.

Dindoriya, V. P. (2022-2023). Concepts of Advaita Vedanta in Śrīrāma's preaching at Pañcavaṭī. \*Prācyaprajñā, 35\*, 240-247.

Meena, T. C. (2022). Ramayaniya Charitrom ke Janajatiyatva ka Nirnaya evam unake Vyaktitva ka Udghatan. \*Vaak Sudha, 8\*(32), 139-145.

Dwivedi, V. S. (2022). Mahabharat mein Varnit Manavkalyan ki Avdharna. \*Vangmayam, Trivenika Sanskrit Parishad, Prayagraj, 11\*, 83-89.

Sharma, S., & Chandra, S. (2022). कृत-शृङ्खला : एक सूचना प्रौद्योगिकी प्रणाली\* .ज्ञान गरिमा सिंधु, 75\*, 87-91. Retrieved from <http://www.cstt.education.gov.in/file/2005>

Nigam, A., & Chandra, S. (2022). धर्मशास्त्रीय अवधारणाओं के शोधकार्यों का सर्वेक्षण\* .ज्ञान गरिमा सिंधु, 75\*, 58-68. Retrieved from <http://www.cstt.education.gov.in/file/2005>

Nigam, A., & Chandra, S. (2022). Designing an Effective Digital Learning Framework for Learning Dharmaśāstric Knowledge Tradition in India. Journal of Xi'an University of Architecture & Technology, 14(7), 609-617. <https://doi.org/10.37896/JXAT14.07/315462>

Sharma, S., & Chandra, S. (2022). संस्कृत-कृदन्त शिक्षण हेतु पाणिनीय नियमाधारित व्युत्पत्ति प्रक्रिया के लिए ऑनलाइन सिस्टम . विज्ञान प्रकाश Research Journal of Science and Technology, 20(1), 38-49. Retrieved from <https://www.vigyanprakash.in/download/20.1.6.pdf>

Sanju, & Chandra, S. (2022). संस्कृत सन्धिगत ध्वनि-परिवर्तनों का भाषावैज्ञानिक आधार .Shodhsamhita: Journal of Fundamental & Comparative Research, VIII(1X), 143-149.

Nigam, A., & Chandra, S. (2022). Environmental Awareness and Protection in Ancient Bharat based on Dharmaśāstric Literature. Zeichen Journal, 8(3), 354-366. Retrieved from <http://www.ezeichen.com/gallery/2480.pdf>.

Nigam, A., & Chandra, S. (2022). मनुस्मृति में मानवीय स्वास्थ्य चिन्तन एवं प्रबन्धन .Shodhsamhita: Journal of Fundamental & Comparative Research, VIII(1X), 50-56.

Nigam, A., & Chandra, S. (2022). Digitization and Instant Reference System for Dharmaśāstric Knowledge Tradition. Language in India, 22(02), 66-72. Retrieved from <http://languageinindia.com/feb2022/arooshidigitizationdharmaatextsfinal.pdf>

Singhal, S. (2022). 'सुधीवैभवम्' आचार्य डॉ. सुधीकान्त भारद्वाजस्य अमृतोत्सवे अभिनन्दनग्रन्थ .In शब्दब्रह्म की आनन्दमीमांसा) pp. 218-222). देववाणी परिषद् .ISBN 978-81-85924-44-1.

Singh, A. P. (2022). Dharma & Darshana: Ek Vishleshan. In Shodh Navneet (pp. 115-118). Stuti Prachyavidya Samiti.

## Books

Dindoriya, V. P. (2022). \*Purāṇetiḥāsadarpaṇa\*. Vaksudha Publication. ISBN 978-81-952826-2-3.

Dindoriya, V. P. (2022). \*Suvṛttatilakam\*. Chaukhamba Surabharati Prakashan, Varanasi. ISBN 978-81-951372-3-7.

Dindoriya, V. P. (2022). \*Aucityavicāracarcā\*. Shivalik Prakashan, Delhi. ISBN 978-93-91214-65-4.

Dindoriya, V. P. (2022). \*Meghadūta\*. Upasana Publication, Delhi. ISBN 978-81-95322-93-0.

## Research Projects

Prof. Meera Dwivedi: Bhāratīya darśana men pratipādita guṇatraya kī avdhārṇā kā Sanskrit Kāvyaśāstra para prabhāva,( भारतीय दर्शन में प्रतिपादित गुणत्रय की अवधारणा का संस्कृत काव्यशास्त्र पर प्रभाव) Funded by Indian Council of Philosophical research (ICPR).Rs 5,00,000/- for three years. From 9.6.2021-3.6.2024

Prof. Ved Prakash Dindoriya: Cultural significance of Śrīrāma's journey from Pañcavaṭī to Lankā; a comparative study based on various Sanskrit Rāmāyaṇas. Minor project, grant under Faculty Research Programme (FRP), 2022-2023, The Institution of Eminence (IoE), University of Delhi, Delhi.

Prof. Tek Chand Meena: Meena Tek Chand, *Ramayan ke Janajatiya-Caritra*, FRP, Institution of Eminence, University of Delhi, Delhi. Rs. 150000/- (04.11.2021 to 30.06.2022.) (Completed)

Dr. Vijay Shankar Dwivedi: Digitization and development of web based instant reference system for dharmaśāstric knowledge tradition, Funded by IoE, University of Delhi, 2022-2023. (Completed)

Development of an Online Indexing and Concept Mining System for Nāradaśmṛti, IoE, University of Delhi, 2023-2024.

Dr. Avadhesh Pratap Singh: रामायण, महाभारत तथा कौटिल्यीय अर्थशास्त्र में वर्णित लोकनीति एवं शासनव्यवस्था की समसामयिक प्रासंगिकता) राष्ट्रीय शिक्षा नीति 2020 के विशेष सन्दर्भ में(, IOE, University of Delhi, Aug 2022-July 2025

### Seminar/Conference Presentation

Prof. Meera Dwivedi: Invited in the national seminar on 2nd June 2023 sponsored by Delhi Sanskrit University organised by Sanskrit department Matasundari women's College, Delhi University and delivered a lecture on भारतीय ज्ञानपरम्परा एवं नाट्यशास्त्र।

Invited in two day national seminar on 21,22 June 2023, jointly organized by Mharshi Dayanand University Rohtak and presented a paper titled – Rāmāyaṇa men Rāmarājya kī avadhārṇā. On 21.6.2023

Invited in two day national seminar on 16,17 May 2022, jointly organized by Sahitya academy, Delhi and Kumar Bhaskar Varma and ancient studies University, Nalbari, Assam and contributed a research paper titled- Important editorials in Sanskrit journals and their contribution to Freedom Struggle.

### Invitee Lectures

वेदेषु मानवाधिकाराः (vedeṣu mānavādhikārāḥ) broadcasted by Prasarbharati on the channel Indraprastha, Air live News 24x7, Akashvani AIR youtube and News on air app, on 6 Oct 2023 at 10:10 PM. <https://youtu.be/gMSGf8aBpd8> Delivered a lecture in central Sanskrit University on the topic of nāṭyaśāstra men navācāra aur shodh sambhavnayen. on 29.08.2023.

Broadcasted a discussion on the subject of संस्कृत सौरभम् -:(संस्कृत भाषा का वैज्ञानिक पक्ष) Sanskrit bhāṣā kā vajjnānika pakṣa) on 24th Aug 2023 at 09:15:00 AM by,Prasarbharati

<https://abs.prasarbharati.org/decide.php?key=NIVMMUIZZmpCMUU9>

Special interview in weekly Sanskrit Magazine Vaartavali program DD news on 2<sup>nd</sup> July. Link: <http://youtu.be/iUXrZG2KIoE>.

Delivered a lecture titled Raṣṭra-prabodhana men saṁhityika mūlyon kā yogadāna (राष्ट्रप्रबोधन में साहित्यिक मूल्यों का दायित्व) in one day ICPR Sponsored National Seminar organised by Sanskrit Department, Banasthali Vidyapith on the topic of Inherent Fundamental Human in Indian Culture and its Viability in national Reformation on 29<sup>th</sup> March 2013.

Delivered a lecture titled Contours of Rasa in Bharatmuni's Nāṭyashastra in workshop organized by Manipal University, Jaipur on 24.11.2022.

Invited as guest Faculty to Deliver for PG diploma on Hindu Studies (PDHS course by Bharat Vidya Prayojana (BVP), IGNC, Ministry of Culture, New Delhi and delivered a lecture on Bhārtiya samāja on 02.12.2022 (Friday from 6:00 PM to 8:00 PM.)

Delivered a lecture titled Bhāratasya pratiṣṭhe dwe Sanskritam Samskr̥tistathā organized by Sanskrit-Sanskriti- Vikasa Sansthan on closing ceremony of Sanskrit week celebration on 28.8.2022.

Delivered a lecture as resource person in a Refresher course organized by center for professional development in higher education (CPDHE-UGC -HRDC), University of Delhi through zoom on 24/8/2022 on the topic titled Stri paryāyon kā Pārivārika ūṀaur Sānskr̥tika Vimr̥sa .

Delivered a lecture titled- Sh Vindhreshvari Prasad Mishra ‘Vinaya’- mahābhāgānām Vānmādhuryam anuvdati shukīti sndarbhe in a Program Orgnised by central Sanskrit University on Sanskrit saptaha mahotsva on āzādi kā amrita mhotsav on 9.8.2022.

Delivered a presiding lecture in a National seminar organized by Sanskrit-Sanskriti- Vikasa Sansthan on technical session- Bhartiya Sanskriti ke pariprekshya men nātya-parmparā on 22 July 2022. By zoom  
Delivered an online lecture as Resource person organized by Amity school of liberal Arts, Amity University, Haryana on the occasion of Mahāmāheshvara Abhinava Gupt Jayanti on the topic of Abhinava Gupta kā Nātyaśāstrīya Cintana, on 7<sup>th</sup> June 2022.

Attended a national seminar jointly organized by Sahitya Academy, Delhi and Kumar Baskar varma Sanskrit University and ancient studies University, Nalvari Assam on 16 &17. May2022, and presented a research paper on Contribution of Sanskrit literature to Indian Freedom Struggle (important editorials in Sanskrit journals and their contribution to freedom struggle.)

Delivered a presiding lecture In an International research Seminar on the topic of Kālidās ke sāhitya men puruṣārtha-catuṣṭaya jointly organized by Kalidas academy of Sanskrit and fine arts Delhi and Bharati college, University of Delhi on 12.04.2022.

Delivered a lecture on the topic of of Upamā-vimr̥sa in shatadīpa- vyākhyānmālā organised by Maharshi vyasdeva rashtriya-prachyavidyagveshanaa kendra, Raurkela Odissa on 3/4/2022 through zoom

### **National Conference/ Seminar/Symposium/ Webinar/ Workshop**

Participated in National workshop intituled ‘Abhirajyashobhushanam: Swaym pranetumracharyasyadvandvatat ’Orgnized by Department of Sanskrit, University of Delhi, on March 18-22, 2023.

Participated in National seminar intituled ‘Bhartiya Bhasha madhyam se Uchchshiksha: chunautiya Avm Sambhawnayen ’Orgnized by Department of Panjabi, University of Delhi, New Delhi& Bhartiya Bhasha Samiti, Shiksha Mantralay Bharat Sarkar on February 28, 2023.

Participated and delivered lecture intituled ‘Vedo mein Shanti ki Awdharna’ in national Vedic conference on the Vedic vangmay mein Rashtriya Ekta avm Vishwabandhutva Orgnized by Department of Sanskrit, Jamia Millia slamia, New Delhi on February 10-12, 2023.

Participated in Memorial lecture on th ltime dilouge Orgnized by Shri Shankar Shikshayatan Delhi on September 28, 2022.

Participated in National workshop on Basic Computer oprations and text editing tools Orgnized by Department of Sanskrit, University of Delhi on September 1-8, 2022.

Participated in National Seminar on Geetvijyanbhashya gyanyogvimarsh jointly Orgnized by Shri Shankar Shikshyatan research center and Central University of Himanchal Pradesh on May27, 2022.

Participated in National Seminar on Navshikshayuge Sanskritadhayaynasy Vishwatomukhatvam in Utkarsh Mahotsav 2022 Jointly Orgnized by Three Sanskrit Central Sanskrit University of India in Ambedkar International Centre Delhi on May7-9, 2022.

Dr. Somveer Singhal विशिष्ट-वक्ता, विषय दर्शपौर्णमास याग विवेचन (अखिल भारतीया वैदिक शोधसंगोष्ठी) Organized, स्वामी समर्पणानन्द वैदिक शोधसंस्थान, गुरुकुल प्रभात आश्रम टीकरी, मेरठ (उ.प्र.) On 13 Jan. 2023.

विशिष्ट -वक्ता, विषय स्वामी श्रद्धानन्द – एक समाज सुधारक (आर्य वैदिक संवाद शृंखला) in हंसराज महाविद्यालय, (दिल्ली विश्वविद्यालय, दिल्ली) On 30. Sept. 2022.

विशिष्ट -वक्ता, विषय समकालीन परिदृश्य और आर्य समाज (आर्य वैदिक संवाद शृंखला) in हंसराज महाविद्यालय, (दिल्ली विश्वविद्यालय, दिल्ली) On 27 Dec. 2022.

### **Refresher course & Faculty Development Programmes (FDP)**

Online Refresher Course in Sanskrit (ID) संस्कृत से संस्कृति Organized by Centre for Professional Development in Higher Education (CPDHE), University of Delhi (Sponsor by UGC-HRDC) on 16<sup>th</sup> August to 30<sup>th</sup> August, 2022.

### **WORKSHOPS.**

पञ्चदिवसीया कार्यशाला, विषय– अभिराजयशोभूषणम् स्वयं प्रणेतुराचार्यस्यवदनारविन्दात्, संस्कृत विभाग, दिल्ली विश्वविद्यालय, दिल्ली, 18-22.03.2023

One Week Workshop on Basic Computer Operations and Text Editing Tools organized by Department of Sanskrit, University of Delhi, Delhi, During Sept. 01-08, 2022.

एकादशदिवसात्मकसर्वदर्शनसंग्रहग्रन्थस्वाध्यायराष्ट्रीयकार्यशाला संगोष्ठी च Organized by दर्शनशास्त्रपीठान्तर्गतसर्वदर्शनविभागेन समायोजिता, श्री लाल बहादुर शास्त्री राष्ट्रीय संस्कृत विश्वविद्यालय, During 21.11.2022 to 01.12.2022.

One Week Workshop on Basic Computer Operations and Text Editing Tools organized by Department of Sanskrit, University of Delhi, Delhi, During Sept. 01-08, 2022.

Online Workshop on Vadashastra (The Art of Making Conversations, Debates and dialogues) organized by Gokul Jan Kalyan samiti, Bhopal, Madhya Pradesh During 21.06.2022. to 24.06.2022

दश दिवसीय विमर्शकार्यशाला पातञ्जल योगदर्शन व्यासभाष्य (समाधिपाद) Organized by सांख्ययोगविभाग, श्री लाल बहादुर शास्त्री राष्ट्रीय संस्कृत विश्वविद्यालय ,दिल्ली एवं श्रीनाथ संस्कृत महाविद्यालय, हाटा, कुशीनगर के संयुक्त तत्त्वावधान में, During 11.05.2022 to 20.05.2022.

### **Participated In International/ National Conferences/Seminars/ Symposiums.**

On the topic - A Two-Day International Seminar, Topic – “भारतीया शास्त्रपरम्परा :सामयिकः सन्दर्भः” The Department of Sanskrit, University of Delhi (July 22nd & 23rd, 2023)



On the topic संस्कृतम् आन्तरिकविकासश्च संस्कृतभारती/ संस्कृत- प्राच्यविद्याध्ययनसंस्थानं जवाहरलालनेहरुविश्वविद्यालयः देहली / भारतीय- ज्ञान-प्रणाली- प्रभागः- भारतसर्वकारश्च इत्येतेषां संयुक्ततत्त्वावधाने राष्ट्रिया शोधसंगोष्ठी, on 08-09/10/ 2022

On the topic 'विश्व-संस्कृति के निर्माण में भारतीय नाट्यपरंपरा का योगदान राष्ट्रिय-अन्तर्जालीय-विद्वद्गोष्ठ्यां) वेबिनार(, महर्षिदयानंदविश्वविद्यालयस्थ संस्कृत-पालि-प्राकृत विभागस्य तथा नवदेहलीस्थ-भारतप्रज्ञाप्रतिष्ठानस्य संयुक्ततत्त्वावधाने, on 20.05.2022.

A One-day international Seminar Rewriting of Indian history in the light of Archaeology and Epigraphy (पुरातत्त्व-अभिलेखशास्त्रयोरालोके भारतीयइतिहासस्य पुनर्लेखनम् International Seminar, Organized by Department of Sanskrit, University of Delhi on 29.03.2022.

**No. of M.Phil./Ph.D. Degree Awarded: 39**

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### **Slavonic & Finno-Ugrian Studies**

#### **Brief History**

Originating in the 1946 creation of the Department of Russian Language at the behest of India's first Prime Minister, Pandit Jawaharlal Nehru, the department's early leadership was held by Dr. V.A. Shibayev, a polyglot and close associate of the renowned Russian painter, poet, and philosopher Nikolai Roerich. Originally named the Department of Modern European Languages in 1948, the department expanded to include courses in French, German, Spanish, and later, Hungarian, Polish, Bulgarian, Czech, Croatian, Portuguese, and Romanian languages by 1969. Due to increased enrolment, the department underwent bifurcation in 1987, leading to the establishment of the Department of Germanic and Romance Studies and the Department of Slavic Studies, subsequently renamed the Department of Slavonic & Finno-Ugrian Studies.

#### **Major Activities and Achievements**

Russian is being taught since 1946, Courses offered in the present: Ph.D., M.A., Intensive Advance Diploma, Part-time courses (B.A. under NEP to be introduced from the academic year 2023-2024). Only Department in India offering courses in: Slavic Languages: Bulgarian, Croatian, Czech, Polish. Finno-Ugrian Languages: Hungarian.

#### **Research Articles**

Munjal, G. (2022). Word-Formation Of Cardinal Numerals In Sanskrit & Slavic Languages (Russian, Polish, Croatian. "WE: A Multidisciplinary and Multilingual Peer-Reviewed Research Journal of Faculty of Arts, DU", 3(1), 49-55.

Munjal, G. (2022). [History of the development of Translation studies in 20th century on Theory and Practice of Literary Translation]. 'Russian Philology', 2(2), 135-148. [Original title in Russian: История развития переводческих исследований XX века по теории и практике художественного перевода]

Bharti, S. (2022). Dostoevsky's Way of Purging the Human Psyche Through Penance and Redemption., Critic, JNU', 20(Part 1), 104-109.

### **Books/Chapter in Books**

Munjal, G. (2023). [Comparative Analysis of Word Formation of Cardinal Numerals in Sanskrit, Russian, Croatian, and Polish Languages]. In \*Samara Humanities Academy, Samara City, Russia\*. (pp. 94-103). ISBN 978-5-98996-264-8. [Original title in Russian: СРАВНИТЕЛЬНЫЙ АНАЛИЗ СЛООБРАЗОВАНИЯ КОЛИЧЕСТВЕННЫХ ЧИСЛИТЕЛЬНЫХ В САНСКРИТЕ, РУССКОМ, ХОРВАТСКОМ И ПОЛЬСКОМ ЯЗЫКАХ]

### **Seminars/Conferences organized by the Department**

In DU, a seminar on “Russian Studies: New Perspectives” «Русистика: новые перспективы» on February 13 th -14 th, 2023. 14-02-2023.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Munjal, Girish (Dr.). March, 2023. Plenary Paper in Russian: “Comparative Analysis Of Word-Formation Of Cardinal Numerals In Sanskrit, Russian, Polish & Croatian Languages” («Сравнительный анализ словообразования количественных числительных в санскрите, русском, хорватском и польском языках»), presented at International Conference “Actual Problems of Linguistics in XXI century” («Актуальные проблемы лингвистики XXI века»), held on 27-28 March 2023, organized by Department of Russian Language & Mass Communication, Samara National Research University named after Academician S.P.Korolyov, Samara city, Russia.

Munjal, Girish (Dr.). March, 2023. Plenary Paper in Russian: “The Childhood Of Lord Rama & Krishna In Indian Literature” at the International Conference “The Image of a Child & the Theme of Childhood in Literature” organized by the Maxim Gorky Institute of Literature and Creative Writing, Moscow, Russia, March 16, 2023.

Munjal, Girish (Dr.). January, 2023. Paper in English: “Literary Landscapes And Cultural Heritage: Bharatendu Harishchandra, Alexander Pushkin, Leo Tolstoy & Munshi Premchand”, presented at the International Conference “Genius Loci: Literary Museums in Russia & India” organized by Indira Gandhi National Centre for the Arts in collaboration with Embassy of the Russian Federation in New Delhi & Russian House in New Delhi, 27-28 January 2023, IGNCA, Janpath, New Delhi, India.

Munjal, Girish (Dr.). November, 2022. Paper in Russian: “Russian & Punjabi Folk Songs: A Comparative Study” presented at the International Conference “Philology in the Modern Word: Perspectives from Russia and India” organized by Centre of Russian Studies, JNU & Institute of Philology, Foreign Languages & Media-Communications, Irkutsk State Univeristy, Irkutsk, Russia, 28-30 November 2022.

Bose, Atmoja (Dr.) British Association for Slavic and East European studies Annual Conference 2023, paper title “Историческое Развие Русских Слов на фоне Иноземних Влияний” University of Glasgow, Scotland, U.K

Bose, Atmoja (Dr.) Cyrillo - Methodian Legacy in International Scholarship and Cultural Memory 2023, paper title “Лексико - Семантическое Развитие с Позиций Плана Выражения и Плана Содержания Русских слов на Фоне Эволюции”, Bulgarian Academy of Science, Sofia. Bulgariao Promotion of Bangla Bhasha: Teaching and Learning 2023, paper title “Language Policy of NEP 2020: In the Light of Global Trajectory”, Bharatiya Bhasha Samiti, Govt. of India, Kolkata

Bose, Atmoja (Dr.) Attended International Online Seminar for teachers of Russian as a Foreign Language “Russian as a Foreign language textbook: Modern, Classic or effective” in the amount of 7 academic hours organized by Pushkin State Russian Language Institute, Moscow, Russia and ‘Zlatoust’ Educational and Publishing Centre, St. Petersburg, Russia.

**Faculty Strength: 6**

**Number of Ph.D. Degrees Awarded: 1**

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## **Urdu**

### **Brief History**

The Department of Urdu at Delhi University, originally part of a combined department with Arabic and Persian since the university's inception, gained its independence in 1959. This milestone followed its initial establishment on the university campus in 1957 as part of the multilateral department. The segregation in 1959 marked a significant moment, allowing for a dedicated focus on Urdu language and literature. It underscored the distinct cultural and literary significance of Urdu, a language renowned for its poetic richness and cultural depth. Since then, the Department has been pivotal in promoting Urdu's scholarly study and preservation, establishing itself as a key center for Urdu academia.

### **Major Activities and Achievements**

The teachers of the Department are actively engaged in research and publications work in different areas of Urdu Language and Literature. A number of distinguished visitors, Professors and eminent personalities visited the Department to deliver the special lectures and interact with faculty members as well as the students of the Department.

### **Publications**

#### **Research Articles**

Ahmad, I. (2018). Urdu Adab Per Dabistan e Sir Syed ke Asrat. Aiwan-e-Urdu. Delhi: Monthly Referred Urdu Journal. ISSN 2321-2888.

Khan, I. A. (2018-19). Nairang-e-khayal ek taassur “SHAM-E-HAYAT”. ZHC Magazine.

Omar, S. (2018-2019). Ismat Chughtai Bahaisiyat Khaka Nigar. Shama-e-Hayat, 88-93.

Department of Urdu, Zakir Husain Delhi College (Evening), Delhi. ISSN 2395-1230.

Omar, S. (2018-19). Kaleemuddin Ahmad: Ek Bazyaft. Urdu Journal, 8(9-10), 351-356.

Department of Urdu, Patna University, Patna. ISSN 2249-7854.

Omar, S. (2018-2019). Insha aur Unke Ahad ka Tahzeebi Manzernamah. Armughan, 5(7), 397-406. Department of Urdu, JMI, New Delhi.

Omair, S. (2019, March). Khud Aaghi ka Safar: Nesai Sheri Aawaz. Urdu Duniya, 21(03), 20-22. NCPUL, New Delhi.

Seminar/Lecture Organised 26.07.2018, A Discussion the Book Ghalib Aur Ahade Ghali, Published by Ghalib Institute Chaired by Prof. S R Kidwai.

29.08.2018, A one Day Research Scholars National Seminar.

14.11.2018, A one Day National Seminar on Qazi Abdus Sattar.

31.01.2019, A Research Scholars Seminar.

14.02.2019, A Research Scholars Seminar.

05.03.2019, A lecture on the topic “Post Parsi Urdu Drama and Theatre” by Dr. Mohammad Kazim, chaired by Prof Syed Ali Karim (Irteza Karim), Conducted by Dr. Irshad Ahmad Khan.

19.03.2019, A Research Scholar Seminar on Takhliqi Adab.

27.03.2019, A National Research Scholar Seminar on Urdu Adab Mein Deomalai Anasir. Seminar/Conference Presentations

Prof. N M Kalma, Presented a Paper on “ Gautam Budh in Urdu Literature”at Ghandhi Bhawan,DU on 30/4/2018

Prof. N M Kamal, Presented a Lecture on”Hindustan mein Urdu Afsana”at M.J.I.Hind,Delhi on 5/5/2018

Prof. N M Kamal, Presented a Lecture on” Adab e Atfal” at Ghalib Academy, Delhi on 30/6/2018

Prof. N M Kamal, Presented a Presidential address on “Akhter Sherani ki Poetry” at JNU,New Delhi on 1/7/2018

Prof. N M Kamal, Delivered a Lecture on “Non – Fictional Prose” at JMI.New Delhi on 27/7/2018

Prof. N M Kamal, Presented a Presidential address on “ Freedom Movement and Urdu” at JMI,Delhi on 30/7/2018

Prof. N M Kamal, Presented a paper on “Tradition of Folk Literature in Hindi”at Khalsa College DU, on 1/11/2018

Prof. N M Kamal, Presented a Presidential address on “Poetry of Insha” at Ghalib Institute, Delhi on 10/11/2019

Prof. N M Kamal, Presented a Presidential address on Abdur Rahman Bijnori”at Sahitya Akademy,Delhi on 23/11/2018

Prof. N M Kamal, Presented a Presidential address on “Reading of Text”at JMI,Delhi on 29/11/2018

Prof. N M Kamal, Presented a Paper on “Semaab Akbarabadi ki Poetry” at St. Johns College, Agra on 13/1/2019

Prof. N M Kamal, Presented a Paper on “Bostan e Khayal mein Razmnigari” at JNU, Delhi on 30/1/2019

Prof. N M Kamal, Presented Extn. Lecture on “ Tradition of Dastaan” at JMI, Delhi on 8/2/2019

Prof. N M Kamal, Presented a Presidential address on “Ghalib and his age” at Ghalib Academy, Delhi on 15/2/2019

Prof. N M Kamal, Presented a Paper on “Ghalib ke Ahd ki Dastanein” at Ghalib Academy, Delhi on 24/2/2019

Prof. N M Kamal, Presented a Presidential address on “ Mahbooburrahman Farooqi” on 9/3/2019

Prof. N M Kamal, Presented a Paper on “ Urdu Research after independence “ at International Conference organized by NCPUL, Delhi on 18/3/2019

Prof. N M Kamal, Presented a Lecture on “ Technique of Dastan” at AMU Aligarh on 23/3/2019

Prof. N. M. Kamal, Presented a Paper on “ Gautam Budh in Urdu Literature” at Gandhi Bhawan, DU on 30/4/2018

Prof. N. M. Kamal, Presented a Lecture on “ Hindustan mein Urdu Afsana” at M. J. I. Hind, Delhi on 5/5/2018

Prof. N. M. Kamal, Presented a Lecture on “ Adab e Atfal” at Ghalib Academy, Delhi on 30/6/2018.

Dr. Mohammad Kazim, Research Methodology in Language & Literature, a series of Lectures in Refresher courses for University & College teachers, organized by UGC–Human Resource Development Centre (Academic Staff College), Gujrat University, Ahmadabad, 24<sup>th</sup> July 2018.

Dr. Mohammad Kazim, *Niyaz Ahmad Khan Memorial Lecture* on the occasion of Birth Anniversary of Professor Niyaz Ahmad Khan organized by The Muslim Institute, Kolkata, February 2019.

Dr. Mohammad Kazim, Contemporary Urdu Theatre, A lecture organized by Department of Urdu, University of Delhi, Delhi, 5<sup>th</sup> February 2019.

Dr. Mohammad Kazim, *Urdu: Fine Arts and Infotainment*, in a World Urdu Conference on The Protection and Promotion of Urdu Language in the Global Context of Today, organized by National Council for Promotion of Urdu Language, Government of India, New Delhi, 18<sup>th</sup> to 20<sup>th</sup> March 2019.

Dr. Mohammad Kazim, *Biswein Sadi Ke Nisf Aakhir Mein Urdu Safarnama*, at a Three Day International Seminar on “Ghair Afsanwi Urdu Nasr”, organized by Department of Urdu, Jamia Millia Islamia, New Delhi, 12-14 March 2019.

Dr. Mohammad Kazim, *Urdu Drama Par Hindustani Asaateer Ke Asraat*, at a Three Day International Seminar on Hindustani Mazaheb: Falsafa aur Adab organized by Department of Urdu, Banaras Hindu University, Varanasi, 25<sup>th</sup> to 27<sup>th</sup> February 2019.

Dr. Mohammad Kazim, *Urdu Drama aur Theatre Ki Maujooda Soorat-e-Haal*, at a Three Day International Seminar on ‘Urdu Zabaan-o-Adab Ke Maujooda Masail’ organized by World Urdu Association & West Bengal Urdu Academy, Government of West Bengal, Kolkata, 1<sup>st</sup> to 3<sup>rd</sup> February 2019.

Dr. Mohammad Kazim, *Urdu Drama Mein Solah-o-Jang Ki Daastaan*, at a Two Day International Seminar on ‘Epic Poetry in Urdu, Persian & Arabic: A Saga of War and Peace’, organized by World Urdu Association & Centre of Indian Languages, Jawaharlal Nehru University, New Delhi, 30-31, January 2019.

Dr. Mohammad Kazim, *Urdu Fiction Ki Maujooda Soorat-e-Haal*, at a Four Day Multilingual International Seminar on ‘Impact of Current Social Changes on Fiction’, organized by Department of Urdu, Chaudhry Charan Singh University, Meerut, 07-10, December 2018.

Dr. Mohammad Kazim, *Sharib Rudaulvi Ki Tanqidi Jehaat*, at a Three Day International Conference on ‘Professor Sharib Rudaulvi’, organized by Department of Urdu, Lucknow University, Lucknow, 02-04, December 2018.

Dr. Mohammad Kazim, *Contemporary performing Arts in India*, in a One Day International Seminar organized by Department of Urdu for Women, Azhar University, Qairo, Egypt, November 2018.

Dr. Mohammad Kazim, *Contemporary Social Media and our Society*, in a Two Day International Conference organized by Department of Urdu and Translation, Azhar University, Qairo, Egypt, November 2018.

Dr. Mohammad Kazim, *Hum Asr Dastaangoi aur Naazereen*, at a National Seminar on Urdu Fiction ka Aaghaz-o-Irteqa, organized by Government Girls General College, Government of West Bengal, Kolkata, 30<sup>th</sup> March 2019.

Dr. Mohammad Kazim, *Qazi Abdus Sattar ka Afsana Lala Imam Bakhsh: Aik Tajziyati Mutalea*, at a Two Day National Seminar on Qazi Abdus Sattar Aur Unka Ahad, organized by Centre of Advance Studies, Department of Urdu, Aligarh Muslim University, Aligarh, 25-26 March 19.

Dr. Mohammad Kazim, *Urdu Drama Ki Tareekh Nawesi: Aik jaiza*, in a One Day National Seminar on Urdu Tareekh Navisi Ki Tashkeel-e-Nau, organize by Anjuman Taraqqi Urdu Hind, New Delhi, 24<sup>th</sup> March 2019.

Dr. Mohammad Kazim, Mahboobur Rahman Farooqui Ki Adabi aur Sahafati Khidmaaty, at a National Seminar on Mahboobur Rahman Farooqui Ki Adabi aur Sahafati Khidmaat, organized by Saeem Educational Trust, New Delhi, 9<sup>th</sup> March 2019.

Dr. Mohammad Kazim, *Allama Iqbal Ki Shairi Mein Funoon-e-Lateefa*, at a Two Day National Seminar on Allama Iqbal: Life and Contribution, organized by Department of Urdu, Mohanlal Sukhadia University, Udaipur, Rajasthan, 6<sup>th</sup> & 7<sup>th</sup> March 2019.

Dr. Mohammad Kazim, *Contemporary Urdu Drama And Theatre*, an Extention Lecture, Department of Urdu, University of Delhi, Delhi, 5<sup>th</sup> March 2019

Dr. Mohammad Kazim, *Niyaz Ahmad Khan Ki Adabi Khidmaat, an Extention Lecture on Professor Niyaz Ahmad Khan*, organized by The Muslim Institute, Kolkata, 15<sup>th</sup> February 2019.

Dr. Mohammad Kazim, *Urdu Adab Mein Metiaburj Ki Khidmaat*, Key Note at a National Seminar on ‘Urdu Adab Mein Metiaburj Ki Khidmaat’, organized by Fatehpur Village Road Ever Green Welfare Society, sponsored by NCPUL, M/O, HRD, Govt. of India, July 28<sup>th</sup> 2018.

Dr. Mohammad Kazim, *Zafar Uganvi Ki Afsana Nigari*, at a Two Day National Seminar on ‘Zafar Uganvi: Hayat-o-Karname’, organized by Narasinha Dutt College, Howrah, West Bengal, 28-29, April 2018.

Dr. Mushtaq Alam Qadri, Participated & Presented a paper entitled “Mughlia Ahad Ke Akhri Daur Ka Farsi Adab Tasawuf Ke Hawale Se” in an international seminar at Ghalib Institute on 23 November 2018.

Dr. Mushtaq Alam Qadri, presented a paper entitled “Daure Hazir Mien Krishen Chander Ki Afsana Nigari ki ahmiyat o ifadiyat” in National seminar at Kathua Jammu in December 2018.

Dr. Mushtaq Alam Qadri, Participated & presented a paper entitled “Akeeswiin Sadi Main Urdu Adab” in National seminar at Srinagar on 15 July 2018.

Dr. Mushtaq Alam Qadri, Participated & presented a paper entitled “Punjab Mein Urdu Adab” in National seminar at Malerkotla Punjab in Feb 2019.

Dr. Mushtaq Alam Qadri, Participated & presented a paper entitled “Maulana Mamlookul Ali Ki Maktoob Nigari” in National seminar at Islamic Cultral Centre in New Delhi 2018.

Dr. Abu Bakar Abbad, 8, July 2018, Shayeri ki kehkashan ka ek tabinda sitara: Aijaz Afzal, One day national seminar, organized by West Bengal Urdu Academy, Kolkata.

Dr. Arjumand Ara, 27 March 2019, Lecture on Arundhati Roy’s novel The Ministry of Utmmost Happiness in the Women Leadership Summit 2019 organized by Women’s College Student Union, AMU, Aligarh

Dr. Arjumand Ara, 25 February 2019, Symposium on the Urdu translation of Arundhati Roy’s novel The Ministry of Utmmost Happiness, participated by Arundhati Roy, Arjumand Ara and Rakhshanda Jalil, organized by Hindustai Awaaz at India Habitat Centre New Delhi.

Dr. Arjumand Ara, 2 February 2019, Book Release and symposium on the Hindi and Urdu translation of Arundhati Roy’s novel The Ministry of Utmmost Happiness, participated by Arundhati Roy, Arjumand Ara, organized by Rajkamal Prakashan Samuh at India International Centre, New Delhi.

Dr. Irshad Ahmad Khan, Asnaf –e-adab ki tadrees (National) oragnised by APDUT Jamia millia islamia 29<sup>th</sup> Nov 2018

Dr. Irshad Ahmad Khan, Sharib rudavlvi ka tanqueedi imteyazat (International) organized by shagirdan-e-sharib in collaboration with Deptt of urdu University of Lucknow, Uttar Pradesh Urdu academy and “urdu dost” Anjuman 2-4 Dec 2018

Dr. Irshad Ahmad Khan, Urdu ka ghair afsanvi adab :1901 ta haal (International) organized by Department of Urdu JMI with NCPUL 12-14 March 2019

Dr. Shazia Omair, Presented a paper in two day national seminar on “Insha Allah Khan Insha and Indian Tradition” entitled “Insha Allah Khan Insha aur Inke Ahad ka Tahzeebi Manzernamah” on 10 th -11 th November 2018, organized by Ghalib Institute, New Delhi.

Dr. Shazia Omair, Presented a paper in Two day national seminar on “Iqbal Ki Fikri Jehat” entitle Iqbal ka Fikri-o-Nazaryati Irteqa, on 29 th -30 th March 2019, organized by Faith Foundation and sponsored by NCPUL with collaboration of Urdu Academy Delhi, New Delhi.

Dr. Shazia Omair, Presented a paper in one day national seminar on “Prof. Maulana Sayeed Ahmad Akbarabadi: Shakhshiyat aur Khidmat” entitled “Sayeed Ahmad Akbarabadi Bahaisiyat Safarnama Nigar” on 30 th March 2019, organized by Jamiat Faizan-e-Ulama-e-Hind with Collaboration of NCPUL, Delhi.

Dr. Shazia Omair, Presented paper in one day national seminar “Urdu Zariya-e-Taleem aur Sarkari Idare: Masael aur Imkanaat” entitled “School me Zariya-e-Taleem Ki Soorat-e-Haal (Urdu ke Hawale Se) on 24 th March 2019, organized by Pragatisheel Mazdoor Jan Kalyan Sewa (reg), with Collaboration of NCPUL, New Delhi.

Dr. Ali Ahmad Idrisi, Presented a research article entitled IQBAL AUR QURAAN in Two day National seminar on IQBAL KI FIKRI JEHAAT organised by Faith foundation on 29 th and 30 th March 2019.

Dr. Ali Ahmad Idrisi, Presented a research article entitled QAUMIYAT AUR URDU ADAB in one day National seminar on contemporary literature and Nationalism organised by Rajdhani College University of Delhi delhi on December 2018.

#### **Number of Ph.D/M.Phil awarded**

Ph.D: 25, M.Phil: 27

#### **Faculty Strength: 14**

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## FACULTY OF AYURVEDIC AND UNANI MEDICINE

### All India Institute of Ayurveda

#### Major Activities and Achievements

The First Ever All India Institute of Ayurveda (AIIA), set up along the lines of AIIMS, was dedicated to the Nation by the Honorable Prime Minister, Shri Narendra Modi on 2nd Ayurveda Day on 17th October, 2017 at New Delhi. AIIA has also been awarded with NABH Accreditation, therefore becoming the first Ayurveda Hospital in Public Sector to be conferred with NABH accreditation in July, 2017, indicating the quality patient services it is rendering. The Institute is a perfect blend of ancient wisdom and modern technology, attracting global attention and expected to boost medical tourism in India with a focus on fundamental research on Ayurveda, drug development, standardization, quality control, safety evaluation and scientific validation of Ayurvedic medicines.

#### Honours/Distinctions

The Prime Minister distributed awards to the winners of Ayush Start-up Challenge. The competition was organized by AIIA in association with Start-up India. The challenge was launched on February 4, 2022.

Ministry of Ayush, Government of India and Western Sydney University Australia, nominated Dr. Rajagopala, Associate Professor & Head of the Department, Kaumarbhritya, AIIA and Dean, Research, AIIA as Joint Academic Chair in Ayurveda at NICM, WSU Australia.

Dr. Galib awarded 2<sup>nd</sup> Sheikh Zayed International Award for Traditional, Complementary, and Alternative Medicine (TCAM), 10<sup>th</sup> October, 2022

Dr. Prashant Gupta 2021 awarded Dr. P. D. Sethi Memorial Annual National Awards 2021 best research paper on application of TLC/ HPTLC in Pharma, Herbal & Other Chemical Analysis Prize declared in 2022 Nov.

#### Publications

Rajput, D. S., Galib, R., Kalaiselvan, V., Rahman, S. Z., & Nesari, T. M (2022) Ancient wisdom of ayurveda vis-à-vis contemporary aspect of materiovigilance. *Journal of Ayurveda and Integrative Medicine*, 13 (3) 100593

Meher, L., Tanwar, A. K., Vyas, M. (2022) Scientific understanding of cytokine storm in perspective of ayurveda: a review, *International Journal of Ayurveda and Pharma Research*, 1 (10) 54-57.

Chakole, D A., Chakole, B A., (2022) An effective use of Ayurvedic management in case of Nail Bed Infection- A case report. *International Journal of Ayurvedic Medicine* 13 (3) 816-819

Nandhini, P., Gupta, P. K., Mahapatra, A. K., Das, A. P., Agarwal, S. M., Mickymaray, S., ... & Rajan, M. (2023) In-Silico molecular screening of natural compounds as a potential therapeutic inhibitor for Methicillin-resistant Staphylococcus aureus inhibition *Chemico-Biological Interactions*, 1(374), 110383

Mahapatra, A. K., Shrikrishna, R., Ojha, N. K., Dharmarajan, P., Dileep, A., & Parameswaran, K. K. (2023) Prameha (diabetes): A scoping review of updates from Keraliya Ayurveda literature. *Journal of Indian System of Medicine* 11(1) 54Nesari, T. M.,

Nesari, T. M., Dharmarajan, P., Mahapatra, A. K., Rajagopala, S., Nesari, M., Kapoor, A., ... & Dileep, A. (2022) Setting up of an integrative center for the management of mild-moderate COVID-19 *Indian Journal of Ayurveda and Integrative Medicine KLEU*, 3(1), 21-29.

Yadav, U., Bhatted, S. K. (2022) Efficacy of Vamana Karma (therapeutic emesis) followed by Darvyadi Kwatha (herbal decoction) in the management of prediabetes (Prameha) - A single-arm clinical trial. *Ayu*, 42(1), 30.

### **Journal published by the College**

Journal of Ayurveda Case Reports, Quarterly, Edited by Prof. Tanuja Manoj Nesari

### **Research Projects**

ICMR, October 2021, “Clinical validation of synergistic effect of Vardhamana Pippali Rasayana along with conventional treatment after unraveling its complex molecular mechanism of action in Breast cancer: From Experimental model to Clinical trial” 1.5 CR.

CCRAS, Ongoing, Validation and Reliability Testing of Ayurveda Diagnostic Methods

1.5 CR.

AIIA, Ongoing 2 year, Development of Pectin Based Biocomposites of Herb Gojihva (*Launea Nudicaulis* Linn.) for Wound Dressing & its Clinical Evaluation on Chronic Wounds: An Exploratory Study (IIT-D) 10 Lakh.

AIIA, 1 year, A study to evaluate the Anti-bacterial Effects of some Ayurvedic herbs and Herbomineral preparations Approx. 10 Lakhs.

NMPB Ministry of AYUSH, Ongoing (3 years), Development of RRDR for Trans Ganga Plain Region, 5 crores

Ministry of Ayush, Ongoing, (3 yrs.), Community based Ayurveda Intervention for Promotion of physical & mental health in elderly population of Faridabad district, Haryana State (PHI Project) 1.5 crore.

Ministry of Ayush, Ongoing, (3 yrs.), Promotion of Knowledge, attitude and practices and mental health status (Anxiety, Stress and Depression) among Police personnel through Ayurvedic Intervention (PHI Project), 1.5 crore.

### **Seminars Organized**

An international webinar was held on 2 Sep 2022, with UFRJ (Universidade Federal do Rio de Janeiro), Brazil, at the "UFRJ Knowledge Festival 2022", in which Prof. (Dr.) Tanuja Manoj Nesari delivered an introductory lecture on Ayurveda and Dr. Huddar delivered lectures on ‘Ancestral Medicine in Modern times’.

An international webinar was held in collaboration with MoU partner CABSIN, Brazil, on Cerebral Palsy in which Dr. Rajagopala S delivered lecture on Introduction to Ayurveda, about AIIA, and Dept. of Kaumarbhritya (Ayurveda Pediatrics) activities and Dr. Arun Kumar Mahapatra shared his experiences on Cerebral Palsy.

An International Webinar ‘India- Germany- Latin America’ on “Ayurveda and Mental Health” was organised by All India institute of Ayurveda, New Delhi in association with Rosenberg Academy of Ayurveda (REAA), Germany on 20th October 2022 starting 5:30 PM on the occasion of Ayurveda Day Celebrations 2022.

An International Webinar was organised by MoU partner CABSIN, Brazil on 23rd Oct 2022, coordinated by Dr. Paula Martins, Ayurveda Committee, CABSIN in which various renowned speakers from CABSIN delivered their lectures and shared experiences.

An International Webinar was organised on 26th October 2022 by AIIA in association with National Institute of Advanced Industrial Science and Technology (AIST), Japan (CAFÉ-PIKNIKH Series 80) on topic “Merger of Teachings & Technologies”.

An International Webinar was organised by AIIA in association with NICM, Health Research Institute, WSU, Australia and Australasian Association of Ayurveda on 5 Nov 2022, Saturday on “Integrative Oncology”.

### **Conferences Organized (with Indian/Foreign Companies/Industry)**

Physiology of Annavaha srotas and diagnosis and treatment of GIT related disorders in Ayurveda, 23rd Aug 2022 to 25th Aug 2022, AIIA

Strengthening our Identity on Integrative Approach in the Management of Sports Injuries, 26th March 2023, AIIA

Conference on Sangyahan and Pain management, 30-01-2023 to 01-02-2023, AIIA

National Conference on Integrative Pediatrics, 20th February to 26th February 2023,

AIIA

Charak Nidana Sthana Chintan, 13.03.2023 to 16.03.2023, AIIA

### **National/International MoUs Signed International**

Tripartite MoU of AIIA with CABSIN & Federal University of Rio de Janeiro, Brazil University Health Network, Toronto, Canada

The National Institute of Advanced Industrial Science and Technology (AIST), Japan

The University of Medical Sciences of Havana (UCMH), The Republic of Cuba

Extension of MoU between Rosenberg European Academy of Ayurveda (REAA), Germany and All India Institute of Ayurveda (AIIA), New Delhi, India

### **Other Inter-Institutional Collaboration**

The Department of Swasthvirita organised a 3-days workshop in collaboration with NIFTEM regarding “Nutrient Analysis of Food Articles.

### **Students under Exchange Programme**

NIFTEM, Dabur Foundation, IGIB

### **Placement Details (Number and percentage of students placed)**

Number and percentage of students placed: 100%

### **Extension and Outreach Activities**

Organized more than 15 Medical Camps in various places (Delhi-NCr and Neighbouring states).

**Number of MD/MS Degrees Awarded: 215**

**Faculty Strength: 45**

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## **Ayurvedic & Unani Tibbia College and Hospital**

### **Major Activities and Achievement**

Institute organized Transitional curriculum for newly admitted students of B.A.M.S. and B.U.M.S. Pharmacognosy lab was developed by Dravyaguna Department. Russian delegates visited A & U Tibbia College & Hospital. International Yoga Day was celebrated on 21<sup>st</sup> June 22 at different sites A & U Tibbia College and Hospital and at Delhi Secretariat. Intra college sports competition and cultural activities were organized. National Ayurveda Day on was celebrated on 23<sup>rd</sup> october22 on this occasion various events and competitions were held. Prakriti parikshan camp was organized by Kriyasharir department. Health talks were delivered during Poshan Pakhwara by Amraz-e-atfal and Balroga department. M. R. Vaccination camp was conducted by Amraz-e-atfal department. IDCF (intensified Diarrhoea central fortnight activity was conducted. Health talk for breast feeding was conducted during breast feeding awareness week Balroga and Amraz-e-atfal department.

### **Honours/ Distinctions**

AUTC institute received Certificate of Appreciation from NCISM, Ministry of AYUSH for conduction of 136 activities for Azadi ka Amrit Mahotsav.

Dr. Mohammad Zubair received ‘Holistic Health Care Leadership Award’ presented by Ayushman Bharat Nyas during National AYUSH Conference (NAC) 2022 on 4-5<sup>th</sup> August, 2022 at India International Centre, New Delhi.

Dr. Mohammad Zubair received the “Corona Warriors” award presented by Deputy Chief Minister, Govt of NCT of Delhi at Delhi Legislative Assembly on 09.08.2022.

Dr. Shabbir Ahmad received the “Corona Warriors” award on 09th August 2022 by Delhi Legislative Assembly.

Dr. Shabbir Ahmad received Hakim Ajmal Khan Award -23 by Doctors ISM Cell Delhi on 20 Feb. 2023.

Dr. Shabbir Ahmad received Academic Excellence Award-2023 by Al Farooque Unani Medical College Indore on 25th Feb. 2023.

Dr. Iqra Hashmi received the ISSN international award for best research work in Unani on Depression and Mizaz.

### **Publications**

Rajan, S., Garg, S., (2022); A critical review of covid-19s impact on reproductive health in males. *Int. J. of Adv. Res.* 10 (Jul). 749-751

Rajan, S., (2022) Ayurvedic management of Oligoastheno teratozoospermia - A case report. *World Jjournal of Pharmaceutical Research*, (ISSN 2277-7105)

Khan, N., A., (2022) Evaluation of safety and efficacy of Unani Add-on regimen in preventing the progression of severity of the disease in hospitalized SARS-CoV2 tested positive symptomatic/mild to moderate symptomatic COVID-19 cases, A randomised controlled clinical trial. *Bangladesh Journal of Medical Science* 21(04), 901-915.

Khan, N., A., (2022) Clinical assessment of Mizaj (Temperament) in the patients of Niqris (Gouty Arthritis). *International journal of Unani and Integrative Medicine* 6(2), 20-23.

Varshney, S., Kunwar M (2023) Comprehensive Analysis of Daruharidra (Berberis aristata D.C.) *IJNRD*, 8 (3)

Walkikar, S., (2023) The role of kunjla kriya in upper respiratory tract disorders w.s.r. to bronchial asthma. *IJAPR* 11(2).

### **Research project**

Treatment adherence, tolerability and safety of Ayurveda therapeutic regimen in the management of Rheumatoid Arthritis: An open level, OPD-based, Multi-Center Study “Collaborative Research with CCRAS (CTRI no.: CTRI/2023/04/051829).

### **Seminars / Webinar organized**

A guest lecture on the topic Global Position of AYUSH System and opportunities by Dr. Pradeep Dua, Technical Officer WHO was organized.

#### **Seminar/Conference presentations**

Dr. Shalini Varshney presented a scientific paper as keynote speaker in the International Conference on Medicinal Plants of Ganga River Basin and Their Therapeutic Importance in Indian system of Medicine organized by Gurukul campus UAU, Haridwar.

#### **National MoU signed**

MOU between DIPSAR and A & U Tibbia College was signed for Collaborative Research Work and Animal house.

#### **Faculty strength: 23**

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## **FACULTY OF COMMERCE AND BUSINESS**

### **Department of Commerce**

#### **Brief History**

Department of Commerce, formally set up as a separate entity in 1967, has imbibed the DSE tradition of exploring new frontiers of knowledge and innovation in academics. In addition to the traditional M. Phil., Ph.D., and flagship M.Com. programme, Department of Commerce initiated two master degree level professional programmes, Master of International Business (MIB) and Master of Human Resource and Organizational Development (MHROD) as a response to market imperatives in 1995. In this span of nearly twenty years, these two programmes have come to be recognised as well-regarded Master's programme in business administration in the country. Both the courses, viz. MIB & MHROD have been well received by the industry till date. The nomenclature of these two professional courses has been recently changed to MBA (IB) and MBA (HRD).

#### **Major Activities and Achievements**

The Department of Commerce is one of the leading institutions of commerce education in India. The institution is best known for its research activities, faculty, and enthusiastic students. The Department boasts its distinguished alumni working in diverse areas across the world. It carries a vision of creating a learning culture. Apart from its academic excellence, the institution also takes pride in engaging its students in extra-curricular activities. During year 2022-2023 department contributed towards academia and research through regular classroom teaching and publications in leading national and international journals by faculty members.

The Department offers M. Com., MBA (IB), MBA (HRD) and PhD programmes. During 2022-23, the department of commerce accomplished following:

Launch of MBA (Business Analytics) w.e.f. academic session 2023-24.

UGCF 2022 for B. Com. (Hons.), UGCF 2022 for B. Com., UGCF 2022 for BA Commerce based courses, and G20 related programmes.

#### **Publications**

#### **Research Articles**

Singh, A.K., and Meena M.K. (2022). Challenges of virtual classroom during COVID-19 pandemic: An empirical analysis of Indian higher education. *International Journal of Evaluation and Research in Education*, 1, 11, 207-212.

Singh, A.K., and Meena M.K. (2022). Teaching-learning process through virtual mode during the pandemic time: Systematic literature review and gap analysis. *Tuning Journal for Higher Education*, 1, 10, 336-372.

Aggarwal, S., & Singh A.K. (2022). Dealing with a New Normal 'E-leadership': A Study Using Bibliometric Analysis and Content Analysis. *Vision: The Journal of Business Perspective*, 1, 1, 1-14

Aggarwal, S., and Singh A.K. (2022). Mediating Role of Psychological Capital between Dimensions of Organisational Culture and Employees' Performance: A Study of Select Organisations. *Ramanujan International Journal of Business and Research*, 1, 7, 82–92.

Gauri., Singh, A. K., & Singh S. K. (2023). Massive Open Online Courses (MOOCs): A Bibliometric Analysis. *Delhi Business Review: An International Journal of SHTR*, 24(1), 35-47.

Goel, A., & Singh, A. (2022). Measurement and Structural Assessment of Circular Economy Model. *Journal of Business Management and Information Systems*, 9(1), 20-28.

Ramchandani., Sahi, & Singh, A.K. (2022). Pathway to Corporate Sustainability: Drivers & Dimensions – A Review Study. *Delhi Business Review: An International Journal of SHTR*, 23(1), 33-42.

V.K. Shrotryia, V.K. and Kalra, H. (2023). COVID-19 and overconfidence bias: the case of developed, emerging and frontier markets. *International Journal of Emerging Markets*, 18(3), 633-665.

Shrotryia, V.K., Saroha, K. and Dhanda, U. (2022). Why employee engagement matters? Evidences from Delhi Metro Rail Corporation in India. *Personnel Review*, 51(2), 501-527.

Shrotryia, V.K., & Kalra, H. (2022). Herding in the crypto market: a diagnosis of heavy distribution tails. *Review of Behavioral Finance*, 14(5), 566-587.

Shrotryia, V. K., & Kalra, H. (2022). Herding and BRICS markets: a study of distribution tails. *Review of Behavioral Finance*, 14(1), 91-114.

Singh, P.K., and Singh K. (2023). Financial Inclusion- A Front Wheel for Women's Empowerment. *International Journal of Advanced Research*, 11(5), 1586-1598.

Kumar, S., & Sinku, S. (2022). Elucidation of efficacy and regulatory mechanism of start-ups in India. *International Journal of Applied Research*, 8(1), 99-103.

Mahajan, R., Saini, J. R., & Sidhu, A. S. (2023). Impediments of MSMEs growth: A study of Hilly State of India. *BULMIM Journal of Management & Research*, 8(1), 16-23.

Kumari, S., Saini, J. R., & Khatun, R. (2022). Assessment of Problems and Prospects of Financial Inclusion in Rural India: A Study of East Champaran District of Bihar. *The Journal of Commerce & Business Studies*, 9(1), 30-45.

Dhingra, S., and Shukla, A. (2023). Growing Private Equity Investment in the Indian NBFC Sector: Analyzing Risks, *Economic and Political Weekly*, 58(18), 41-49.

Jain, N., Thomas, A., Gupta,Vikas., Ossorio, M., and Porcheddu, D. (2023). Stimulating CSR learning collaboration by the mentor universities with digital tools and technologies – an empirical study during the COVID-19 pandemic. *Management Decision*, 60(10)



Bala, K. (2023). An Empirical Study of the Moderating Impact of Peer Group on Key Business Antecedents and Digital Games Performance of the Indian Economy. *Thailand and the World Economy*, 41(1)

Singh, A.K., Shrivastav, R.K., Chapagain, R., and Yadav, K. (2022). Impact of Fossil Fuel Consumption, Population Growth and Financial Development on the Carbon Emissions in India. *Journal of Commerce and Business Studies*, 9(1), 69-75.

Jhunjhunwala, S., & Sethi, A. (2022). Do ETFs affect the return co-movement of their underlying assets? Evidence from an emerging market, *Managerial Finance*, 48(11), 1661-1686.

### **Books/Chapter in Books**

Kaur, S. (2023). Theorizing on Religiosity and Frugal Buying Behavior: A Literature Review, Religion and Consumer Behaviour, (pp.1-26). London: Routledge.

Kaur, S. (2022). Post demonetization outlook: A new era of digitalisation, Demonetisation and Indian Economy: 5 years of hiccups and achievements, (pp.171-176). India: Prestige Publications.

Jhunjhunwala, S. (2023). Corporate Governance: Creating Value for Stakeholders, (pp.1-273). Singapore: Springer Nature.

### **Journal(s) Published by the Department**

Journal of Commerce and Business Studies,(2020-23),Journal of Commerce and Business Studies, Department of Commerce, Faculty of Commerce and Business, University of Delhi, 1, 9, 1-79

### **Research Projects**

Indian Council of Social Science Research (ICSSR), 2021-2023, Impact of Direct Benefit Transfer Scheme on Financial Inclusion: An Assessment, 14,99,000/-

Indian Council of Social Science Research (ICSSR), 2022-2023, Assessment of digital financial inclusion and its impact on the socio-economic status of rural households: A study of East Champaran district of Bihar, 4,00,000/-

Indian Council of Social Science Research (ICSSR), 2021-2022, - Impact assessment of GST on financial inclusion: A case of MSMEs, 100

### **Seminars/Conferences organized by the Department**

Fellow And Former Head. Trade. Commerce And Strategic Economic Dialogue, Niti Aayog, Government Of India;

Icssr, Annual International Commerce Conference – 2023 “भारत @ 2047: Role Of Commerce And Business, 12-01-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Sunaina Kanojia presented a paper titled "Corporate Governance and Family-Owned Businesses: A Systematic Review", 2022 ICVG Conference, held in Monash University, Melbourne Australia, during 15-16 December 2022.

Dr. Kirti Singh presented a paper titled "Role of Think Tanks in Advancing Innovative Practices in the Public Sector" in International Conference on Innovations in Public Performance Management: Lessons for Policy Makers, June 30 & July 01, 2023 organized by MDI Gurgaon and The National Center for Public Performance, Suffolk University, The Common Wealth Secretariat & IBM Center for the Business of Government.

Dr. Kirti Singh presented a paper titled "Financial Inclusion- A Front Wheel for Women Empowerment" in International Summit on "New Advances in Business, Finance & Management" organised By Department of Banking, Economics & Finance. Bundelkhand University, Jhansi on 27-29 March 2023.

Dr. Jagdish Raj Saini - presented a paper titled "Assessment of Digital Financial Inclusion and its Impact on the Socio-Economic Status of Rural Households: A Study of East Champaran District of Bihar" in 8th Annual International Commerce Conference – 2023 "भारत @ 2047: Role of Commerce and Business" organised by Department of Commerce, University of Delhi from January 11-12, 2023.

Dr. Jagdish Raj Saini - presented a paper titled "Analysis of NEP-2020" presented in national seminar on Indian Education System through the Lens of NEP-2020 organised by Minerva College of Education, Indora, Kangra on April 12, 2023.

Dr. Rajdeep Singh - presented a paper titled, "Does Insolvency and Bankruptcy Code Improve Credit Channels for firms in Indian Manufacturing Sector" organized by Insolvency and Bankruptcy Board of India in collaboration with IIM Ahmedabad at IIM Ahmedabad from April 30, 2022 to May 1, 2022.

Dr. Rajdeep Singh - presented a paper titled "International Conference on Vayu: The Vital Life Force" organized by Ministry of Environment, Forest and Climate Change at Shiksha O Anusandhan University, Bhubaneswar, Orissa.

Dr. Rohit Kumar Shrivastav - presented a paper titled 'Corporate Social Responsibility Spending in India' presented in International Conference on Multidisciplinary Concepts in Management (ICMCM-2023) organised by Department of Management Studies, G L Bajaj Institute of Technology & Management, Greater Noida, India in association with California State University, San Bernaridino, USA held on 30th June - 1st July 2023.

Dr. Supreet Kaur - Participated and presented a paper on FinTech for Financial Inclusion: Empirical Analysis of Indian Experience in "One Day National Seminar on Digital Transformation for Competitive Advantage" organised by School of Management Studies, Punjabi University, Patiala, February, 2023.

Dr. Sumita Sinku – presented a paper titled “Cashless Indian Economy- UPI, E-UPI- A descriptive study” in 8th Annual International Commerce Conference – 2023 “भारत @ 2047: Role of Commerce and Business” organised by Department of Commerce, University of Delhi from January 11-12, 2023.

### **Placement Details (Number and percentage of students placed)**

MBA(IB)

Number and percentage of students placed – 52/53 - 98.11%

Number of Companies visited for campus recruitment - 75

MBA(HRD)

Number and percentage of students placed – 63/65- 95% (3 pursued family business)

Number of Companies visited for campus recruitment - 75

M.Com.

Number and percentage of students placed – 110 /408 and 26.96%

Number of Companies visited for campus recruitment - 13

### **Faculty Strength**

Professors: 15, Associate Professors: Nil, and Assistant Professors: 15

**Number of Degrees Awarded Ph.D.: 26, M.Phil.: 19**

### **Other Significant Information**

HORIZON'22: Annual alumni conference, in which panels of Department's esteemed alumni discuss the prevailing impediments, and recommend new solutions to overcome them, as well as potential avenues in the HR sphere that may arise in future.

HR Symposia 2022 (September 27-28, 2022): HR Symposia is a 2-day annual HR conference focused on a central theme. It includes Panel Discussions and Speaker Sessions on specific topics related to the industry and distinguished leaders from the HR Fraternity are invited to be a part of these sessions to share their opinions about the same.

SYNERGY'23: Synergy is the Annual Management Fest organized by students of MBA (IB) & MBA (HRD), Department of Commerce, Delhi School of Economics. It involves the sharpest management brains across the country participating in a plethora of events and competitions that encompass various domains of management education in the fields of International Business, HR, Marketing, Finance, Strategy and Consulting.

COMBAT'23: It's an annual festival conducted on Unstop formerly known as D2C. It comprises two events, Hunt It - It is a quiz plus scenario-based test designed to measure the critical thinking and creativity of the person. These help in developing analytical and critical thinking skills which are essential for a manager.

ERUDITION 2022 – The Annual Business Convention of the MBA Course at the department provides a common platform for educationists, industrialists, entrepreneurs, financial gurus, and students to share practical knowledge and give their insights on the current scenario of business globally. The Annual Convention seeks to strengthen this very foundation by exposing students to industry leaders and their schools of thought.

THE CORPORATE ECCLESIA'22: The theme for this year's event was " Leadership: Coping with the new normal". The panel discussion revolved around three broad themes. A) Traits of a good leader B) How leadership is derived from behavioural and mindset qualities rather than designations?

Symposia Rethink'22: Team IISAC organised Symposia Rethink'22 on October 1st, 2022 on the theme of Redefining Globalisation. The Occasion was graced by Hon'ble Chief Guest Mr Rajeev Kher, IAS Retd. (Former Commerce Secretary, Government of India). He highlighted the importance and challenges of Globalisation and International Trade. The Guest of Honour Mr Sanjay Chadha (Former Additional Secretary, Ministry of Commerce Government of India) showed us the journey of how globalisation evolved and talked about the Potential Opportunities and Challenges for India in Future.

Beyond the classroom - Media Cell, a student-led editorial society of M.Com. Department of Commerce, Delhi School of Economics with its flagship work 'Drishti', the official magazine of Department of Commerce has also launched 'Beyond the Classroom' - a series of sessions for the students that aims at bringing the experiences of experts in various fields.

Blooming Insights, the official Blog of Media Cell, was launched in February 2023. Since then, it has been providing its readers with quality and well-researched content, interesting and engrossing topics, and up-to-date news. Every week new contemporary articles are posted to keep our readers entertained and updated with what's going on in the world.

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## **FACULTY OF EDUCATION**

### **Department of Education**

#### **Brief History**

The Department of Education, University of Delhi, earlier known as CIE, is perhaps the first major institution of professional learning and research in Education that was established since independence. The first Prime Minister of India, Pandit Jawaharlal Nehru and his first Education Minister, Maulana Abul Kalam Azad took considerable interest in its establishment in 1947 and activities and progress in those early years. Maulana Azad visualized the function of it not merely to "turn out teachers who will be 'model teachers', but to evolve into a research centre for solving new educational problems of the country". Maulana prophesized that it would grow into "a beacon light for training institutions of the country". Over these past decades, the Department has indeed grown into a pace-setting institution in Teacher Education and Educational Research. Recognized as the Institute of Advanced Studies in Education (IASE) and having launched the Maulana Azad Centre for Elementary and Social Education (MACESE), the Department has shaped its unique philosophy, which finds reflection in its all the programmes through inculcating core values of democracy, freedom, dedication, creativity, social responsibility, diversity, inclusion, collaborative and experiential learning, innovation, sincerity, and excellence.

#### **Major Activities and Achievements**

In the year ending 2023, 105 students got their B.Ed. degree, 59 students got their M.Ed. degree. Likewise, 14 Scholars were awarded the M.Phil. degree in the year and 18 scholars received their Ph.D. degrees in the University Convocation.

Our department has celebrated Platinum Jubilee 75th Foundation Day where Professor Virendra Kumar Malhotra delivered Foundation Day address and Presided by Honorable Vice-Chancellor, University of Delhi Professor Yogesh Singh. Our faculty organized National Seminar on National Curriculum Framework for Foundational Stage 2022 on November 11, 2022, and FDP/training program on enhancement of research skills among the teacher educators of DIET and SCERT from 1st March to 6th March, 2023. Under the aegis of the G20 Activities, Various activities like G 20 Presidency of India and Global Economic Policies has been organized.

The Department has been striving hard to improve the functioning of the Enabling Unit to support students with disabilities. The aim of the unit is to make students with disabilities feel at home and provide them with opportunities for psychosocial well-being apart from facilitating their learning. There are around more than 20 students across the various courses and programmes of study. The unit has a collection of Braille books of NCERT books, reports that are being used by the students. Recording of readings and lectures are done regularly making them available as and when needed. Around 81 voice recordings of readings, mostly in Hindi, are available in the Unit. Also, a significant number of Braille versions of important books for students have been procured in 2022-2023. It has also computers, Braille printers Mentoring and counselling of students in this challenging time was routinely carried out by the teachers of the unit. Every year, the unit supports the students in the procedure for procurement of scholarships and assistive devices

like tailor made laptops for students with visual impairment. The Unit also tries to generate awareness among youth and develop sensitivity towards issues related to persons with disabilities.

The Department celebrated International Yoga Day on 21st June, 2022 wherein several faculty members and Non-teaching staff actively participated. There was a yoga expert who demonstrated different Asanas and Pranayam. He also gave tips on diet, lifestyle and how to be happy. One of the major highlights of students' activities is their cultural and sports festival, Manranjan. Manranjan is being celebrated for three-five days where the main events are 'Cultural events', 'Bal mela', and 'Prof. R.P. Sharma memorial Sports day', etc. Students of B.Ed. and M.Ed., with scholars of M.Phil., and Ph.D. participate in this programme with great zest and zeal. A Bal-Mela for the students at the CIE Experimental Basic School is a special feature.

Our Departmental has launched new departmental website on Platinum Jubilee of the department and centenary year of the University of Delhi. It gives full details and information about all that we do. It can be accessed by visually challenged students too. So anyone requiring more information about our programmes and activities can visit our website where they will find reports and details.

Professor Mary E. John, who has significant contribution in the field of Women and Feminist politics, delivered the Basu Memorial Lecture on 26th February 2023 which is an annual event to commemorate Prof. A. N. Basu, the founder Principal of CIE. The theme of her lecture was 'Gender, Education, and Empowerment'. It was attended by many alumni, students, scholars and teachers of the Faculty of Education.

Faculty of Education (CIE) Library was established immediately after the establishment of Central Institute of Education in 1947. There is a collection of about 93,871 books, theses, and dissertation in the CIE library. This Year added 771 books (440 English titles+331 Hindi titles).

## **Publications**

### **Research Articles**

Arora, P. (2022). Co-Curricular Activities as Best Practices of CIE. *International Journal of Teacher Education and Teaching*. 2(1), 67-72.

Arora, P. (2022). Multidisciplinary and Interdisciplinary in NEP 2020. *Madhya Bharati*, 82,62-69.

Arora, P. and Sahoo, R. (2022). Concept of Citizenship among the Students and Teachers of the State of Jammu & Kashmir. *MIER Journal of Educational Studies Trends and Practices*. 12(2), 161-180.

Balaganapathi, D. & Baniwal, V. (2023). Introduction. *Philosophical Practice*. 18(1), 3024-3026.

Balaganapathi, D. & Baniwal, V. (2023). Editorial. *HASER. Revista Internacional de Filosofia Aplicada*, 14, 13-16.

Balaganapathi, D. & Baniwal, V., & Garg, V. (2023). Conversations on Psychological Counselling and Philosophical Counselling: Examining the Convergences and Divergences Between Philosophical and Psychological Counselling. *Philosophical Practice*. 18 (1), 3072.

Baniwal, V. & Chaudhary, A. (2023). Śravaṇ Kumār: Rethinking a Cultural Ideal for Indian Youth, Religions. 14 (6), 695

Chander, S. (2022). Use of ICT during Pandemic: Exploring Perspectives of Special Educators. *Navtika: A journal of Early Childhood Care Education*. XIII, 39-45

Chander, S. and Arora, C. (2023). A study of School Teachers on Adaptation to Online Education during Pandemic Period, *Indian Journal of Educational Technology*. 5(1), 44-53.

Chhabra, M. and Das, R. (2023). Students' understanding of electrostatic force as a vector quantity at the undergraduate level. *Physics Education*. 58(3), 035016(1-10)

Chhabra, M. and Das, R. (2023). Undergraduate students' visualization of quantum mechanical eigenstates and the role of boundary conditions. *European Journal of Physics*. 44, 025702(1-22)

Gupta, S. (2023). Classroom Based Assessment Practices for Learning. *Journal of Indian Education*. 48(4), 1-9

Gupta, S. & Gupta, S. (2022). Online Teaching Challenges and Opportunities Created for School Teachers Amid Covid-19 Pandemic. *International Journal of Management and Science*. 12(1), 7-16.

Ingole, M., Kanvaria, V.K. and Mandal, H.K. (2023). Exploring the Effect of Anonymity in Cyberbullying of Females in Higher Education Institutions in India. *Indian Journal of Educational Technology*. 5(1), 98-111.

Ingole, M., Kanvaria, V.K., and Mandal, H.K. (2022). Awareness about Cyberbullying Implicit Belief and Regulation Matter. *Shodh Samikksha*. 12(2),159-173.

Kanvaria, V. K. and Dubey, V. (2022). DIKSHA, NISHTHA and CPD: Experiences and perceptions of school learning-facilitators. *Indian Journal of Educational Technology*. 4(2), 144-151.

Kumar, R. (2022). Encouraging Learners' Attempt to Problematize and Visualize Solution-Prospects in Complex Multi-Layered Reality. *International Journal of Early Childhood Special Education (INT-JECSE)*. 4( 2). 6892-6905

Kumar, R. and Sharma, V. (2023). Bharat, G-20 Aur Vasudhev Kutumbkam ke Mool Shrot ki Khoj. *Academic Jagat*. 5, 11-15

Kumar, S. (2023). Reconceptualizing Teacher Education from an Emancipatory Perspective. *Journal of Educational Planning and administration*, XXXVII, 1, 31-46.

M Rajendran. (2022). Sociocultural Perspective on Assessment for Learning: Exploring Pre-Service Teachers' Understanding. *International Journal of Social Science And Human Research*. 5(10), 4567-4570

M Rajendran. (2022). Evaluation of a Conceptualised Learning Design for the Development of Techno-Pedagogic Competencies among Pre-Service Teachers. *Journal of Information & Knowledge Management*, 12(2) 1-21

Niwas, R., (2022), Impact of Happiness Curriculum: An exploratory study of Delhi School, Excellence in Education XI (3), 112-118.

Rai, G. (2022). Barriers in Higher Education in Ladakh, *Education India*, 11(3), 1-11

Rai, G. (2022). Exploring teachers' views about Online vs Face-to-Face teaching in ESL classrooms. *ELT Voices*, 12(3), 51-65

Singh, A., Gupta, S. (2022). कोविड-काल के दौरान शिक्षकों के लिए ऑनलाइन अध्ययन का विश्लेषण: सर्वेक्षण शोध. *Shodh Drishti*. 13(11), 29-38.

Singh, S. Pal, R., Verma, K. (2022). Impact of Mann ki Baat on Divyangjan: A Case Study of Jagadguru Rambhadracharya. *WE Journal of Delhi University*. 3(2), 98-109.

Singh. S. (2023). Curriculum & Its Practice in Teacher Education Department at BHU & DU: A Comparative Case Profiling. *Journal of Educational Planning and Administration*, XXXVII, 2, 148- 148-177

Verma, S. (2022). A study of Perception of Teachers about Learning Outcomes, *Dogo Rangsang Research Journal*, 19(5), 114-123.

Verma, S. (2022). Mathematics Elements in Traditional Gaming of Dogra Community of Jammu: An Ethnomathematics Study. *Education and Society*. 45(4), 86-95.

### **Books/Chapter in Books**

Baniwal, V. (2022). *Engaging with Meditative Inquiry in Teaching, Learning, and Research: Realizing Transformative Potentials in Diverse Contexts*. New York, Routledge, 9781003128441, 14

Behari, A. and Saxena, S. (2022). *Perspective Building for Environment among Teachers: A Curricular Initiative for Sustainable Development*. UK: Cambridge Scholars Publishing, 9781527577237.

Chander, S. (2022). *Adolescents and Issues Related to Learning and Academic Achievement*. Singapore, Springer, 9789811698811, 81–103.

Chander, S. (2022). *Scientific Parenting Handbook for Parenting of the Preschoolers*. India, ETMA.



Gandhi, H. (2022). *School: a site for curriculum and pedagogy*, New Delhi, Shipra Publications, 9789391978235, -

Gandhi, H. and Popli, M. (2022). *Foundational numeracy: a quintessential ingredient for a developing nation*. New Delhi, Shipra Publications, 9789391978235, 199

Gupta, L. (2022). *The International Science and Evidence-based Education Assessment: ISEE Assessment Working Group 1*, New Delhi, UNESCO MGIEP, 9789391756048, 339

Ingole, M. (2022). *Meta-cognitive Strategies and Learning Approaches: Usability in the Educational Context*. Lulu Publication, 9781387894901

Jain, S. & Sarohe, S. (2022). *Gender, school and society*, India, Pearson, 9789354497483

Kumar, R. (2022). *Guidance & Counselling Activities: Handbook for the Primary Teachers*, New Delhi, SCERT, 9789390000000.

Kumar, R. (Member). (2022). *Strategies Used by the Teachers in Promoting Inclusion in the Science Class at Upper Primary Level in the Schools of Central District of Delhi – An Exploratory Study*, DIET, 9789394368002

Kumar, S. (2022). *Research and Innovation in the Context of the NEP 2020*, Atlantic Publication, 9788126935550, 21

Kumar, S. (Expert). (2022). *Guidelines for 50 Hours of Continuous Professional Development for Teacher, Head Teachers and Teacher Educators: Based on NEP 2020*, NCERT, 978-93-5580-045-9, 68

Prasad, R. (2022), *Tools of Data Collection in Educational Research*, New Delhi, Lucky International, 9789392255083.

Saxena, V., Kumar, S., and Chander, S. (Contributor). (2022). *Course Manual on Pedagogical Imperatives for Capacity Building in Higher Education*, University of Delhi: Institute of Life Long Learning., 9789390878093, 96

Kajal and Singh, S. (2022). *Exploring Status Of Science Education In Indian Rural Classroom: A Study Of Eastern Districts*, India, Homi Bhabha Centre for Science Education, 9788195805426, 11

Singh, S. (Expert), (2022). *Guidelines for 50 Hours of Continuous Professional Development for Teacher, Head Teachers and Teacher Educators: Based on NEP 2020*, Delhi, NCERT, 9789355800459, 68

Kumar, S. (2022). *Open Margins: Diversity among Momosexuals un Urban India*, Rawat Pubication, 9788131611142, 17

Prasad, R., and Anshu, K. (2023). *Attitude Scale Towards Private Tuition*, National Psychological Corporation, Agra, National Psychological Corporation, 9789391723781.

Ingole, M. and Bukusheva, A., (2023). *Fostering Mathematical Knowledge Through Usage of Meta-cognitive Strategies: An Explorative Study*, Israel, University of Haifa, Israel: PME, 9789659311217, 471

J C Aggarwal & Sandeep Kumar. (2023). *Essentials of Educational Psychology 4 Edition: As per UGC and NEP 2020*, New Delhi, Vikas Publication, 9789356746169.

Saxena, V. (2023). *Academic writing a practioner's insight from the field*, Delhi, Muktibodh trust Publication, 978-93-5913-104-7

Saxena, V. (2023). शिक्षा मे समावेशन के आयाम (Siksha me samavesanke aayam), Mumbai, Pralek Prakashan, 9789355004352, 3

Kumar, S. (2023). *Strengthening Qualitative Research in Education*, Delhi, Muktiboth Publication, 9789359131047.

Kumar, S. (2023). *Essential of Educational Psychology*, New Delhi, Vikas Publication, 9789356746169.

Ranganathan, N. (2023). बच्चों की दुनिया: विकास एवं शिक्षा. New Delhi, Shipra Publication, 9789391978433, 60

### **Journal(s) Published by the Department**

### **Research Projects**

Ingole, M., ICSSR- Minor Project, 2023, *The Barrier and Enablers to Higher Education among Warli Tribe Girls in Thane and Palgar District Maharashtra: A Ethnomethodological Study*. (5,00,000)

Kumar, G. (2022). राष्ट्रीय शिक्षा नीति 2020 के आलोक में, उत्तराखंड के संस्कृत महाविद्यालयों में शिक्षा के अवसरों की समानता, पहुँच और शैक्षणिक गुणवत्ता का समालोचनात्मक अध्ययन, ICSSR-Minor Project (3,80,000)

Kumar, S. 2023. Developing Self-directed School Based Scheme of Continuous Professional Development for Social Science Teacher. IOE, University of Delhi (2,00,000)

Kumar, S. (2023). *Pedagogy In Higher Education: Exploring And Developing A Possible Framework*, IOE, University of Delhi (2,00,000)

Singh,S. (2022). *Skill Development and Entrepreneurship Education in Delhi Government Schools: An Exploratory Study*, IOE, University of Delhi (2,00,000)

Singh,S. (2023). *An Ethnographic Study of Baiga Tribes in Central India*, ICSSR- Major Project (12,00,000)

Singh,S. (2023). *Empirical Understanding of the Social Impact of Mann Ki Baat*, ICSSR. (3,30,000)

### **Seminars/Conferences organized by the Department**

Department of Education, University of Delhi, MOE, National Seminar on *National Curriculum Framework for Foundational Stage 2022*, 11-11-2022

CIE and SCERT, Delhi, SCERT, A Five-day FDP/training program on *enhancement of research skills among the teacher educators of DIET and SCERT*, 06-03-2023

### **Extension and Outreach Activities**

Yoga, Heritage Walks and Music for B.Ed. and M.Ed. students

### **Faculty Strength**

Professor: 13, Associate Professor: 5, Assistant Professor: 17, Guest: 2

**Number of Ph.D. Degrees Awarded: 18, M.Phil. Degrees Awarded: 14**

### **Other Significant Information**

The department has its own website <http://www.doe.du.ac.in> which is updated almost every day. The website is visually and hearing challenged-friendly and maintained by a highly dedicated team. It is highly enriched with the information bearing the titles Home, About Us, Faculty, Academics, Students, Scholars, Colloquium/Viva, Admissions, IQAC, Resources, CIE Staff, CIE Alumni Website, Honour Board, Infrastructure & Facilities, Useful University Links, Useful Web Links, Annual Report, Special Web Resources for Visually & Hearing Challenged, Anti-Ragging, Anti Smoking, SC/ST/OBC Grievance Cell, Students' Grievance Redressal and North East Student Grievance and Contact Us. The website is explored regularly by all the students, constituent colleges and faculty members. The department has a vigilant Anti-ragging cell as per UGC guidelines. The department also maintains a school attached with it, namely CIE Experimental Basic School which works under direct guidance and supervision of the departmental authority. The school has a very optimal teacher-student ratio especially as compared to other schools in Delhi.

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## **FACULTY OF HOMEOPATHIC MEDICINE**

### **Nehru Homeopathic Medical College & Hospital**

#### **Major Activities and Achievements**

Nehru Homoeopathic Medical college & Hospital was designated as COVID Health Centre by GNCT of Delhi. During the peak period of COVID pandemic, the hospital had provided health care facilities for appropriate management of mild & moderate COVID positive patients. In this regard, the hospital successfully conducted an observational research study to delineate Clinical Profile of COVID-19 patients after obtaining due Institutional ethical clearance. An on-going research on prophylactic role of Homoeopathic Medicine in COVID-19 pandemic is also being conducted at NHMC & Hospital under the aegis of Directorate of AYUSH, Govt. of NCT of Delhi.

The Hospital also had been pro-actively involved in Immune booster homoeopathic medicine distribution as part of Immunity Campaign. The institute is also ensuring IEC display and staff sensitization for COVID-19 appropriate behavior as part of Public Health response.

#### **Publications**

Dr Seema Rai. (2022). International Journal of preventive Curative and Community Medicine . 2022, 8(2022), 8-11.

Dr Sapna Gupta. (2022-23). Evidence-Based Treatment of Severe Psoriasis by Individualized Homoeopathy: Case Reports . 2022, 35(03)(2022), 164-174.

#### **Research Projects**

Four multicentric research proposals have been approved by CTIRI to be conducted at NHMC&H in collaboration with Dr. B.R. Sur Homoeopathic Medical College & Hospital and Dr D. N. De Homoeopathic Medical College.

#### **Conferences Organized**

National Doctors Day, 07-01-2022, NHMC

Anaemia Screening & Awareness Program, 07-02-2003, NHMC

#### **Seminar/Conference Presentations**

Dr. George Mathew Resource Person for CME in Materia Medica for P.G. Teachers of Homoeopathic Colleges, sponsored by Ministry of AYUSH, Govt. of India & Delivered 2 lectures on “Sources of Homoeopathic Materia Medica, Drug Proving & Collection of symptoms” on December 19th, 2022, at M. L. Dhawale Memorial Homoeopathic Institute, Palghar.

Resource Person for CME in Materia Medica Module 3 for Teachers of Homoeopathic Colleges, sponsored by Ministry of AYUSH, Govt. of India & Delivered 2 lectures on “Halogen group of Materia Medica & Ways to study Animal Kingdom” on January 28th, 2023, at Homoeopathy University, Jaipur.

Domain Expert for Seminar on Health Education in Kerala on 15th February, 2023, inaugurated by Hon’ble Health Minister of Kerala, Smt. Veena George, at Velloppilli Samskrithi Bhawan, Thiruvananthapuram, Kerala, organized by Kerala Gazetted Officers’ Association. Experts from Modern Medicine, Ayurveda, Homoeopathy, Nursing, Pharmacy, Dental & Paramedical systems made their presentations.

**Faculty Strength: 32**

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## FACULTY OF INTERDISCIPLINARY & APPLIED SCIENCES

### Biochemistry

#### Brief History

The Department of Biochemistry, one of the most vibrant and premiere biochemistry departments in the country, was established in 1983. Students are offered PG-level (M.Sc. and Ph.D.) courses in Biochemistry with advanced level theory and practical learning in various classical and modern areas of biochemistry with utmost emphasis on hands-on training. The teaching and research theme of the department is the development of molecular strategies to combat various human diseases. The department contributes to social needs majorly by discovering rationalized novel drugs and developing diagnostic kits and vaccines for the community. The laboratories are well-recognized nationally and internationally. Many faculty members are working in close collaboration with industry or institutions to take leads to the next level in the process of product development. Several research initiatives in the area of host-virus interaction, drug discovery, and mechanistic insight into Cardiovascular diseases, Cancer, Malaria, Tuberculosis, Leishmaniasis, Obesity, and others are ongoing.

#### Major Activities and Achievements

The Department continued to improve its teaching-learning activities through enthusiastic faculty participation and hands-on practical exercises. New M.Sc. students were welcomed and oriented by special interaction with all the faculty, staff, and senior students. In honor of the Centenary year of DU, the department organized special seminars, a mini-symposium with distinguished scientists of the country, exciting academic events with the Adjunct faculty who visited from the USA, and the historical First Alumni meet to reconnect with all the alumni of the department. More importantly, the department recruited an Associate Professor, Dr. Vijay Kumar Prajapati. The faculties continued with their cutting-edge research endeavors, leading to the signing of MoUs, the filing of patents, and several high-end research publications. They were also invited to deliver lectures and serve as experts in various national scientific committees as well as selection committees.

#### Honours/Distinctions

Prof. Amita Gupta - Outstanding Scientist Award by the Society for Bacteriophage Research and Therapy for contributions in the field of bacteriophage research, 2022.

#### Publications

##### Research Articles

Jaiswal, N., Nandi, D., Cheema, P.S., & Nag, A. (2022). The Anaphase Promoting complex/cyclosome co-activator, Cdh1, is a novel target of human Papillomavirus 16 E7 oncoprotein in cervical oncogenesis. *Carcinogenesis*, 43(10), 988-1001.

Dhembla, C., Yadav, U., Kundu, S. & Sundd, M. (2022). Lipoate protein ligase B primarily recognizes the C8-phosphopantetheine arm of its donor substrate and weakly binds the acyl carrier protein. *Journal of Biological Chemistry*, 298(8)

Aggarwal, D.D., Mishra, P., & Singh, M. (2023). An analysis of direct and indirect effects in *Drosophila melanogaster* undergoing a few cycles of experimental evolution for stress-related traits. *Comparative Biochemistry and Physiology. Part B Biochemistry & Molecular Biology*, 263

Dasauni, P., Singh, N., Chhabra, V., Mahapatra, M., Saxena, R., and Kundu, S. (2022). Optimization and Identification of Single Mutation in Hemoglobin Variants with 2, 2, 2 Trifluoroethanol Modified Digestion Method and Nano-LC Coupled MALDI MS/MS. *Molecules*, 27(19)

Nag, A., Banerjee, K., Barman, R., Kar, J., Sarkar, D. P., Jana, S. S., and Ghosh, S. (2022). Direct Correlation between the Secondary Structure of an Amphiphilic Polymer and its Prominent Antiviral Activity. *Journal of American Chemical Society (JACS)*, 145(1), 579-584.

Bandyopadhyaya, S., Yadav, P., Sharma, A., Dey, S.K., Nag, A., Maheshwari, R., Ford, B.M. and Mandal, C.C. (2023). Oncogenic Role of an Uncharacterized Cold Induced Zinc Finger Protein 726 in Breast Cancer. *Journal of Cellular Biochemistry*, 124(6), 889-906.

Mathur, S., Yadav, S. K., Yadav, K., Bhat, S., and Kundu, Suman. (2023). A novel single sensor hemoglobin domain from the thermophilic cyanobacteria *Thermosynechococcus elongatus* BP-1 exhibits higher pH but lower thermal stability compared to globins from mesophilic organisms. *International Journal of Biological Macromolecules*, 240

### **Book Chapter**

Kumar, G., Dey, S. K., Kundu, S. (2023). Nitric Oxide and Cardiovascular Diseases: Cardioprotection, Complications and Therapeutics. *Springer*, 13, 41-66

### **Research Projects**

CSIR, 3 years, Understanding the Tumor Suppressing Properties of Artemisinin in blocking the oncogenic activities of FOXM1 and HBX in hepatocellular Carcinoma, Rs.25.0 lakhs

DBT, 3 years, Genome-wide analysis to trace the signatures of induced-obesity in *Drosophila*, 75.0 lakhs

ICMR, 27.03.2023 to 26.03.2026, Dual Perspective Proteomics profiling of human macrophages infected with *M. tuberculosis* to investigate the role of VirS, a transcriptional regulator of *M. tuberculosis*, in modulating the host responses, 50.50 lakhs

DBT, 21.12.2022 to 20.12.2024, Engineering antisense oligonucleotides to design novel liposome-encapsulated drugs against tuberculosis, 56.33 lakhs

### **Seminars/Conferences organized by the Department**

Dr. Mausumi Bharadwaj, Head, Molecular Biology Group, ICMR - National Institute of Cancer Prevention & Research at Noida, DU, Molecular Basis of Human Papillomavirus (HPV) Mediated Cancers, 17-03-2023

Prof. Siddhartha Jana, IACS, Kolkata, DU, A Journey from Virosome to Endosome, 30-01-2023

Dr. Vijay Kumar, ILBS, New Delhi, DU, Active DNA demethylation during replication and gene transcription, 30-01-2023

Prof. Amitabha Mukhopadhyay, IIT Delhi, DU, How Leishmania makes safe home and gets food, 30-01-2023

Prof. Chandi C. Mandal, CUR, Ajmer, DU, An unexplored zinc finger protein bridges the relationship between cold temperature and cholesterol in breast cancer, 30-01-2023

Prof. Pradip Chakraborty, PU, Chandigarh, DU, Insight into bacterial kinases, 30-01-2023

Prof. Anand Bachhawat, IISER Mohali, DU, Regulation of one carbon metabolism: solving a decades old puzzle, 30-01-2023

Prof. Ellora Sen, NBRC, Manesar, DU, Prof. P.C. Ghosh Memorial Lecturer 2023 entitled, "Interaction between Metabolic and Epigenetic Landscapes: Implications in Glioma Progression, 12-01-2023

Prof. Debasish Sinha, Jennifer Salvitti Davis, M.D. Chair in Ophthalmology, Professor of Ophthalmology, Cell Biology and Developmental Biology, University of Pittsburgh, School of Medicine, USA (Adjunct Faculty, Department of Biochemistry, University of Delhi South Campus), DU, Targeting autophagy as a therapeutic strategy for atrophic age-related macular degeneration, 14-11-2022

Prof. Suvendra Nath Bhattacharyya, Senior Principal Scientist, CSIR-Indian Institute of Chemical Biology, Kolkata, DU, Extracellular vesicles associated miRNAs in action: Mechanism of packaging, transport and delivery, 28-09-2022

Dr. Garima Khare; Dr. Prachi Nangpal; Mr. Sanchay K. Das, Assistant Professor, Dept. of Biochemistry, DU; Scientist, Dept. of Biochemistry, DU; Director, CSK Bio-Projects Pvt. Ltd., Delhi, DU, Conducted an online "Training course on BSL3 practices and advanced TB research protocols, 26-09-2022

Prof. Samrat Mukhopadhyay, Head, Department of Biological sciences, IISER, Mohali, DU, Organized Seminar (Centenary Seminar Series) on "Prion Protein Biology Through the Lens of Liquid-Liquid Phase Separation: A Tale of an Intrinsically Disordered Tailolecular, 28-07-2022

Prof. Pradip Raychaudhuri, Dept. of Biochemistry & Molecular Genetics, University of Illinois, Chicago, USA (Adjunct Faculty, Dept. of Biochemistry, UDSC, New Delhi), DU, Organized Seminar (Centenary Seminar Series) on "Molecular Basis of Aggressive Breast Cancer Progression: Mechanisms of FoxMI, 20-06-2022

Dr. Garima Khare; Dr. Prachi Nangpal; Prof. N. Latha; Dr. Sreekanth Ramachandran, Assistant Professor, Dept. of Biochemistry, DU; Scientist, Dept. of Biochemistry, DU; Professor, Dept. of Biotechnology, Bennett Univ., Noida; Director, Medicinal Chemistry, Enveda Biosciences, Hyderabad, DU, Organized online course on Drug Discovery (with a focus on TB Drug Discovery), 27-05-2022

Dr. Garima Khare; Dr. Prachi Nangpal; Dr. Gandharva Nagpal, Assistant Professor, Dept. of Biochemistry, DU; Scientist, Dept. of Biochemistry, DU; Scientist C, Department of Biotechnology, GOI, DU, Hands-on training course on BSL3 practices and TB research protocols, 10-12-2022



Dr. Garima Khare; Dr. Prachi Nangpal; Mr. Sanchay K. Das, Assistant Professor, Dept. of Biochemistry, DU; Scientist, Dept. of Biochemistry, DU; Director, CSK Bio-Projects Pvt. Ltd., Delhi, DU, Organized online course on BSL3 practices, genetic manipulation and drug discovery protocols for TB research, 01-04-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Suman Kundu: Invited Talk. Title: “A peptide that disrupts hADA3-E6 interaction: implications in HPV induced cancer therapy”, at the 9th Indian Peptide Symposium and Indian Peptide Show, jointly organized by the Indian Peptide Society and BITS Pilani, K.K. Birla Goa Campus, at Goa, India, 23rd – 25th February, 2023 (talk on 23rd February, 2023).

Prof. Suman Kundu: Invited Lead Talk. Title: “Rooted in plants enroute a therapy for sickle cell disease”, at the International Conference on Exploring New Horizons in Biotechnology and Mini-symposium on Recent Advances in Biotechnological Innovations, jointly organized by School of Biotechnology, Institute of Science and Institute of Eminence, Banaras Hindu University, Varanasi, Uttar Pradesh, India, 10th – 12th February, 2023 (talk on 11th February, 2023).

Prof. Alo Nag - Invited for a talk in the 16th International Cancer Symposium on Translational Chemoprevention and Brainstorming being organized by Special Centre for Systems Medicine & School of Life Sciences Jawaharlal Nehru University (JNU), New Delhi, India on 18th-19th November, 2022. The title of the invited lecture: Mechanistic insights into the oncogenic strategies of FoxM1.

Prof. Alo Nag - Invited as Chief Guest in the valedictory function of Four Week Summer Training Program 2022 on “Green Fabrication of Silver Nanoparticles and its Antibacterial” on July 8th, 2022.

Prof. Alo Nag - Invited for a talk and Chaired a session in the international conference "Celebrating Proteins on the Birth Centenary of Dr. G.N. Ramachandran" at MS Baroda University, Vadodara on 4th March, 2023.

The title of the invited lecture: Disrupting oncogenic interaction with peptides - a strategy for HPV induced cancer therapy

Prof. Amita Gupta - Outstanding Scientist Award by the Society for Bacteriophage Research and Therapy for contributions in the field of bacteriophage research, 2022. Dr. Garima Khare - Invited talk at the 4th BioGroup-India Meeting held at IISER Thiruvananthapuram, 19-20th August 2022

Prof. Alo Nag - 16th International Cancer Symposium on Translational Chemoprevention and Brainstorming being organized by Special Centre for Systems Medicine & School of Life Sciences Jawaharlal Nehru University (JNU), New Delhi, India on 18th-19th November, 2022.

Prof. Alo Nag - "Celebrating Proteins on the Birth Centenary of Dr. G.N. Ramachandran" at MS Baroda University, Vadodara on 4th March, 2023.

Prof. Alo Nag - “Basic Molecular Biology Techniques Relevant to Cancer Research” by Department of Health Research at NICPR, Noida – March 02, 2023.

Dr. Garima Khare - Participated in 5th Biogroup-India Meeting held at JNCASR, Bangalore, 17th – 18th July 2023

Dr. Garima Khare - Participated in International Tuberculosis Conference “Toward End TB Achievements, Challenges and future Directions” organized by THSTI, Faridabad held from 23rd – 25th March 2023

Dr. Garima Khare - Delivered an invited talk in National conference on “Biotechnology for Sustainable Development and human welfare” organized by Jamia Hamdard University, 23rd-24th November 2022

Dr. Garima Khare - Participated in one-week online capacity building FDP “Enhancing Administrative efficiency in HEIs”, 16th – 22nd November, 2022 organized by Teaching Learning Centre, Ramanujan College in collaboration with Janki Devi Memorial College, University of Delhi

Dr. Garima Khare - Delivered an invited talk 4th Biogroup-India Meeting held at IISER Thiruvananthapuram, 19th – 20th August 2022

Dr. Garima Khare - Participated in one-week Faculty Development Programme on “Academic Research Writing”, 4th – 10th June, 2022 organized by Teaching Learning Centre, Ramanujan College, University of Delhi

Dr. Garima Khare - Served as a panelist in a panel discussion at Hy-Sci 2022 organized by CDFD, Hyderabad held on 14th May, 2022

Dr. Dau Dayal - Participated as an organizing member in ADNAT, India held in BHU on dated 09th March to 12th March 2023. Document attached.

### **Extension and Outreach Activities**

Prof. Alo Nag - A motivational talk (Dream to achieve) and interaction for the school students of SPV School, Lodhi Road, New Delhi delivered by Prof. Alo Nag on 18th August 2022.

Prof. Alo Nag – Served as a mentor for Sashkat Program of Reddy's Foundation, 6th December 2019 till date

Dr. Garima Khare – Organised workshops on skill development 24th - 27th May, 2022 – “Drug Discovery (with a focus on TB drug discovery)” 85 participants from 45 different Institutes/ Universities/Colleges all over the country

20th – 26th Sep, 2022 – ‘Training course on BSL3 practices and advanced TB research practices’ 94 participants from 61 different Institutes/ Universities/Colleges all over the country

7th -10th December, 2022 – “Hands-on Training course on BSL3 practices and TB research protocols” 14 participants from 08 different Institutes/ Universities/Colleges all over the country

**Faculty Strength: 6**

**Number of Ph.D. Degree awarded: 3**

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## **Biophysics**

### **Brief History**

The Department of Biophysics, established in 1985, began with Professor U.N. Singh and expanded its faculty over the years. Early research focused on Theoretical & Mathematical Biology, and significant contributions included Dr. Sudipto Das's establishment of an electrophysiology facility in 1990. Despite changes in faculty, including the departure of key members, the department continued to grow, with new appointments such as Dr. Hemlata Agnihotri and Dr. Sumit Kumar Chaturvedi in 2022.

Since its inception, the department has offered a Ph.D. program in Biophysics and participated in an M.Phil. (Biotechnology) program. It launched its own M.Phil. Biophysics in 2018 and started an M.Sc. Biophysics course in 2020, graduating its first batch in 2022.

Equipped with state-of-the-art research labs funded by various agencies, the department focuses on structural and computational biology, electrophysiology, mathematical modeling, and bioinformatics. Research areas include protein structure-function studies in extremophiles, metagenomics, molecular modeling, and genome and protein sequence analysis. The department's commitment to academic and research excellence is evident in its alumni's success, occupying prestigious positions globally as independent researchers and post-doctoral fellows in renowned institutions like the University of California San Francisco, Indian Institute of Technology-Madras, and the National Institute of Health (USA).

### **Major Activities and Achievements**

Manish Kumar's research group focuses on translational research, encompassing bioinformatics, cheminformatics, and phylogenomic to study microbial evolution, virulence, and antibiotic resistance. They predict protein interactions in metabolic and signalling pathways to identify diagnostic, vaccine, and therapeutic targets. The lab employs molecular modelling and computer simulations for drug design, including repurposing existing drugs. They use Next Generation Sequencing for metagenomic data analysis, particularly in antibiotic resistance gene load, and have developed a related gene library for diagnostic test development. Kumar's group also works on genome, proteome, and metabolome annotation, and studies amino acid patterns in proteins for understanding post-translational modifications and their impact on protein function, integrating computational and experimental methods. Prof. Manisha Goel's group works with structural bioinformatics and is currently exploring the role of prosequences in protein folding and function. They are also interested in the mechanism of action of Cas proteins involved in CRISPR function. Dr. Hemlata Agnihotri's lab works on Cell signalling, Receptor biology, Host-pathogen interactions. Dr. Sumit Kumar Chaturvedi's lab works on conformational and ligand binding on proteins.

### **Honours/Distinctions**

Ms. Manisha Aswal received Forderverein Grant from the European Society of Clinical Microbiology and Infectious Disease (ESCMID) to attend 2023 ECCMID Conference at Copenhagen Denmark.

Dr. Somendro Singh Nambram received Forderverein Grant from the European Society of Clinical Microbiology and Infectious Disease (ESCMID) to attend 2023 ECCMID Conference at Copenhagen Denmark.

Ms. Manisha Aswal received FEMS congress attendance grant to present her work as oral presentation in FEMS 2023 conference at Hamburg Germany.

## **Publications**

### **Research Articles**

Aswal, M., Singhal, N., and Kumar, M. (2023). Comprehensive genomic analysis of hypocholesterolemic probiotic *Enterococcus faecium* LR13 reveals unique proteins involved in cholesterol-assimilation. *Frontiers in Nutrition*, 10

Pandey, D., Singhal, N., and Kumar, M. (2022).  $\beta$ -LacFamPred: An online tool for prediction and classification of  $\beta$ -lactamase class, subclass, and family. *Frontiers in Microbiology*. *Frontiers in Microbiology*, 13

Pandey, D., Kumari, B., Singhal, N., and Kumar, M., (2022). BacARscan: an in-silico resource to discern diversity in antibiotic resistance genes. *Biology Methods & Protocols*, 7(1)

Garg, A., Singhal, N., and Kumar, M., (2022). Investigating the eukaryotic host-like SLiMs in microbial mimitopes and their potential as novel drug targets for treating autoimmune diseases. *Frontiers in Microbiology*, 13

Zaidi, S., Aswal, M., Kumar, M., Rashid, F., Khan, A. (2022). Protein expression profiling, in silico classification and pathway analysis of cariogenic bacteria *Streptococcus mutans* under bacitracin stress conditions. *Journal of Medical Microbiology*, 71

Bhardwaj, K., Garg, A., Pandey, A.D., Sharma, H., Kumar, M., Vrati, S. (2022). Insights into the human gut virome by sampling a population from the Indian subcontinent. *Journal of General Virology*, 103(8)

### **Research Projects**

ICMR, 2023, Artificial intelligence-aided genomics, transcriptomics and proteomics analyses of multidrug-resistant enteropathogens to discern novel drug targets. 29.37 Lakhs.

ICMR, 2022, Using the National COVID 19 testing database to develop a machine learning model for rapid prioritization/triage of SARS-CoV2 patients and demographic groups. 35.16 Lakhs.

DBT, 2022, Specific single domain antibodies (sdAbs) against antimicrobial resistant Mastitis pathogens for clinical therapeutic use in dairy animals. 150.95, Lakhs.

DST, 2022, Center of Antibody Engineering: Center for Immuno-Diagnostics! Therapeutics Veneering Technologies (CIVET). 474.60 Lakhs.

### **Seminars/Conferences organized by the Department**

Prof. Deepak Nair, Professor, Regional Center for Biotechnology, none, Structure, mechanism and function of DNA polymerases, 23-09-2022

Dr. Indrani Ghosh, Senior Technical Officer & Registered Patent Agent, INNOVATION PROTECTION UNIT (IPU), CSIR, None, PATENTING IN LIFE SCIENCE – Inventor's Perspective, 04-11-2022

Prof. B. Jayram, Emeritus Professor, School of Biological Sciences, IIT Delhi, None, Meet the Bioinformatician, 27-03-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr. Manish Kumar has delivered a talk titled 'Informatics in Drug Resistance' organized by GSFC University, School of Sciences, Vadodara on 14/Nov/2022

Dr. Manish Kumar has delivered a talk titled titled “Evolution of Antibiotic Resistance: How it Spreads” in National Refresher Course (NRC 2022) On “Fisheries, Aquaculture and Post-Harvest Technology” Organized by ICAR-Central Institute of Fisheries Technology, Kochi, Kerala Faculty of Fisheries, Rangil, Ganderbal (SKUAST – Kashmir) & National Agriculture Development Cooperative Ltd. Baramulla, J & K on 14/May/2022

### **Extension and Outreach Activities**

WE have started an outreach activity in collaboration with International Society of Computational Biologist (ISCB) to popularize Bioinformatics as a research discipline among the students (undergraduate as well as postgraduate). We invite leading figures of Bioinformatics to interact with the students.

**Faculty Strength: 4**

**Number of Ph.D. Degree awarded: 1, M.Phil. Degree awarded: 1**

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## **Electronic Science**

### **Brief History**

The Department of Electronic Science was established in 1985 and is widely recognized as one of the country's most prestigious Electronic Science Departments. The Department is conducting courses leading to an M.Tech in Microwave Electronics and M.Sc. in Electronics. These programs aim to provide the necessary theoretical background and practical experience to meet the requirements of the R&D Organizations and Industries. All students joining the M.Sc. course are required to undergo summer training in the Industry or R&D Organisations. A full range of resources and facilities are available to the students. The department has a well-equipped computer laboratory with various circuit simulation and microwave design software for students. In addition, there are well-equipped laboratories for experimental work in the following areas: Microwave Measurements, Communication Electronics, Circuit Design, Electrical Machines and Control Systems, Electronic Materials and Semiconductor Devices, Microprocessors, and Digital Signal Processing and Optical Electronics.

### **Major Activities and Achievements**

The faculty members are actively engaged in research as well as supervision of research leading to the Ph. D degree in the field of optical electronics, semiconductor materials and devices, nano-materials, microwaves, and microelectronics. The Department has national and international collaborations and several research projects funded by the CSIR, SERB, DRDO, etc. Apart from this, the Department organizes seminars, lectures, and talks on a regular basis. The Department also organizes every year

Visitors' program. The Department is actively helping the students in their placement through Campus interviews. Students graduating from the Department have found positions in both government and private organizations working in Space Applications, Telecommunications and Semiconductors.

## Publications

### Research Articles

Priyadharshini, K., Panda, D., Peta, K. R., & Rathinavel, S. (2023). PVK-grafted multiwalled carbon nanotube materials with enhanced mobility for electronic devices. *Applied Surface Science Advances*, 13

Kem, A., Ansari, M.R., Prathap, P., Jayasimhadri, M., Peta, K.R. (2022). Eco-friendly Green Synthesis of Stable ZnO nano-particles Using Citrus limon: X-Ray Diffraction Analysis and Optical Properties. *Physica Scripta*, 97(8), 15

Pasupuleti, K. S., Bak, N.H., Peta, K. R., Kim, S.G., Cho, H. D., Kim, M.D. (2022). Enhanced sensitivity of langasite-based surface acoustic wave CO gas sensor using highly porous Ppy@PEDOT:PSS hybriide nanocomposite. *Sensors and Actuators B: Chemical*, 363

Kaur, H., Tiku, V., Prasad, A., Singh, Y. A., Jaiswal, V. V., Peta, K. R., Jayasimhadri, M., Haranath, D. (2022). Luminescent and colorimetric properties of Sol-gel driven mono-phase Dy<sup>3+</sup> doped silicate-based phosphor for w-LED applications. *Journal of Sol-Gel Science and Technology*, 101(2), 443-452

Gautam, K., Singh, I., Bhatnagar, R., Bhatnagar, P.K., Peta, K. R. (2022). Synergistic effect of graphene and ZnO nanorods in enhancing the performance of MEH-PPV based polymer light emitting diode. *Displays*, 73

Kumari, V., Gupta, M., and Saxena, M. (2022). Sensitivity Investigation of Planer Ground Plane Junctionless Transistor (GP-JLT) for UVA Photodetector, *IEEE Sensors Journal*, 23(1), 308-316.

Goyal, P., & Kaur, H. (2022), Implementing variable doping and work function engineering in  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> MOSFET to realize high breakdown voltage and PfoM., *Semiconductor Science and Technology*, 37(4), 10.

Pandey, P., and Kaur, H. (2022). A comprehensive physics based surface potential and drain current model for SiGe channel dual programmable FETs, *Semiconductor Science and Technology*, 37(5), 8.

Pandey, P., and Kaur, H. (2022). Performance investigation of Reconfigurable-FET under the influence of parameter variability of ferroelectric gate stack at high temperatures. *Microelectronics Journal*, 124

Sehgal, P., & Patel, K. (2023). Dual-Band  $4 \times 4$  Hexagonal SRR MIMO Antenna with Port Excitation-Controlled Gain and Directivity for WLAN/WiMAX Applications. *Progress In Electromagnetics Research*, 135, 55-67.

Kaushal, V., Birwal, A., Patel, S. M., & Patel, K. (2023). Diversified path loss performance of dual-Polarised MIMO antenna in sub-6 GHz for RFID applications. *International Journal of Electronics*, 1-17.

Sehgal, P., & Patel, K. (2023). Dual-Band Hexagonal SRR Antennas and Their Applications in SIMO and MISO-Based WLAN/WiMAX Systems. *Progress In Electromagnetics Research B*, 99, 139-157.

Kaushal, V., Birwal, A., & Patel, K. (2023). Diversity characteristics of four-element ring slot- based MIMO antenna for sub-6-GHz applications. *ETRI Journal*, 45(4), 581-593.

Birwal, A., Patel, K., & Singh, S. (2022). A directional wide-band antipodal Vivaldi antenna for imaging applications. *Progress in Electromagnetics Research C*, 127, 227-237.

Birwal, A., Kaushal, V. & Patel, K. (2022). Investigation of Circularly Polarized CPW fed Antenna as a 2.45 GHz RFID Reader. *IEEE Journal of Radio Frequency Identification*, 6, 593-600.

Kumar, V., Vankateswara, S. R., and Jain, P. K. (2023). Coaxial Beam Rotating HPM Mode Converter Using Dielectrics Plates. *IEEE Transaction Electron Devices*, 70(3), 1288 – 1293.

Kumar, C., Raghuwanshi, S. K., and Kumar, V. (2022). Graphene based microstrip patch antenna on photonic crystal substrate for 5G application. *Frontiers in Materials, Sec. Semiconducting Materials and Devices*, 9

Agrahari, R., Kumar, P., and Kumar, V. (2022). Pixelated metasurface based wideband cross polarization converter. *Journal of Electromagnetic Waves and Applications*, 37(4), 562-574.

Goyal, P., & Kaur, H. (2023). Exploring the efficacy of implementing field plate design with air gap on  $\beta$ -Ga2O3 MOSFET for high power & RF applications. *Micro and Nanostructures*, 173, 207-454.

Goyal, P., & Kaur, H. (2023). Impact of Dual Material Gate Design and Retrograde Channel Doping on  $\beta$ -Ga2O3 MOSFET for High Power and RF Applications. *silcon*, 15(4), 1597-1608.

Pandey, P., & Kaur, H. (2022). Exploring the Performance of Palladium gated–SiGe channel–polarity controllable–FET for hydrogen gas monitoring applications. *Micro and Nanostructures*, 207-357.

### **Seminars/Conferences organized by the Department**

Dr. Rajiv Joshi, IBM, T. J. Watson Research Center, Yorktown Heights, NY, IEEE EDS, IEEE EDS DL Talk on “Predictive Analytics in Machine Learning”, 13-03-2023

Prof. Ajit Panda, DL, IEEE EDS Electronics Center of Excellence and VVDN Technologies National Institute of Science and Technology (NIST), Berhampur, Odisha, IEEE EDS, Technical Talk on "5G Electronic Systems", 03-02-2023

Prof. H. S. Jatana, MIT Pune & IITG EICT Prof. Subir Kumar Sarkar, Jadavpur University, Kolkata Prof. Brinda Bhowmick, NIT Silchar Prof. Nihar Ranjan Mohapatra, IIT Gandhinagar Prof. Jai Narayan Tripathi, IIT Jodhpur Prof. Saurabh Lodha, IITMumbai Prof. Shree Prakash Tiwari, IIT Jodhpur Prof. Shaibal Mukherjee, IIT Indore, Professor, IEEE EDS, Workshop on "Emerging Devices, Circuits and Systems," 18-11-2022

Er. Randhir Singh, Ambition Technologies, Delhi, Ambition Technologies, PCB Design workshop using EDWinXP and PCB Prototyping Machine, 13-01-2023

Shri Rajesh Kumar Bahl, Scientist/Engineer-G Space Applications Center (SAC), ISRO, Department of Electronic Science, Optical Communication Technologies and Quantum Key Distribution Technology, 18-11-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dhananjaya Panda and Koteswara Rao Peta, “Modelling and analysis of Polypyrrole Interleaved Polyvinylidene Fluoride Microcantilever Biosensor” (Poster) Recent Advances in Nano Medical Sciences (RANMS-2022), 22-23 June 2022, Institute of Nano Medical Sciences (INMS) & Institution of Eminence (IoE), University of Delhi, New Delhi,

Dhananjaya Panda and Koteswara Rao Peta, “Optimizing a V-Shaped Piezoelectric Microcantilever for Cadaverine Amine Detection”. (Oral) International Symposium on Advances in Piezoelectric (ISAP-2022), 14-15 July 2022, Center for Materials for Electronics Technology (CMET), Thrissur Kerala.

Goyal P, Kaur H. Effect of Step Doping Profile and Dual Material Gate Design on  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> for superior RF Performance. In 2022 6th International Conference on Devices, Circuits and Systems (ICDCS) 2022 Apr 21 (pp. 6-10). IEEE.

Goyal P, Kaur H. Impact of Vertically Graded (VGrad) Channel Design on Device Performance of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> MOSFET. In 2022 IEEE 7th International conference for Convergence in Technology (I2CT) 2022 April, pp. 1-4. IEEE, 2022.

Goyal P, Kaur H. Exploring the suitability of Dual Step Gate Oxide Design on  $\beta$  – Ga<sub>2</sub>O<sub>3</sub> MOSFET for High Power Microwave Applications – Part I. Latin American Electron Devices Conference (LAEDC) - 4th- 6th July 2022 (Hybrid Mode)

Goyal P, Kaur H. Exploring the suitability of Dual Step Gate Oxide Design on  $\beta$  – Ga<sub>2</sub>O<sub>3</sub> MOSFET for High Power Microwave Applications – Part II. Latin American Electron Devices Conference (LAEDC) - 4th- 6th July, 2022 (Hybrid Mode)

Priyanka Pandey and Harsupreet Kaur, Impact of Mole Fraction Variation on the pH Sensing Performance of SiGe channel-based Polarity Controllable Ion Sensitive FET – Part-I, 2022 IEEE 7th International Conference for Convergence in Technology (I2CT), Pune, India, 7-9 April 2022. DOI: 10.1109/I2CT54291.2022.9824400. Electronic ISBN: 978-1-6654-2168-3.

Priyanka Pandey and Harsupreet Kaur, Impact of Mole Fraction Variation on the pH Sensing Performance of SiGe channel-based Polarity Controllable Ion Sensitive FET – Part-II, 2022 IEEE 7th International Conference for Convergence in Technology (I2CT), Pune, India, 7-9 April 2022. DOI: 10.1109/I2CT54291.2022.9824897. Electronic ISBN: 978-1-6654-2168-3.

Koteswara Rao Peta “Strategic Approach to Enhance Photocatalytic Process of ZnO Nanoparticles for Water Treatment Applications” IUMRS-ICA 2022, December 19-23, 2022, IIT Jodhpur

Dr. Harsupreet Kaur, Analysis of pH Sensing Performance of Polarity Controllable-Ferroelectric-Ion Sensitive FET. IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 2022

### **Other Inter-Institutional Collaborations**

Delhi Technological University

Prof. Moon Deock Kim, Department of Physics, Chungnam National University, Republic of Korea. Dr.

M. Jayasimhadri, Department of Applied Physics, Delhi Technological University, New Delhi, India

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## Genetics

### Brief History

The Department of Genetics was established in 1984 as a part of the Faculty of Inter-disciplinary & Applied Sciences at the University of Delhi South Campus. In its brief period of existence, the department has developed into an advanced center of study in Genetics recognized by the University Grants Commission (UGC) under their Special Assistance Programme (SAP-phase III) and the Department of Science & Technology under their FIST (Level 2) program. Two of the faculties also have Centers of Excellence supported by the Department of Biotechnology. Two courses are offered by the Department: A two-year M.Sc. program and a Ph.D. program. Both programs are based on a strong foundation of research in individual laboratories. The department enjoys the unique strength of having faculty with research specialization using a range of model systems such as *Drosophila*, *Arabidopsis*, Yeast, *Dictyostelium*, and human-induced pluripotent stem cells.

### Major Activities and Achievements

The faculty members of the Department of Genetics have made notable scientific contributions. Research work from Prof. A. K. Pradhan's group at (CGMCP) led to the development of CMS-based and GM-based productive hybrids, several pure lines with improved quality and white rust resistance and identification of some promising combiners for heterosis breeding, and sequencing of brassica genome. The lab has sequenced the genome of seven important oilseed mustard lines which will help in identification of candidate genes for some traits of importance and also help in diversification of important QTL and genes. Research highlights from Prof. Thelma lab include i) providing the first ever exome-wide mutation spectrum in known genes for Mendelian forms of Parkinson's disease; ii) demonstration of hypomorphic effect of a deep intronic variant in CENPJ in Seckel syndrome; iii) providing genetic evidence for cumulative contribution of genes of minor effect in schizophrenia; and iv) design and development of novel inhibitory molecules for two candidate proteins for rheumatoid arthritis. Prof. M.V Rajam's work has led to the identification and characterization of several novel genes involved in viral and fungal pathogenesis in tomato; and metamorphosis of insect pests of tomato, brinjal and cauliflower, and using RNAi-mediated silencing of these genes, they have demonstrated their potential for crop protection. Prof. P.K Burma's group has analyzed tapetum specific promoter A9 from *Arabidopsis thaliana*, which led to the identification of transcription factors involved in regulation of promoter. Research findings from Prof. Surajit Sarkar's group has reported novel role of *Drosophila* Globin1 pathogenesis of human tauopathies. Also, for the first time they have demonstrated that glipizide, an FDA approved anti-diabetic drug can be repurposed as an effective treatment strategy against the neurodegenerative poly(Q) disorders. Prof. Jagreet Kaur's group have used set of geographically diverse *Arabidopsis* accessions (140 accessions) to uncover the genetic architecture underlying resistance to *Alternaria brassicae*, which can potentially help in developing resistant crops. Prof. Tapasya Srivastava's group have continued to work on our on-going project on epigenetic regulation in gliomas. The group has also investigated on a specific gene CNIH1 for its role in onset and progression of gastric cancer and gliomas. The group has fostered collaborations within and outside FIAS - that has also resulted in a publication. Prof. Srivastava's group has initiated work on liquid biopsy and ctDNA with her collaborators at AIIMS. Dr. Kaustuv Datta's group has identified novel GTPase in the mitochondrial ribosomes which potentially respond to changes in ATP/ADP ratio and regulate cellular ability to perform respiratory functions. Dr. Aruna Devi Naorem's group is working towards understanding the role of regulatory proteins such as PPIases - Parvulins, Wee family kinases etc. in developmental processes in *D. discoideum*. Her group is also investigating the importance of single amino acid repeats in proteins. Her group has showed evidences for *D. discoideum* PinA, a novel parvulin, in regulating multiple processes in growth and development of this organism.

## Publications

### Research Articles

Aggarwal, P., Thapliyal, D., and Sarkar, S. (2022). The past and present of *Drosophila* models of traumatic brain injury. *Journal of Neuroscience Methods*, 371

Nisha, and Sarkar, S. (2022). Downregulation of *glob1* mitigates human tau mediated neurotoxicity by restricting heterochromatin loss and elevating the autophagic response in *Drosophila*. *Molecular biology reports*, 49(7), 6581-6590.

Chongtham, J., Pandey, N., Sharma, L.K., Mohan, A., & Srivastava, T. (2022). SNP rs9387478 at ROS1-DCBLD1 Locus is Significantly Associated with Lung Cancer Risk and Poor Survival in Indian Population. *Asian Pacific journal of cancer prevention*, 23(10), 3553-3561.

Shukla, P., Deswal, D., Pandit, M., Latha, N., Mahajan, D., Srivastava, T., & Narula, A. K. (2022). Exploration of novel TOSMIC tethered imidazo [1,2-a] pyridine compounds for the development of potential antifungal drug candidate. *Drug Development Research*, 83(2), 525-543.

Tandon, S., & Sarkar, S. (2023). Glipizide ameliorates human poly(Q) mediated neurotoxicity by upregulating insulin signalling in *Drosophila* disease models. *Biochemical and biophysical research communications*, 645, 88-96.

Verma, R., Sekar, H., Mandal, S., and Kaur J. (2023). Expression of *Arabidopsis* NPR1 (*AtNPR1*) in *Brassica juncea* var *Varuna* confers significant resistance against *Sclerotinia sclerotiorum* and *Alternaria brassicae*. *Physiological and Molecular Plant Pathology*, 126(12)

Pandey, N., Chongtham, J., Pal, S., Ali, A., Lalwani, S., Jain, D., Mohan, A., & Srivastava, T. (2023). When “No-Smoking” is not enough: Hypoxia and nicotine acetylcholine receptor signaling may drive lung adenocarcinoma progression in never-smokers. *Biochimica et Biophysica Acta (BBA) - Molecular Cell Research*.

### Book/Chapter in Books

Pragati, Tandon, S., Aqsa, Aggarwal, P., Sarkar S. (2022). *Drosophila melanogaster*: An immaculate model for glial research. In I. Patro, P.Seth, N. Patro & P.N. Tandon (Eds.), *The Biology of Glial Cells: Recent Advances*, (pp.679-718). Springer Nature.

Kaur, G., Rajarammohan, S., Kumar, S., Verma, R., Kaur, G., Kaur, J., Gajbhiye, S., Dixit, S. and Kaur, J. (2022). Genomic Designing for Biotic Stress Resistant Oilseed Crop, (pp.215-264). Springer Cham.

Pant, P., Hamsa, S., & Kaur, J. (2022). Advances in Breeding Strategies for Improving Stress Tolerance in Brassicas, (pp.439–469). Springer Cham.

Srivastava, T., (2022). Organelle Heredity and Epigenetics Concepts in Genetics: (BBCCT-117), IGNOU.

Srivastava T. (2022). Structure of DNA: (BBCCT-117) Gene Organization, Replication and Repair, IGNOU.

Srivastava T. (2022). Gene and Genomic organization II: (BBCCT-117) Gene Organization, Replication and Repair, IGNOU.

### **Research Projects**

SERB, 03.02.2023 - 02.02.2026, Role of prolyl isomerisation in developmental processes: A study using *Dictyostelium discoideum* as a model organism, 42.83 Lakhs.

SERB - SPG, 2022-2025, Investigating the role of hypoxia in regulating differentiation and development of leukemia, 40.80 Lakhs.

MRP-IOE, 2022-2025, Investigating the genetics predictive risk factors associated with long-COVID sequelae in a longitudinal multisystem study, 22.79 Lakhs.

### **Seminars/Conferences organized by the Department**

Dr Supriya G Prasanth, "Professor and Head, Department of Cell and Developmental Biology, University of Illinois, Urbana-Champaign", Department of Genetics, UDSC (Alumni Lecture Series), Mechanisms of genome stability, 30-06-2022

Dr. Navneet Kaur Matharu, Bioengineering and Therapeutic Sciences University of California San Francisco, and Women Entrepreneur fellow at Innovative Genomics Institute at University of California Berkeley, Department of Genetics, UDSC (Alumni Lecture Series), Modulating gene regulation to treat genetic disorders, 06-07-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr. Aruna Naorem attended and chaired one session at 4th BioGroup-India Meeting at IISER Thiruvananthapuram, Kerala, during August 19-20, 2022

Prof. Jagreet Kaur- Transcriptomic insights into the molecular mechanism of Arabidopsis response to *Alternaria brassicae*.: FS Bio 2023; IISER TRV.

Prof. Jagreet Kaur-All India Cell Biology Conference BHU 2023

### **Other Inter-Institutional Collaborations**

Prof. T. Srivastava- collaborative research work with Prof Sujata Sharma, AIIMS for work on lactoferrin ; Collaborative research work with Dr Ashutosh Misra, IRCH-AIIMS for work on ctDNA and liquid biopsy

### **Placement Details (Number and percentage of students placed)**

Outgoing M.Sc. and Ph.D. students opted for higher education, Ph.D., and Post-doctoral research work, respectively, in National and International Institutions.

### **Extension and Outreach Activities**

Dr . Aruna Naorem attended as a panelist for the session titled "Industry-Academia Collaboration for Women-led Innovation and Economic Growth in Northeast India" on March 29, 2023

at Miranda House in an International Conference on Sustainability, Innovation, and Entrepreneurship in North East India, organized by North East Regional Research and Resource Centre, Miranda House, University of Delhi, North Campus from March 28-29, 2023

Dr . Aruna Naorem Delivered a lecture on “Dictyostelium discoideum - a promising model organism” at the Department of Genetics, Maharshi Dayanand University, Rohtak, Haryana, on Nov 16, 2022.

Prof. Surajit Sarkar -Students from different schools and colleges visited the lab in February 2023

Prof. Tapasya Srivastava hosted FIAS Conversations seminar series

Prof. Tapasya Srivastava -Molecular and cancer biology one day workshop for Gargi College students on 15th October 2022

Prof. Tapasya Srivastava- ACBI Vigyan Chaupal science outreach program for senior secondary school students on 26th November 2022

**Faculty Strength: 9**

**Number of Ph.D Degrees Awarded: 11**

**Number of M.Phil Degrees Awarded: 1**

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## **Microbiology**

### **Major Activities and Achievements**

The Department of Microbiology carries out basic as well as translational research.

Prof. Swati Saha’s laboratory investigates events linked to *Leishmania* DNA biology. Over the past year her laboratory has worked towards unravelling the role of several proteins believed to play an epigenetic role in gene regulation. These proteins have been found to impact various aspects of transcription and DNA repair. Prof. Rajeev Kaul Laboratory conducted a study that identified three polymorphic sites each in BoLA DRB3 and BoLA genes of cattle which correlated with evidence of recent infection with foot and mouth disease (FMD) indicating their role in determining susceptibility of vaccinated animals to FMDV infection. Occurrence of infection in vaccinated animals is well-known in some diseases and is termed as breakthrough infection. The Major Histocompatibility Complex (MHC) of bovines i.e. Bovine Leukocyte Antigen (BoLA) is important for antigen presentation. The BoLA DRB3 allele, which codes for the beta chain in Class II antigen, has been extensively studied where we investigated the polymorphism in BoLA DRB3 and BoLA gene sequences of host and their relation with breakthrough FMDV infection in vaccinated animals. Dr. Vijay. K. Verma laboratory works in the area of exploring the molecular mechanism of persistent infection which underlie asymptomatic host pathogen coexistence in human pathogen *Helicobacter pylori*. They are focusing on the different toxins present in *H. pylori* and their role in pathogenesis. Recently, the lab have discovered the presence of many toxin-antitoxin pairs in *H. pylori* genome. Prof. Y. P. Khosa laboratory’s work is focused on recombinant product development in *E. coli* and

*Pichia pastoris* expression hosts. The laboratory is developing cost-effective SUMO protease technology to reduce the production cost of heterologous proteins in soluble form. They are also developing and optimizing bioprocesses for single chain antibody production against hTNF- $\alpha$ . Dr. Pau Biak Sang's lab is working on the DNA repair protein in *Candida glabrata* and its importance in pathogenesis. His lab is also working on discovery of novel methods for detection of antimicrobial resistance.

## **Publications**

### **Research Articles**

Gulati, P., Singh, A., Goel, M., and Saha, S. (2023). The extremophile *Picrophilus torridus* carries a DNA adenine methylase M.PtoI that is part of a Type I restriction modification system. *Frontiers in Microbiology*, 14

Tyagi, R., Paul, C., Banerjee, J., Kaul, R., & Banerjee S. (2022). Virus Association with Gastric Inflammation and Cancer: An Updated Overview. *Journal of Medical Microbiology and Infectious Diseases*, 10(4), 163-178.

Kumar, A., Alam, M.S., Hamid, H., Chugh, V., Tikla, T., Kaul, R., Dhulap, A., & Sharma, S.K. (2023). Design and synthesis of anti-inflammatory 1, 2, 3-triazolylpyrrolobenzodiazepinone derivatives and impact of molecular structure on COX-2 selective targeting. *Journal of Molecular Structure*, 1272

Kashyap, A., Saini, K., Saini, M., Khasa, Y.P., and Gupta, R. (2023) Development of a novel *Pichia pastoris* expression platform via genomic integration of lipase gene for sustained release of methanol from methyl oleate. *Preparative Biochemistry & Biotechnology*, 53(1), 64–75.

Babbal, Mohanty, S., Dabburu G.R., Kumar, M., and Khasa, Y.P. (2022). Heterologous expression of novel SUMO proteases from *Schizosaccharomyces pombe* in *E. coli*: Catalytic domain identification and optimization of product yields. *International Journal of Biological Macromolecules*, 209, 1001-1019.

Dagar, V.K., Babbal, Mohanty. S., and Khasa, Y.P. (2022). Effect of N-glycosylation on secretion, stability, and biological activity of recombinant human Interleukin-3 (hIL-3) in *Pichia pastoris*. *3 Biotech*, 12 (9), 221

Gupta, N., Behera, D.K., Prajapati, V.K., & Verma, V.K. (2022). A comprehensive approach to discover Toxin-Antitoxin systems from human pathogen *Helicobacter pylori*: A poison and its antidote encapsulated in the genome. *Life Sciences*, 288

Pathak, V.M., Verma, V.K., Rawat, B.S., Kaur, B., Babu, N., Sharma, A., Dewali, S., Yadav, M., Kumari, R., Singh, S., Mohapatra, A., Pandey, V., Rana, N., and Cunill, J.M. (2022). Current status of pesticide effects on environment, human health and its eco-friendly management as bioremediation: A comprehensive review. *Front Microbiol*, 13

Gupta, N., Kumar, A., & Verma, V.K. (2023). Strategies adopted by gastric pathogen *Helicobacter pylori* for a mature biofilm formation: Antimicrobial peptides as a visionary treatment. *Microbiological Research*, 273

### **Books/Chapter in Books**

Sinha, K., Sang P.B., Sharma, P. and Jaiswal, R.K. (2023). DNA Replication Stress and Genome Instability in Breast Cancer. In P. Kendrekar, V. Adimule and T. Hurst (Eds.), *Drug and Therapy Development for Triple Negative Breast Cancer*, (pp.35-64).

### **Research Projects**

BIRAC-sponsored BioNEST program “Fostering Innovation and technology development through BioIncubation” awarded to the Department of Microbiology. 2020-2023. PI Prof. Swati Saha, Rs. 444.67 Lakhs

SERB, Characterization of the SET domain proteins SET2 and SET3 in *Leishmania donovani*. 2020-2023. Prof. Swati Saha, 58.1 lakhs

DST-SERB funded project titled “Characterization of the functional role of SET domain proteins SET2 and SET3 in the protozoan parasite *Leishmania donovani*” started from 14-Feb-2020 to 13-Feb-2023. Total cost: 58.08 lakhs.

DBT funded project titled “Towards identifying parasite-specific proteins involved in DNA replication in the protozoan *Leishmania donovani*” starting from 23-Aug-2022 to 22-Aug-2025. Total Cost: 68.99 lakhs.

DST-SERB funded project titled “Center of Antibody Engineering: Center for Immuno-Diagnostics/Therapeutics Veneering technologies (CIVET)” starting from 03-Mar-2022 to 02-Mar-2025. Total cost: 1.87 Crores. PI: Prof. Rajeev Kaul, Co-PI: Prof. Y.P. Khasa

DBT funded project titled “Specific Single domain antibodies (sdAbs) against antimicrobial resistant Mastitis pathogen for clinical therapeutic use in dairy animals” starting from 11-Mar-2022 to 10-Mar-2025. Total Cost: 59.6 lakhs. PI: Prof. Rajeev Kaul, Co-PI: Prof. Y.P.Khasa

### **Seminars/Conferences organized by the Department**

COVID-19: Tracking SARS-CoV-2 Variants through whole genome sequencing and Rapid tests. Speaker: Dr. Subhash Verma from University of Nevada Reno, USA, Organised on 25J uly 2022

Delineating survival strategy employed by *M. tuberculosis*, Speaker: Vinay Nandicoori, Organized on 27<sup>th</sup> Feb 2023

### **Seminar/Conference Presentations (National / International)**

Swati Saha (2023). “*Leishmania donovani* SET1 protein plays a role in mediating the cell’s response to an oxidative environment”. Invited lecture given at the International Symposium on Biology of Development and Disease, BHU, Varanasi, India (20<sup>th</sup>- 22<sup>nd</sup> January, 2023).

Swati Saha (2023).“*Role of academia in supporting incubation of juvenile technologies: the way forward*”.Invited lecture given at two day conference on the theme ‘Bioentrepreneurship: Academia to Industry’. (23<sup>rd</sup>-24<sup>th</sup>February, 2023).

Rajeev Kaul. 2023. Identifying Universal Principles of host-pathogen interaction: lessons from Morbilliviruses. Delivered invited talk in Symposium on ‘Current Trends in Microbiology’ organized by Microbiologists Society of India in Delhi on 18-Apr-2023.

Rajeev Kaul & Rashmi Singh. 2023. Therapeutics for Antimicrobial Resistance: Lessons from past and implications for future. Invited talk as resource person in 35th ICAR-CAFT course on ‘Combating AMR in Livestock and Poultry: Recent Advances in Surveillance, Diagnostics and Therapeutics’, Department of Veterinary Microbiology, LUVAS, Hisar, Haryana on 10 Feb, 2023.

Rajeev Kaul. 2023. Identifying Universal Principles of host-pathogen interaction: lessons from Morbilliviruses. Delivered invited talk in Microquest-2023 organized by the Microbiology society of BCAS college on 07 Feb, 2023.

Dr. Vijay K. Verma (2023) Participated in “VALIDATE 5<sup>th</sup>Annual Meeting and one day Early Career Workshop” organized by VALIDATE network, Jenner Institute, University of Oxford, UK, held at BMA house, London (6 -8 March 2023).

Dr. Vijay K. Verma (2022) Participated in short term course on “Research Methodology” a UGC-sponsored short term course, organized by Centre for Professional Development in Higher Education (CPDHE), Human Resource Development Centre, University of Delhi, Delhi, India. (14<sup>th</sup> – 20<sup>th</sup> October 2022).

Dr. Vijay K. Verma (2022) Participated in “2022 IEDB Virtual User Workshop” organized by La Jolla Institute for Immunology, San Diego, California, USA (26 – 28 October 2022). (Online mode)

### **Placement Details (Number and percentage of students placed)**

Two M.Sc. students opted for industrial job and 10 M.Sc. students are preparing for higher education (Ph.D.) and 2 Ph.D. students opted for industrial jobs (Post-doctorate, industry job etc.).

### **Extension and Outreach Activities**

The Department conducted several workshops for college students. In these workshops students received hands-on training in basic molecular biology techniques, animal cell culture techniques, fermentation technology, and use of HPLC. Under these workshops a total of 70 students received direct hands-on training.

### **Faculty strength: 5**

### **Number of Ph.D. Degrees Awarded: 3**

### **Other Significant Information**

The Department runs the BIRAC-funded BioNEST programme and has established a bio-incubator where start-ups can incubate their juvenile technologies.

## Physical Education & Sports Sciences

### Major Activities and Achievements

Seminars held on different subjects & topics like Test and Measurement, Psychological interventions in sports, health related fitness assessment, Descriptive Research in Physical Education, Physiology of Yogic Practices and Research & Publication Ethics

### Publications

#### Research Articles

Chand, C., Uniyal, N., & Shaw, D., (2022), A Meta-Analysis on the Effect of Yoga on Reaction Time, *South Journal of Social Sciences*, 1, 10, 6-14, 21

Chand, C., Katiyar, V. K., & Shaw, D., (2022), Post Training Recovery and Yoga: A Comprehensive Review, *Journal of the Oriental Institute*, 4, 71, 108-114, 20

Shaw, D., Pratap, V., Singh, K.S., & Yadav, A., (2022), A Survey Study to Analyze the Status of College Students Attitude towards Wearing Mask During the Covid-19 (Wave-III) Pandemic in Ghaziabad District, *Journal of Health & Sports Sciences*, 1, 16, 8-16, 12

Rawat, S., Chand, C., & Shaw, D., (2023), Effect of Yoga Practices on Hormonal Functions (A Meta-Analysis), *International Journal of Current Research*, 3, 15, 23979-23982, 18

#### Books/Chapter in Books

Co-author, (2023), Physical Education Key Learning for Competitive Exams, *Karnataka*, Selfpage Developers Pvt Ltd., 978-93-5747-058-2, 1-330

First Author, (2022), Kinesiology of Exercises with Apparatus, *Delhi*, Khel Sahitya Kendra, 978-93-93393-23-4, 1-274

First Author, (2022), Kinesiology of Freehand Exercises, *New Delhi*, Sports Publication, 978-93-93781-42-0, 1-20

#### Seminars/Conferences organized by the Department

Prof. Dhananjay Shaw, Head, Department of Physical Education & Sports Sciences, NA, Test & Measurement, 02-08-2023

Prof. Dhananjay Shaw, Head, Department of Physical Education & Sports Sciences, NA, Psychological Interventions in Sports, 02-08-2023

Prof. Dhananjay Shaw, Head, Department of Physical Education & Sports Sciences, NA, Health-Related Fitness Assessment in Youth, 04-08-2023



Prof. Dhananjoy Shaw, Head, Department of Physical Education & Sports Sciences, NA, Descriptive Research in Physical Education, 08-08-2023

Prof. Dhananjoy Shaw, Head, Department of Physical Education & Sports Sciences, NA, Physiology of Yogic Practices, 11-08-2023

Prof. Dhananjoy Shaw, Head, Department of Physical Education & Sports Sciences, NA, Research & Publication Ethics, 27-08-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

International Conference on Physical Education & Exercise Sciences- ICPESS 2023 held from 22nd till 24th March 2023, Prof. Dhananjoy Shaw served as a Resource Person and Chairperson

Faculty Strength: 7

**Number of M.Phil. Degrees Awarded: 20**

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## **Plant Molecular Biology**

### **Brief History**

The Department of Plant Molecular Biology (PMB) was established in 1988 under the Faculty of Interdisciplinary and Applied Sciences. Its primary aim was to cater to students' needs in frontier areas of plant biology and to propel advanced research in the Molecular Aspects of Plant Biology and Biotechnology. The same year, it incorporated the Unit for Plant Cell and Molecular Biology, an initiative originally established by the DST. The growth and development of the department were greatly supported through various grants. Notably, the COSIST grant by the UGC between 1990 and 1995, followed by its recognition of the department for Special Assistance under its DRS Phase I & Phase II programs from 2002 to 2012, to bolster research and teaching in Plant Molecular Biology.

Over the years, the department has been steered by esteemed academicians. Notably, Professor S.C. Maheshwari (1988-1992), Professor Akhilesh K. Tyagi, Professor Jitendra P. Khurana, Professor Paramjit Khurana, Professor Anil Grover, Professor Indranil Dasgupta, Professor Madan Mohan, and Professor Sanjay Kapoor (serving as the Head from 2022 onwards) have played pivotal roles as Heads of the Department.

The department's research efforts have been significantly supported by major grants, such as, "Centre for Plant Molecular Biology" and "Genome Initiatives on Sequencing, Gene Discovery and Function" by DBT. Besides, several other competitive grants have been received from other notable organizations such as DST, UGC, the European Commission, and the Rockefeller Foundation. Since its inception, the faculty's work has culminated in around 900 publications, and multiple patents have been filed. The faculty's participation in multi-institutional and international collaborative projects has consistently characterized this department, emphasizing the department's commitment to global scientific exchange and research collaborations.

## Major Activities and Achievements

The Department of Plant Molecular Biology has made significant contributions to plant science. It participated and contributed significantly to the global genome sequencing efforts on Rice, Tomato, and Wheat. The department is known for its research on abiotic stress tolerance, especially heat, osmotic, and drought tolerance. It has led to the discovery of several candidate genes that can confer stress resilience across multiple growth stages. The department is pioneering efforts to combat mineral nutrient deficiency in crops, aiming to harness biotechnology to create stress-tolerant crops. A PMB-led multi-institutional DBT-funded program on functional genomics of rice has revealed functions of several genes involved in floral transition, gametophyte development, and seed development. Another feather in their cap is the establishment of the 'Indian Biological Data Centre (IBDC),' marking India's first national life science data repository. The research on tomato ripening has spotlighted genes that can extend its shelf-life. Presently, the PMB team is delving deep into the intricate genomic networks, elucidating how diverse genomic elements synchronize and respond to a myriad of developmental and environmental stimuli.

## Honours/Distinctions

Prof. Girdhar K. Pandey received the Prof. Shri Ranjan Memorial Award given by the National Academy of Sciences (NASI) in the year 2023

Prof. Indranil Dasgupta received the INSA Senior Scientist fellowship given by INSA in the year 2023

Professor Paramjit Khurana received Dr. S. Rajaram Outstanding Women Scientist Award-2022 given by the Society for Advancement of Wheat and Barley Research (SAWBAR). in the year 2022

## Publications

### Research Articles

Pahuja, S., Bheri, M., Bisht, D., & Pandey, G.K. (2023). Calcium signalling components underlying NPK homeostasis: potential avenues for exploration. *Biochemical Journal*, 4, 480, 1015–1034.

Saini, L.K., Sharma, M., Ravi, B., Ghosh, S., Pahuja, S., Singh, N., & Pandey, G.K. (2023). Overexpression of ARM repeat/U-box containing E3 ligase, PUB2 positively regulates growth and oxidative stress response in Arabidopsis. *Biochemical Journal*, 4, 480, 555-571

Bhat, E.A., Ali, T., Sajjad, N., Kumar, R., & Bron, P. (2023). Insights into the structure, functional perspective, and pathogenesis of ZIKV: an updated review. *Biomedicine & Pharmacotherapy*, 165

Mahto, A., Yadav, A., Aswathi, P.V., Parida, S.K., Tyagi, A.K., & Agarwal, P. (2023). Cytological, transcriptome and miRNome temporal landscapes decode enhancement of rice grain size. *BMC Biology*, 1, 21

Bhushan S, Singh AK, Thakur Y, Baskar R. (2023). Persistence of parental age effect on somatic mutation rates across generations in Arabidopsis. *BMC Plant Biology*, 1, 23

Prusty, A., Sharma, S., Malik, N., Kapoor, S., Tyagi, A.K., (2023). Functional Versatility of Multi-Protein Mediator Complex in Plant Growth and Development. *Critical Reviews in Plant Sciences*, 5, 42, 138-176

Verma, V., Boora, N., Nayar, S., Kumar, G., Thapliyal, S., Ankur, S., Khurana, R., Gawande, G., Kapoor, M., Kapoor, S., (2023). Ca<sup>2+</sup>-Calmodulin regulates nuclear translocation of the rice seed-specific MADS-box transcription factor OsMADS29. *FEBS Journal*

Kumar, R., Ghatak, A., Goyal, I., Sarkar, N.K., Weckwerth, W., Grover, A., Chaturvedi, P., (2023). Heat-induced proteomic changes in anthers of contrasting rice genotypes under variable stress regimes. *Frontiers in Plant Science*, NA, 13

Kumari, A., Sharma, D., Sharma, P., Wang, C., Verma, V., Patil, A., Imran, M., Singh, M.P., Kumar, K., Paritosh, K., Caragea, D., Kapoor, S., Chandel, G., Grover, A., Jagadish, V.K., Agarwal S.K., & Agarwal, M. (2023). Meta-QTL and haplo-pheno analysis reveal superior haplotype combinations associated with low grain chalkiness under high temperature in rice. *Frontiers in Plant Science*, 14

Balyan, S., Kansal, S., Jajo, R., Behere, P.R., Chatterjee, R., Raghuvanshi, S. (2023). Delineating the tissue-mediated drought stress governed tuning of conserved miR408 and its targets in rice. *Functional and Integrative Genomics*, 3, 23

Chithung, T.A., Kansal, S., Jajo, R., Balyan, S., Raghuvanshi, S. (2023). Understanding the evolution of miRNA biogenesis machinery in plants with special focus on rice. *Functional and Integrative Genomics*, 3, 23

Kaladhar, V.C., Singh, Y., Nair, A.M., Kumar, K., Singh, A.K., Verma, P.K. (2023). A small cysteine-rich fungal effector, BsCE66 is essential for the virulence of *Bipolaris sorokiniana* on wheat plants. *Fungal Genetics and Biology*, 166

Sharma, K., Sizova, I., Sanyal, S.K., Pandey, G.K., Hegemann, P., Kateriya, S. (2023). Deciphering the role of cytoplasmic domain of Channelrhodopsin in modulation of the interactome and SUMOylation of *Chlamydomonas reinhardtii*. *International Journal of Biological Macromolecules*, 243

Sharma, A., Samtani, H., Sahu, K., Sharma, A.K., Khurana, J.P., Khurana, P. (2023). Functions of Phytochrome-Interacting Factors (PIFs) in the regulation of plant growth and development: A comprehensive review. *International Journal of Biological Macromolecules*, 244

Ahmed, I., Kumar, A., Bheri, M., Srivastava, A.K., Pandey, G.K. (2023). Glutamate receptor like channels: Emerging players in calcium mediated signaling in plants. *International Journal of Biological Macromolecules*, 234

Sanyal, S.K., Sharma, K., Bisht, D., Sharma, S., Sushmita, K., Kateriya, S., Pandey, G.K. (2023). Role of calcium sensor protein module CBL-CIPK in abiotic stress and light signaling responses in green algae. *International Journal of Biological Macromolecules*, 237

Sanyal, S.K., Awasthi, M., Ranjan, P., Sharma, S., Pandey, G.K., Kateriya, S. (2023). Characterization of Chlamydomonas voltage-gated calcium channel and its interaction with photoreceptor support VGCC modulated photobehavioral response in the green alga. *International Journal of Biological Macromolecules*, 245

Gambhir, P., Singh, V., Raghuvanshi, U., Parida, A.P., Pareek, A., Roychowdhury, A., Sopory, S.K., Kumar, R., Sharma, A.K. (2023). A glutathione-independent DJ-1/PfpI domain-containing tomato glyoxalaseIII2, SIGLYIII2, confers enhanced tolerance under salt and osmotic stresses. *Plant Cell and Environment*, 2, 46, 518-548.

Sharma, E., Bhatnagar, A., Bhaskar, A., Majee, S.M., Kieffer, M., Kepinski, S., Khurana, P., Khurana, J.P. (2023). Stress-induced F-Box protein-coding gene OsFBX257 modulates drought stress adaptations and ABA responses in rice. *Plant Cell and Environment*, 2, 46, 1207-1231.

Ravi, B., Foyer, C.H., & Pandey, G.K. (2023). The integration of reactive oxygen species (ROS) and calcium signalling in abiotic stress responses. *Plant Cell and Environment*, 2, 46, 1985-2006.

Jain, N., Khurana, & P., Khurana, J.P. (2023). AtTLP2, a Tubby-like protein, plays intricate roles in abiotic stress signalling. *Plant Cell Reports*, 5, 42, 235-252.

Singh, S., Sharma, P., Mishra, S., Khurana, P., & Khurana, J.P. (2023). CRY2 gene of rice (*Oryza sativa* subsp. indica) encodes a blue light sensory receptor involved in regulating flowering, plant height and partial photomorphogenesis in dark. *Plant Cell Reports*, 5, 42, 73-89.

Daware, A., Malik, A., Srivastava, R., Das, D., Ellur, R.K., Singh, A.K., Tyagi, A.K., & Parida, S.K. (2023). Rice Pangenome Genotyping Array: an efficient genotyping solution for pangenome-based accelerated genetic improvement in rice, *Plant Journal*, 3, 113, 26-46.

Gambhir, P., Raghuvanshi, U., Parida, A.P., Kujur, S., Sharma, S., Sopory, S.K., Kumar, R., & Sharma, A.K. (2023). Elevated methylglyoxal levels inhibit tomato fruit ripening by preventing ethylene biosynthesis. *Plant Physiology*, 2, 192, 2161–2184.

Thakro, V., Malik, N., Basu, U., Srivastava, R., Narnoliya, L., Daware, A., Varshney, N., Mohanty, J.K., Bajaj, D., Dwivedi, V., Upadhyaya, H.D., & Parida, S.K. (2023). A superior gene allele involved in abscisic acid signaling enhances drought tolerance and yield in chickpea. *Plant Physiology*, 1, 191, 1884-1912.

Babbar, R., Tiwari, L.D., Mishra, R.C., Shimpfui, R., Singh, A.A., Goyal, I., Rana, S., Kumar, R., Sharma, V., Tripathi, G., Sarkar, N.K., & Grover, A. (2023). Arabidopsis plants overexpressing additional copies of heat shock protein Hsp101 showed high heat tolerance and endo-gene silencing. *Plant Science*, 330

Singh, R., Kumar, K., Purayannur, S., Verma, P.K. (2023). Genomics-assisted genetics of complex regions from chickpea chromosome 4 reveals two candidate genes for Ascochyta blight resistance. *Plant Science*, 334

Singh, S., Vergish, S., Jain, N., Sharma, A.K., Khurana, P., & Khurana, J.P. (2023). OsCRY2 and OsFBO10 co-regulate photomorphogenesis and photoperiodic flowering in indica rice. *Plant Science*, 330.

Kumar, R., Tripathi, G., Goyal, I., Sharma, J., Tiwari, R., Shimphui, R., Sarkar, N.K., Grover, A. (2023). Insights into genomic variations in rice Hsp100 genes across diverse rice accessions. *Planta*, 2, 257

Pasricha, S.L., Sree, K.S., Boka, K., Keresztes, A., Fuchs, J., Tyagi, A.K., Khurana, J.P., & Appenroth, K.J. (2023). Characterisation of a Spontaneous Mutant of *Lemna gibba* G3 (Lemnaceae). *Plants*, 12, 2525

Chaudhary, C., Sharma, N., & Khurana, P. (2023). Genome-wide identification of Aux/IAA and ARF gene families in bread wheat (*Triticum aestivum* L.). *Protoplasma*, 2, 260, 257-270.

Sharma, N., Shree, B., Khurana, P. (2023). Myo-inositol phosphate synthase improves heat stress tolerance by ethylene-mediated modulation of chlorophyll content and photosynthetic efficiency. *Protoplasma*, 2, 260, 1097-1107.

Jain, N., Khurana, P., & Khurana, J.P. (2023). Overexpression of a rice Tubby-like protein-encoding gene, OsFBT4, confers tolerance to abiotic stresses. *Protoplasma*, 2, 260, 1063-1079.

Singh, S.K., Shree, A., Verma, S., Singh, K., Kumar, K., Srivastava, V., Singh, R., Saxena, S., Singh, A.P., Pandey, A., Pandey, A., Verma, P.K. (2023). The nuclear effector ArPEC25 from the necrotrophic fungus *Ascochyta rabiei* targets the chickpea transcription factor Ca<sup>2+</sup>LIM1a and negatively modulates lignin biosynthesis, increasing host susceptibility. *The Plant Cell*, 1, 35, 1134-1159.

Gambhir, P., Sharma, A.K., & Kumar, R. (2023). The two faces of DJ-1D proteins. *Trends in Plant Science*

Kumar, R., Dasgupta, I. (2023). Geminiviral C4/AC4 proteins: An emerging component of the viral arsenal against plant defence. *Virology*, 579, 156-168.

Naresh, M., Purkayastha, A., & Dasgupta, I. (2023). Silencing suppressor protein PRT of rice tungro bacilliform virus interacts with the plant RNA silencing-related protein SGS3. *Virology*, 581, 71-80.

Jagram, N., Dasgupta, I. (2023). Principles and practice of virus induced gene silencing for functional genomics in plants. *Virus Genes*, 59, 173-187.

Dahal, S., Gour, P., Raghuvanshi, S., Prasad, Y.K., Saikia, D., & Ghatani, S. (2023). Multi-stage transcriptome profiling of the neglected food-borne echinostome *Artyfechinostomum sufrartyfex* reveal potential diagnostic and drug targets. *Acta Tropica*, 233

Samtani, H., Sharma, A., & Khurana, P. (2023). Correction ecto tropic overexpression of TaHsFA5 promoted thermomorphogenesis in *Arabidopsis thaliana* and thermotolerance in *Oryza sativa*. *Plant Molecular Biology*, 112, 245-246.

Ghosh, S., Bheri, M., Bisht, D., Pandey, G.K. (2022). Calcium signaling and transport machinery: Potential for development of stress tolerance in plants. *Current Plant Biology*, 29, 28

Samtani, H., Sharma, A., Khurana, J.P., & Khurana, P. (2022). Thermosensing in plants: Deciphering the mechanisms involved in heat sensing and their role in thermoresponse and thermotolerance. *Environmental and Experimental Botany*, 203

Anwar, K., Joshi, R., Morales, A., Das, G., Yin, X., Anten, N.P., Raghuvanshi, S., Bahuguna, R.N., Singh, M.P., Singh, R.K., Singla-Pareek, S.L., Pareek, A. (2022). Genetic diversity reveals synergistic interaction between yield components could improve the sink size and yield in rice. *Food and Energy Security*, 1, 11, 5

Gahlaut, V., Samtani, H., Gautam, T., & Khurana, P. (2022). Identification and Characterization of DNA Demethylase Genes and Their Association with Thermal Stress in Wheat (*Triticum aestivum* L.). *Frontiers in Genetics*, 13

Khurana, R., Bhimrajka, S., Rao, G.S., Verma, V., Boora, N., Gawande, G., Kapoor, M., Rao, K.V., & Kapoor, S. (2022). Characterization of Transcription Regulatory Domains of OsMADS29: Identification of Proximal Auxin-Responsive Domains and a Strong Distal Negative Element. *Frontiers in Plant Science*, 13

Sasi, J.M., VijayaKumar, C., Kukreja, B., Budhwar, R., Shukla, R.N., Agarwal, M., & Katiyar-Agarwal, S. (2022). Integrated transcriptomics and miRNAomics provide insights into the complex multi-tiered regulatory networks associated with coleoptile senescence in rice. *Frontiers in Plant Science*, 13, 4

Samtani, H., Sharma, A., & Khurana, P. (2022). Wheat ocs-Element Binding Factor 1 Enhances Thermotolerance by Modulating the Heat Stress Response Pathway. *Frontiers in Plant Science*, 13, 3

Jain, M., Bansal, J., Rajkumar, M.S., Sharma, N., Khurana, J.P., & Khurana, P. (2022). Draft genome sequence of Indian mulberry (*Morus indica*) provides a resource for functional and translational genomics. *Genomics*, 3, 114, 10

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Prasad, K., Gour, P., Raghuvanshi, S., Kumar, V. (2022). The SARS-CoV-2 targeted human RNA binding proteins network biology to investigate COVID-19 associated manifestations. *International Journal of Biological Macromolecules*, 217, 853-863.

Khan, Z.A., Kumar, R., Dasgupta, I. (2022). CRISPR/Cas-Mediated Resistance against Viruses in Plants. *International Journal of Molecular Sciences*, 4, 23

Singh, K.N., Rawat, S., Kumar, K., Katiyar-Agarwal, S., Goel, S., Jagannath, A., & Agarwal, M. (2022). Identification of significant marker-trait associations for Fusarium wilt resistance in a genetically diverse core collection of safflower using AFLP and SSR markers. *Journal of Applied Genetics*, 3, 63(3), 447–462.

Borah, P., Sharma, A., Sharma, A.K., Khurana, P., & Khurana, J.P. (2023). SCF OsFBK1 E3 ligase mediates jasmonic acid induced turn-over of OsATL53 and OsCCR14 to regulate rice anther and root lignification. *Journal of Experimental Botany*

Mahiwal, S., & Pandey, G.K. (2022). Potassium: a vital nutrient mediating stress tolerance in plants. *Journal of Plant Biochemistry and Biotechnology*, 31, 705-719.

Sharma, N., & Khurana, P. (2022). Genome-Wide Identification and Analysis of the TaSERK Gene Family in Bread Wheat *Triticum aestivum* L. and TaSERK8 Overexpression Study in Rice. *Journal of Plant Growth Regulation*

Pandey, A., Bhat, B., Aggarwal, M.L., Pandey, G.K. (2022). Enhancing Cohort PASA Efficiency from Lessons Assimilated by Mutant Genotyping in *C. elegans*. *Methods in Molecular Biology*, 17-33.

Kanwar, P., Ghosh, S., Sanyal, S.K., & Pandey, G.K. (2022). Identification of Gene Copy Number in the Transgenic Plants by Quantitative Polymerase Chain Reaction (qPCR). *Methods in Molecular Biology: PCR Primer Design*, 161-171, 2

Samtani, H., Sharma, A., Khurana, J.P., & Khurana, P. (2022). The heat stress transcription factor family in *Aegilops tauschii*: genome-wide identification and expression analysis under various abiotic stresses and light conditions. *Molecular Genetics and Genomics*, 4, 297, 1689–1709.

Singh, R., Kumar, K., Purayannur, S., Chen, W., Verma, P.K. (2022) *Ascochyta rabiei*: A threat to global chickpea production. *Molecular Plant Pathology*, 23, 1241–1261.

Singh, R., Dwivedi, A., Singh, Y., Kumar, K., Ranjan, A., Verma, P.K. (2023). A Global Transcriptome and Co-expression Analysis Reveals Robust Host Defense Pathway Reprogramming and Identifies Key Regulators of Early Phases of Cicer-*Ascochyta* Interactions. *Molecular Plant-Microbe Interactions*, 35, 1034–1047.

### **Books/Chapter in Books**

Ravi, B., Sanyal, S.K., & Pandey, G.K. (2023). Calcium decoders and their targets: The holy alliance that regulate cellular responses in stress signalling, (pp.371-439). Netherlands: Elsevier.

Pandey, G.K. (2023). Protein phosphatases and their targets: Comprehending the interactions in plant signaling pathways In Book Series Advances in Protein Chemistry and Structural Biology, (pp.307-370).Netherlands: Elsevier.

Pandey, G.K. (2022). Enhancing Cohort PASA Efficiency from Lessons Assimilated by Mutant Genotyping in *C. elegans* In Book Methods in Molecular Biology, (pp.7-33). New York: Humana Press.

Pandey, G.K. (2022). Identification of Gene Copy Number in the Transgenic Plants by Quantitative Polymerase Chain Reaction (qPCR) In Book Methods in Molecular Biology: PCR Primer Design, (pp.161-171). New York: Humana Press.

Dasgupta, I. (2022). RTBV-Based VIGS Vector for Functional Genomics in Rice: Methodology, Advances, Challenges, and Future Implications in Book Methods in Molecular Biology: Plant gene silencing, (pp.117-131). New York: Humana Press.

### **Research Projects**

BRNS, DAE, India,, 2020 to 2023, Utilization of halophyte specific genes for improving abiotic stress tolerance in crop plants,, 31.58 lakhs

SERB, DST, 2021-2024, J.C. Bose National Fellowship (Phase –III), NA

SERB, DST, 2020 – 2023, Development of a Cell-line based Starch Bio-factory System by Manipulating Components of Starch Regulatory and Biosynthetic Machinery in Tobacco BY-2 Cells, 52.9 Lakhs

SERB, DST, 2023 - 2026, Deciphering the role of CBK - CPK in regulating WRKY transcription factor in abiotic stress responses, 38.5 lakhs

### **Seminars/Conferences organized by the Department**

PMB Annual Symposium, 24-02-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Paramjit Khurana - Invited talk on “Plant Genomics for Climate Resilient Crops” on the World Environment Day celebrations on June 4, 2022, at Sriram Institute for Industrial & Chemical Research, Delhi.

Prof. Paramjit Khurana -Invited talk on “Bioeconomy-based Entrepreneurship Development via Biotechnological Interventions” at Imphal on October 11, 2022 under the NASI-IBSD organized workshop.

Prof. Paramjit Khurana -Invited talk on “Climate Resilient Crops in the Era of Plant Genomics” at NABI, Mohali on International Women’s Day celebrations on March 13, 2023.

Prof. Paramjit Khurana -Invited talk for the RR Das Memorial Lecture on “Plant Genomics for Climate Resilient Crops” at Jiwaji University, on March 17, 2023.

Professor Anil Grover - Talk “Prof. S. N. Patnaik Memorial Lecture” organized by Prof. S. N. Patnaik Memorial Trust, Bhubaneswar, Odisha (26 September 2022).

Professor Indranil Dasgupta - Participated in Annual National Conference VIROCON 2022, organized by Indian Virological Society, held at Sher-e-Kashmir University of Science and Technology, Srinagar on 05.11.2022 and 06.11.2022. Chaired a session during the conference.



Professor G.K.Pandey - How calcium signaling regulates oxidative stress in plant? A story of mitochondrial gate-keeper, Voltage dependent anion channel, International conference on Exploring New Horizon in Biotechnology (ENB-2023), BHU, 10-12Feb, 2023

Professor G.K.Pandey - Calcium signaling in stress condition in plants: Role of CIPK9-VDCA3 in regulating oxidative stress signaling, Centre of DNA Fingerprinting and Diagnostic, Hyderabad, Telangana, 20 Jan 2023.

#### **No. of Students under Exchange Programme**

Barkha Ravi -- Newton Bhabha Exchange Programme

#### **Placement Details (Number and percentage of students placed)**

Dr Harsha Samtani, Research Associate at NIPGR, New Delhi.

Dr Aishwerya Sharma, Research Fellow at NIPGR, New Delhi.

Dr. Sanchi - Associate editor, Books, Life Sciences Springer Nature

Dr. Ridhi Khurana Assistant Professor at Hans Raj College

Dr. Neelima Post Doc at CEA Cadarache

#### **Extension and Outreach Activities**

DPMB students visited to Plant phenomics facility, IARI on 25.05.2023 and 14 students participated

Students of Hans Raj College (Dept. of Botany) visited CIF of UDSC University of Delhi South Campus on 09.11.2022 and 42 students participated.

Shivaji college Students Visit to Dept. of Plant Molecular Biology DPMB on 28.08.2022 and 14 students participated.

Faculty Strength: 8

**Number of Ph.D. Degrees Awarded: 5**

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## **FACULTY OF LAW**

### **Brief History**

The Faculty of Law at the University of Delhi stands as a venerable institution with a rich legacy in legal education. Established in 1924, it has consistently maintained its reputation as a national focal point for legal studies. Over the years, the department has been at the forefront, producing distinguished legal figures, including Supreme Court and High Court judges, prominent advocates, influential political leaders, policy-makers, and individuals who have set trends across various domains. Despite its renowned alumni, the department maintains an egalitarian ethos, offering practically free legal education at a nominal cost.

The Faculty of Law has unparalleled expertise of its faculty members and a multicultural environment, adds to its allure. Currently catering to over 10,000 students, encompassing LL.B., LL.M., and Ph.D. programs, the Faculty operates within limited resources. While a comprehensive three-year LLB degree course is offered by the three centers operating within the fold of the Faculty ( Law Centre – I, in 1970, followed by Law Centre – II in 1971 and Campus Law Centre in 1975), the LL.M. and Ph.D. programs are administered under the direct supervision of the Dean. Embracing the case method of teaching law, the department distinguishes itself by not relying on publishers' new editions. Instead, faculty members diligently revise case materials for LL.B. and LL.M. programs every semester, ensuring the most relevant and up-to-date content. Printed copies of these materials are then distributed to all students without profit.

### **Major Activities and Achievements**

In addition to its commitment to accessible legal education, the Faculty of Law boasts a rich print library supplemented with e-resources. The faculty comprises individuals with diverse knowledge and experiences, with professors from other universities, including foreign institutions, visiting under various fellowship programs to engage in research within the institution. The department also actively fosters international collaborations, with delegations from foreign universities frequently visiting to share knowledge and enrich the learning experience for our students.

### **Seminars/Conferences organised**

The Faculty of Law at the University of Delhi has been actively organising various seminars and events, including World Animal Day on October 4, 2022, facilitated by the Animal Law Cell. Additionally, the faculty hosted a Conclave on Indianisation of Legal System and Education on September 29-30, 2022, a Workshop on United Against Gender-Based Violence on July 19, 2022, and a Two-Day Workshop on Women and Technology: Addressing Sexual Violence against Women on June 24-25, 2022.

Further contributions include a Special Lecture on JUSTICIABILITY OF ECONOMIC, SOCIAL AND CULTURAL RIGHTS on May 6, 2022, a Webinar on Theories of Justice on April 12, 2022, and the 3<sup>rd</sup> International Conference on Mediation held on April 9-10, 2022, featuring a comprehensive list of speakers and sessions.

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## **Campus Law Centre**

### **Brief History**

Campus Law Centre fondly known as CLC is one of the premier legal education centers of the country. It was established in 1922, under the aegis of University of Delhi in its foundation year. In 1975, the day classes of LL.B. of the Faculty of Law were rechristened as Campus Law Centre. The Campus Law Centre or CLC, known for its great achievements, has the distinction of being one of the oldest and most prestigious institutions, which continues to preserve its 100 years of rich heritage and legacy of yielding profound lawyers, academicians, Union Cabinet Ministers, Chief Justices, and judges.

### **Major Activities and Achievements**

Campus Law Centre (CLC) organized the 19<sup>th</sup>. K.K. Luthra Memorial Moot Court Competition in February 17–19, 2023. This year's competition received the participation from 96 institutions from India and abroad.

### **Honours/Distinctions**

Prof. (Dr.) Alka Chawla, Professor In-Charge: Awarded with women of the decade award by women chamber of commerce and industries (dec. 2022)

Prof. (Dr.) Gunjan Gupta: Awarded/sanctioned as the Project Investigator a major project entitled, "Sports as a Tool for Women Empowerment: A Study of Policies, Practices and Barriers Faced by Women in Sports in India" funded by the National Commission for Women (NCW) (Oct. 2022).

Dr. Harleen Kaur: Awarded Mahanagar Global Achievers Award of "Women Empowerment" in sixth season of Mahanagar Global Achievers' Award 2022, on 31<sup>st</sup> Oct, 2022 at Multipurpose Hall India International Centre, Max Mueller Marg, and New Delhi.

Dr. Anita Yadav: Awarded with Global Pride Award-2023 & Business Conclave Under The Campaign of Atmanirbhar Bharat & Mission Export & Celebrate 6<sup>th</sup> Anniversary of the Group on Occasion of "National Women Day" Organized by Dr. Rakesh Goyal Tigrania CHAIRMAN & EDITOR IN CHIEF HUMAN PRIDE GROUP at Constitution Club of India New Delhi on 13<sup>th</sup> Feb 2023

### **Publications**

#### **Research Articles**

Prof. Raman Mittal, (2022), Using other Proprietor's Trade Mark - An Analysis of the Principle of Fair Use in Trade Mark Law in India, *Journal of Indian Law Institute*, 3, 64, 261-280.

Prof. Raman Mittal (CLC Faculty) & Mritunjay Kumar, (2023), Aspects of Truth in the Practice of Logic, Law, and Spirituality, *Journal of Constitutional Law and Jurisprudence*, 1, 6, 16-31.

Andrea Morales Caceres, Kshitij Kumar Singh (CLC Faculty), Timo Minssen, Susan Rogers Van Katwyk, and Steven J. Hoffman, (2022), Using the International Pandemic Instrument to Revitalize the Innovation Ecosystem for Antimicrobial R&D, *Journal of Law, Medicine & Ethics*, S2, 50, 47-54.

Kshitij Kumar Singh (CLC Faculty) Kumari M.; Qureshi K.A.; Jaremko M.; White J.; Singh S.K.; Sharma V.K.; Singh K.K.; Santoyo G.; Puopolo G.; Kumar A., (2022), Deciphering the role of endophytic microbiome in postharvest diseases management of fruits: Opportunity areas in commercial up-scale production, *Frontiers in Plant Science*, 1, 2.

Dr. Harleen Kaur (CLC Faculty) & Mr. Aayush Tripathi, (2022), Exception to Martial Rape in India: An Unconstitutional Intrusion into the Victim's Right to Equality and Privacy, *ILI Law Journal*, Winter Issue, 299-320.

Dr. Rohit Moonka & Dr. Silky Mukherjee, (2022), Protection of Traditional Knowledge including Ayurveda, Unani and Siddha Medicines: Issues and Challenges, *Legal Wisdom Journal*, 1, 1, 1-11.

Dr. Ashish Kumar & Dr. Rahul Kumar (CLC Faculty), (2022), Probing the Structural Phases of the Mediation Process, *NUSRL JOURNAL OF LAW AND POLICY*, IX, 114-138.

Dr. Ajay Kr. Sharma, (2023), Duties or Rights: Should Duties Trump over Rights?, *Indian Journal of Law and Justice*, 1, 14, 131-146.

### **Books/Chapter in Books**

Raman Mittal & Kshitij Kumar Singh (eds), (2022), Book--Relevance of Duties in the Contemporary World With Special Emphasis on Gandhian Thought., *Singapore*, Springer, Singapore, 978-981-19-1835-3; 978-981-19-1838-4, 1-389

Raman Mittal, (2022), Book Chapter--Intellectual Property Duties: Exhumation, Exploration and Examination, *Delhi*, Springer, 978-981-19-1835-3, 327-342

Kshitij Kumar Singh, (2022), Book Chapter-Patent and Pandemic: Exploring Duties, Obligations and Responsibilities, *Singapore*, Springer, Singapore, 978-981-19-1835-3; 978-981-19-1838-4, 367-389

Kshitij Kumar Singh (CLC Faculty) & Subham K. Jain, (2022), Book Chapter- Relevance of Duty Through the Lens of Gandhi and East-West Jurisprudence, *Singapore*, Springer, Singapore, 978-981-19-1835-3; 978-981-19-1838-4, 3-19

Harleen Kaur (CLC Faculty) and Ayushka Sharma (authors), (2022), Book Chapter--The Principle of Restorative Justice Towards the Strengthening of Crime Prevention as Viewed from the Pragmatic Gandhian Lens., *Delhi*, Springer, 978-981-19-1835-3, 273-302

Narender Nagarwal, (2022), Secularism and Secularization of the State: Decoding Gandhian Philosophy in Contemporary India (Book Chapter), *Delhi*, Springer, 978-981-19-1835-3, 227-242

Dr. Anita Yadav, (2022), Book Chapter- Immortality of the Vision: How Gandhi Can Guide the Future of India's Refugee Policy", *Delhi*, Springer, 978-981-19-1835-3, 121-138

Jai Prakash Meena, (2022), Protection of Environment as a Fundamental Duty (Book Chapter), *Delhi*, Springer, 978-981-19-1835-3, 295-304

### **Journal(s) Published by the Department**

Prof.(Dr.) Gunjan Gupta,(2022),Journal of Campus Law Centre, *Campus Law Centre (University of Delhi), Delhi*, 9, 133

### **Research Projects**

National Commission for Women (NCW), Awarded in Oct. 2022, “Sports as a Tool for Women Empowerment: A Study of Policies, Practices and Barriers Faced by Women in Sports in India”, Awarded to Prof. (Dr.) Gunjan Gupta

IOE, Delhi University, 2022-2023, Access to First Information Report Under Crime and Criminal Tracking Network & Systems (CCTNS) Scheme: A Critical Evaluation, 2 lakhs; Awarded to Dr. Harleen Kaur

Chair on Urban Poor and the Law at National Law School of India University (NLSIU) Bangalore, India, instituted by the Central Government Ministry of Urban Housing and Poverty Alleviation, India, 1 March 2022- December 2022, “Affordable Shelter for Street Women and Children: A case study of Delhi”, 50 thousand; Awarded to Dr. Anita Yadav

### **Seminars/Conferences organized by the Department**

Experts invited by the CLC Debate and Discussions Society (DDS). Dr. Anand Ranganathan and Mr Bharat Chugh, Distinguished Professor from JNU, and an Advocate and Former Judge respectively, The CLC Opinion Project 5.0- The Annual Intra-college Debate Competition., 19-07-2022

From SCC and Maupatra Team: invited by the CLC DDS, SCC and Manupatra, Workshop on Fundamentals of Legal Research conducted by SCC and Manupatra, 01-10-2022

Mr Sidharth Batra, AOR, Supreme Court of India., Interactive Session on Litigation by Mr Sidharth Batra, AOR, Supreme Court of India., 07-02-2023

Hon'ble Mr. Justice Hemant Gupta, Former Judge, Supreme Court of India, Lecture on "Genesis of PIL and it's Journey by Hon'ble Justice Hemant Gupta as a part of "Abhigyan Lecture series", an initiative of the Debate and Discussions Society., 14-02-2023

Professor Ved P. Nanda, Distinguished University Professor and Thompson G. Marsh Professor of Law at the University of Denver, Lecture on "India's Permanent membership in UNSC" by Professor P. Ved Nanda as a part of "Abhigyan Lecture series", an initiative of the Debate and Discussions, 17-02-2023

Several dignitaries and expert resource persons including, Dr. K.S. Kardam, Dr. Malthi Lakshmikumaran; Dr. Namita Gupta; and Dr. Parag Kinge, Former Sr. Joint Controller of Patents and Designs, Indian Patents Office, New Delhi; Executive Director and Practice Head, M/s Lakshmikumaran and Sridharan, N.D.; FITT-IIT Delhi; Head Legal, Gennova Biopharma Ltd., The workshop "IPR and Technology Transfer", organised by Centre for Innovation in Infectious Diseases, Research Education and Training (CIIDRET) and Delhi School of Skill Enhancement & Entrepreneurship Development (DSSSED), University of Delhi in collaboration with IPR Society, Campus Law Centre, University of Delhi. It was organised under the aegis of "100 Days Skill Festival" to commemorate the centenary year of University of Delhi., 18-03-2023

Distinguished Speakers: Prof. B. Ramesh, Prof. (Dr.) Alka Chawla, Prof. Hussain Mohammad, Prof. (Dr) Raman Mittal, Prof. Mohammad Tariq, Dr Kshitij Kumar Singh, Sh. G.D. Bansal, Goa Business School; Professor In-Charge, Campus Law Centre (University of Delhi); University of Kashmir; Professor, Campus Law Centre (University of Delhi); Aligarh Muslim University; Assistant Professor (Senior Scale), Campus Law Centre (University of Delhi); Advocate, Rajasthan High Court, National Workshop on “IPR Edification: Creative and Innovative India” organised by the Department of Lifelong Learning, University of Rajasthan and IPR Society, Campus Law Centre, DU., 31-01-2023

Prof. (Dr) Alka Chawla, Prof. (Dr) Raman Mittal, Dr Kshitij Kumar Singh, Professor In-Charge, Campus Law Centre (University of Delhi), Professor, Campus Law Centre (University of Delhi), Assistant Professor (Senior Scale), Campus Law Centre (University of Delhi), “Faculty Voices: Trade Mark Law in India”: CLC Placement Assistance Council (PAC), 14-07-2022

Mr. Sumeer Malik, Director of Eastern Book Company (EBC), Workshop on “Intricacies of Legal Research”: PAC, 11-02-2023

Ms. Achint Kaur, Counsel, Corporate and Commercial Practice, Khaitan & Co., N.A., Masterclass and Webinar on "Roadmap for a successful corporate lawyer, commercial transactions, art of drafting, negotiation and management skills": PAC, 25-02-2023

Mr. Tamir Kriegel, Vice President, Review Solutions at Consilio LLC, PAC: Seminar on "Unearthing New Career Avenues with Emerging Technologies and eDiscovery in the Legal Solutions Industry", 21-03-2023

Mr. Saurabh Kirpal, Sr. Adv. Supreme Court of India, CLC Legal Aid Society (LAS): Webinar on “Queering Justice: Courts and the Constitution”, 20-07-2022

Ms. Rishika Srivastava, Secretary Central DLSA, LAS: Seminar on “Access to Justice: vulnerable witnesses and victim compensation schemes” in collaboration with CDLSA, 18-07-2022

Dr Jayashree Sood, Dr Bimla Sharma, Dr Puneet Rathore, Ms Sunita Sharma, Department of Palliative Medicine, Sir Ganga Ram Hospital, LAS: Webinar in collaboration with Sir Ganga Ram Hospital, New Delhi on ‘Principle and Legal Aspects in Palliative Care”, 20-09-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr Narender Nagarwal: National Conference on Interfaith Dialogue and Communal Harmony-Department of Islamic Studies, Kashmir University, Sri Nagar UT Kashmir-March 8 and 9, 2023. Paper presented: Negotiating Inter-religious Discourse to Strengthen the Secularism

Mr. Jai Prakash Meena: Presented paper titled “Transition in The Concept of Dattaka (Adoption) From Vedic to Modern Jurisprudence” in International Conference on “Vedic Jurisprudence and its impact on Contemporary World” held on 11<sup>th</sup> - 12<sup>th</sup> February 2023 at Centre for Vedic Sciences, Banaras Hindu University, Varanasi-221005.

Dr. Rahul Kumar: Keynote Speaker on the title, "Health Laws Violations and Offence of Money-Laundering" at a National Conference on "Right to Public Health: Changing Dimensions in the Era of a Transnational World" organised by Madhav University, Pindwara(Sirohi), Rajasthan, India on 12<sup>th</sup> May 2023.

Dr. Harleen Kaur: "Presented Research Paper titled 'Religion-Based Hate Speech or Free Speech: Indian Courts in a Quandary' co-authored with Prof. (Dr) Usha Tandon, Dean, Faculty of Law, University of Delhi in the conference organised by The Centre for International Law Research and Policy (CILRAP) on 'Religion, Hateful Expression and Violence, held in Florence, Italy from 8-9 April 2022.;

Dr. Harleen Kaur: Invited as a speaker in the International Rule of Law Convention 2023 organised by Bar Association of India on 15<sup>th</sup> & 16<sup>th</sup> April, 2023 at India Habitat Centre, Lodhi Road, Delhi New to speak on "Developing Collaborations for Capacity Building in the Legal and Justice Sectors in the Global South"

Dr. Anita Yadav: Speaker/Resource Person/Judge, etc. in 25 Academic Events including, Chaired Technical Session of the Two Days E-International Seminar on "Alternative Disputes Resolution and Intellectual Property Rights" organised by Law Mantra Trust in Collaboration with Maharashtra National Law University, Nagpur, Faculty of Law and Administration, Jagiellonian University, School of Law, Texas A & M University, Faculty of Law, University of Colombo, Sri Lanka on September 10, 2022;

Dr. Anita Yadav: Resource Person in the "National Conclave on Access to Justice: Need for Innovative Mechanism in 21st Century" organised by the Pro Bono Club, Manipal University Jaipur as part of Nyaya Bandhu Scheme under the aegis of Department of Justice, Ministry of Law & Justice, Government of India on 16<sup>th</sup> February 2023.

Dr. Kshitij Kumar Singh: Participated and Presented/Resource Person in 5 Academic Events including, Delivered a seminar, "Making precision medicine a global reality by recognising the stakes of LMIC: Reflections from India" at CeBIL, University of Copenhagen on 24<sup>th</sup> May, 2022 Tuesday (5pm Danish Time, 8:30 pm Indian Standard Time; in hybrid mode);

Dr. Kshitij Kumar Singh: Presented on "IPR and Crises Innovation: An Inquiry into the COVID-19 Pandemic" in the 5<sup>th</sup> IP & Innovation Researchers of Asia (IPIRA) Conference (Singapore) in online mode on March 1, 2023.

Dr. Ajay Kumar Sharma: Participated and presented a Paper (online) titled "MASS TORTS BY MULTINATIONAL CORPORATIONS: IS THE INDIAN TORT LAW REGIME ADEQUATELY EQUIPPED?" at the 19<sup>th</sup> Asian Law Institute (ASLI) Conference (an International Conference) held on 28-29 May 2022 co-organized by The University of Tokyo, Graduate Schools for Law and Politics and the Asian Law Institute (NUS, Singapore).

### **Other Inter-Institutional Collaborations**

Several academic events/research projects are held in collaboration with other bodies/institutions. Details are provided in other columns in this report.

### **Placement Details (Number and percentage of students placed)**

ACADEMIC YEAR 2022-2023

**Total Internships:** 114

**Total Recruitments:** 21 (Total strength of Final Year Students in the Academic Year 2022-23: 795)

## **Extension and Outreach Activities**

Such activities conducted by the CLC Legal Aid Society (LAS): DSLSA's invitation for summer internship in collaboration with DSLSA; Legal Aid society Legal Awareness and Outreach Programme collaboration with DSLSA; Legal Awareness Drive in Malkaganj Area; Open Air Celebration organised on World Mental Health Day; A vigilance Awareness Drive;

LAS Campus Law Centre volunteered for National Lok Adalat held in various district courts of Delhi; Awareness Drive was organised from Kingsway Camp to Dhaka Village on the occasion of Constitution Day;

A seminar organised on 'Human Rights Day' on the theme "Dignity, Freedom & Justice for All" in collaboration with Project Saksham Nek Mission Foundation and Sankhyiki.; Legal Awareness Workshop on 'Labour Card Scheme' The Legal Aid Society in collaboration with 'Neev-Foundation for Legal Aid' ; Para Legal Volunteer Training Programme collaboration with DSLSA & Legal Aid society; A legal awareness programme on 'Laws Related to Acid Attack' collaboration with CDLSA Project "SPARSH"

## **Faculty Strength**

No. of permanent teachers: 39, Guest Teachers: 34

## **Other Significant Information**

Online Fee System: Our digital initiative includes ensuring minimum interaction of the students for all routine issues viz deposit of semester fee, filling-up the examination forms, selection of optional subjects and other queries. This approach not only provides flexibility to students with varying schedules but also opens up opportunities to utilize their precious time to study and other important tasks.

Green Practices, Waste Management, etc.: Under the present dispensation, scrap/waste was disposed/written off, through the e-auction by the University Engineer for the CLC in Jan. 2023, which was of the amount of Rs. 2,35,002.

Any other: Measures for Divyang (PwD) Students: Laptops are available for issue to the V.H. students of the CLC, including for writing answers in the end-term examination. The latest software including JAWS has been installed on these laptops for the benefit of the said students. A Kibo scanner and Daisy player for recording lectures, etc. is also available for such Divyang students. Scribes are permitted for such examinees during the examination, and extra 1 hour is given to the Divyang examinees in a 3-hour end-term examination. Classes for the Divyang students and faculty members are only kept in the classrooms on the ground floor.

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## **Law Centre-I**

### **Brief History**

Law Centre-I was established in the year 1970 and commenced its classes for the LL.B. in the evening in the D.A.V. School building at Paharganj. Soon it was relocated to the N.P. School building at Mandir Marg. In 1994, Law Centre-I was relocated to the main campus of the Faculty of Law on Chhatra Marg. Later, the University of Delhi allocated a five-storey building to the Law Faculty in 2015—the Umang Bhawan which is in vicinity of the old premises on Chhatra Marg. Umang Bhawan is equipped with all the modern



amenities like elevators, CCTV cameras, spacious and modern classrooms with multi-media facilities among others.

### **Major Activities and Achievements**

Law Centre-I resumed all operations in physical mode including all teaching-learning activities such as seminars, workshops, training programs and placement activities. Law Centre-I organized the XVIIth LC-I All Delhi NCR Moot Court Competition in online mode, which saw overwhelming participation of students from all major law schools in Delhi-NCR. Law Centre-I organized a lecture by Padma Bhushan Prof. Ved P. Nanda on 50 years of Stockholm Conference: A Stock-taking on the trials of International Environmental Law. The faculty members have published research papers in national and international journals and chapters in book published by reputed publishers.

### **Honours/Distinctions**

Mr. Pushkar Anand, Assistant Professor, Law Centre-I was awarded the Best Researcher in the under 45 years category by the University of Delhi (2023).

Dr. Krishna Murari Yadav was awarded with the Pratibha Samman by the Faculty of Law, Banaras Hindu University (2022).

Law Centre-I was awarded the Best Website by the University of Delhi (2023).

Additionally, Law Centre-I won the 1st position in Research cum Paper presentation for the paper titled, “A Report On The Field Study On The Implementation Of The RTE, Act 2009 In The Government Primary Schools Of North Delhi- 2022-23” organized by Legal Aid and Awareness Committee of National Law University, Jodhpur.

Law Centre-I also won the First Prize in National Youth Parliament organized by Nehru Yuva Kendra, East Delhi, Ministry of Youth Affairs & Sports, Govt. of India (2023).

### **Publications**

#### **Research Articles**

Kavita, (2023), Analysis of Internet Banking along with Legal Aspects in India, *Kurukshetra Law Journal*, Volume XI, 113-129.

Khaute, Mercy, (2022), Safety of workplace for women from Northeast in Delhi- a legal inquiry, *Labour and Development*, No. 1, Vol 29, 185-202.

Mishra, Archana, (2023), Inheritance Right of Hindu Women in Agricultural Property: Uncertain Justice, *Journal of Indian Law Institute*, 2, 65, 123-135.

Sain, Anil, (2022), Right to be forgotten and personal data protection in India, *The Lex-Warrier: Online Law Journal*, 1, 29– 38.

Sain, Anil, (2022), Employee’s Right to Privacy in Cyberspace, *AD VALOREM*, IV, 9.

Sain, Anil & Chouhan, Subham, (2022), Critical Analysis of ITC on Free Samples under Goods & Service Tax in India, *HPNLU JTL*, I, 138.

### **Books/Chapter in Books**

Kavita, (2022), Laws relating to Sexual Offence against Women & Children in Archana Vashishth (Eds) A Guide relating to Law on Women and Child, *India*, Noble Science Press, International Publishing, 978-93-91842-68-0.

Sharma, Alok, (2023), Realisation of Right to Legal Aid: A Critical Analysis with Reference to NCT of Delhi. In Dr. V.P. Tiwari (Ed.) Changing Facets of Legal Profession in India" A Festschrift in honour of Late Prof. (Dr.) N.R. Madhava Menon, *Delhi*, Mohan Law House, 978-81-956099-5-6.

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## **Law Centre-II**

### **Brief History**

Law Centre-II made a humble beginning in the year 1971 at the premises of ARSD College, Dhaula Kuan to offer a full-time LL.B. program. It has a glorious past of 50 years. The LL.B. classes were conducted in the evening and the alumni of Law Centre-II included top bureaucrats, police officers, military officers, teachers from different departments, chartered accountants, doctors, engineers, and other professionals. The Centre had the privilege of being headed by the top law scholars of India, such as Prof. Upendra Baxi, a well-known jurist and former Vice-Chancellor of University of Delhi; Prof. Tahir Mahmood, who subsequently became Chairperson, Minority Commission, Prof. A.K. Koul, who was elevated as Vice-Chancellor, National Law University, Jodhpur and National Law University, Ranchi, Prof. Gurdip Singh who became Vice-Chancellor, National Law University, Lucknow, Prof. Poonam Saxena, who is presently Vice-Chancellor, National Law University, Jodhpur.

### **Major Activities and Achievements**

Law Centre II continued with the celebration of its Golden Jubilee Celebrations. The Centre established two new specialised academic societies/cells, International Law Cell and Arbitration Law Cell at the centre level with faculty -student participation.

In addition to the regular academic activities, Law Centre II held its annual Justified Moot Court, 2022.

Law Centre II also held one of the most successful conferences of 2022 on IPRs titled, International Conference on Standard Essential Patents and Frand Licensing with renowned experts/ speakers all over India and abroad.

LC II was also fortunate to have yet another Faculty Interaction with Prof. Ved Nanda, Honorary Professor of Law at the University of Delhi.

### **Honours/Distinctions**

Prof Vageshwari Deswal Awarded Exceptional Woman of Excellence by Women's Economic Forum in December 2022

## **Publications**

### **Research Articles**

Anjay Kumar, (2022), Necessity of the Commercial Courts Act: A Critical Study, *International Journal of Development Studies and Research*, 3, 11, 54-66.

Jupi Gogoi, (2022), Actors and Accolades: Examining the Rights of Actors in Films in India from a Copyrights Perspective, *Indian Journal of Law and Justice*, 1, 13, 228-252.

Nitesh Saraswat, (2022), court of judicial magistrate- the first line of defence against vexatious criminal litigation, *International journal of transparency and accountability in governance*, 7, 8, 47-68.

Nitesh Saraswat, (2022), court of judicial magistrate- the first line of defence against vexatious criminal litigation, *Dehradun Law Review*, 1, 14, 93-102.

### **Books/Chapter in Books**

Dr Anjay Kumar, (2022), Introduction to Transfer of Property Act, *Delhi*, Satyam International Publications, 978-9391345242.

Dr. Jupi Gogoi, (2023), Protection of Traditional Knowledge and Geographical Indications With Special Reference to North-East India, *New Delhi*, NLUJA, Assam & Satyam LAW International, 978-81-19121-03-8.

Kislay Soni, (2022), Mainstreaming Gender in Disaster Management Paradigm: A Comparative Analysis, *New Delhi*, Thomson Reuters, 978-93-91340-29-2.

Kislay Soni, (2022), IPR Enigma in the Realm of Video Games, *New Delhi*, Thomson Reuters, 978-93-92630-99-6.

Saurabh Rana, (2023), IPC- Cases and Material, *New Delhi*, University Book Publishers, 9789390672370.

Dr. Parikshet Sirohi, (2022), Institutional Decline in Neo-Liberal Regime: Notes from India, *New Delhi*, Thomson Reuters, 978-93-92630-23-1.

Dr. Isha Wadhwa Sharma, (2022), Copyright Exceptions and Online Education, *New Delhi*, Thomson Reuters, 978-93-92630-99-6.

Anupam Jha, (2022), Acts of International Terrorism : Need of Incorporation into Rome Statute, *Netherlands*, Brill/Nijhoff, 978-900-444-7455.

### **Journal(s) Published by the Department**

Prof. (Dr.) Kiran Gupta,(2020 ), NATIONAL CAPITAL LAW JOURNAL, *Law Centre 2*, 18, 1-120

Dr. Vageshwari Deswal,(2021), Delhi Journal of Contemporary Law, *LAW Center 2*, 4, 1-271

## **Research Projects**

Institute of Eminence, University of Delhi, August, 2022, Minor Research Grant under Faculty Research Programme, INR 3,00,000

## **Seminars/Conferences organized by the Department**

Prof A K Pandey, Professor Banaras Hindu University, UP, Feminisms and Feminist Justice, 27-05-2022

Justice Sudhir Kumar Jain, Judge High Court of Delhi, Judicial Response to Trippel Talaq, 02-04-2022

Prof Ved Nanda, Professor, Faculty Interactive Session, 14-02-2023

Justice Prathib a M Singh Patil Dr Jay Kesan and others, Judge Delhi High Court Professor, Illinois University, International Conference on standard Essential Patent and Fraud Licensing, 28-07-2022

## **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr Irwin Lalmuanpuii Hnamte Assistant Professor National Seminar on Contemporary Issues of Women and the Law Hindu Succession (Amendment) Act 2005: Challenges and Problems in Women Empowerment in India Karnataka State Law University Hubballi and Kristu Jayanti College of Law, Bengaluru Online 16/08/2022.

Dr Irwin Lalmuanpuii Hnamte Assistant Professor National Conference on Protection of Traditional Knowledge, Geographical Indications and Rights of Indigenous Peoples Protection of Traditional Cultural Expressions with Special Reference to North East India Online National Conference on Protection of Traditional Knowledge, Geographical Indications and Rights of Indigenous People Online 27/05/2022

Dr Irwin Lalmuanpuii Hnamte Assistant Professor Gender Sensitisation and National Seminar on Women Professionalism: Issues and Challenges Women Professionals and the Law- An Overview T Romana College, Aizawl, Mizoram T. Romana College, Republic Veng, Aizawl, Mizoram 17/03/2023

Dr Pramod Tiwari Assistant Professor REWA RESEARCH CONCLAVE, 2022, INTERNATIONAL E CONFERENCE Weather and crime in Delhi REWA UNIVERSITY REWA UNIVERSITY 16-17 December 2022

Shourie Anand Singh International Conference on convergence of international law to National Law in the Era of Globalization. Conflicts between Human Rights and Diplomatic Immunity a need for Common Ground. VIT School Of Law Vellore VIT school of Law Vellore. 22 and 23 April 2022.

Kiran Gupta Professor “National Conclave on Consumer Issues” Guest of Honour Consumer Law, NLU Delhi Online 11<sup>th</sup> March 2023

Kiran Gupta Professor Resource Person “Uniform Civil Code and Family Laws” JEMTEC School of Law, JIMS, Greater Noida JEMTEC School of Law, JIMS, Greater Noida 13<sup>th</sup> July, 2022

Dr Jupi Gogoi Assistant Professor Two Day National Workshop on Entrepreneurship and Patents Guest Speaker “Basics of Patent and Patent registration in India” Board for Research, Innovation, and

Consultancy (BRIC), Institution's Innovation Council (IIC), and Innovation and Startup Cell, Assam Don Bosco University Online June 4, 2022

Dr. Jupi Gogoi Assistant Professor workshop on "Intellectual Property Rights: Protecting Creation and Innovation" Guest Speaker 'Introduction to IPR' Department of Physics and Department of Computer Science & Electronics, USTM, Meghalaya Brynihat, Meghalaya October 21, 2022

Dr. Monica Chaudhary Assistant Professor National Virtual Multidisciplinary Seminar on Surrogacy The Anachronistic Ideology of The Assisted Reproductive Technology (Regulation) Act, 2021 and The Surrogacy (Regulation) Act, 2021: A Critical Analysis Maharashtra National Law University, Aurangabad Online May 2-3, 2022

Dr. Ashutosh Acharya Assistant Professor Clinical Legal Education and Human Rights Implementation of Right to Education Act, 2009: Role of Legal Aid Societies in Law Schools in India All India Law Teachers Congress, ISIL New Delhi 19-20 November, 2022

Dr. Ashutosh Acharya Assistant Professor Ninth International Conference on International Law and Changing Global Order, ISIL Deep Sea Bed Mining and its impact on Marine Environment: Role of International Sea Bed Authority Indian Society of International Law New Delhi 2<sup>nd</sup> – 4<sup>th</sup> March 2023

Kiran Gupta Professor Special Talks "Uniform Civil Code: Feasibility in India", Citizen Forum India, New Delhi Online 16<sup>th</sup> April, 2022

**Placement Details (Number and percentage of students placed): 5**

**Faculty Strength: 42**

## **FACULTY OF MANAGEMENT STUDIES**

### **Brief History**

Faculty of Management Studies (FMS, Delhi) is one of the oldest B-Schools in the country, established in 1954 under the aegis of the University of Delhi. The institute was started as a part of the Delhi School of Economics and has grown to be a full-fledged management institute. Being a part of University system, it has been contributing to the industry, businesses, government and social sector at par with leading business schools. Having started with an evening Masters Programme in Management in 1954. It commenced its MBA (Full-Time) Programme in 1967. FMS went on to establish Shanti Prasad Jain Advanced Management Research Centre at University of Delhi-South Campus to promote research and training of managers from India and abroad in the year 1982. The institute over the years has gained prominence for its learned faculty and students who today occupy coveted positions in the corporate world, both in India and abroad. All its programmes viz. MBA (Full-Time), MBA Executive, MBA Executive (Health Care Administration), and Ph.D. in Management are well accepted by the industry.

### **Major Activities and Achievements**

The Faculty of Management Studies, University of Delhi (FMS) is one of the top management schools in India, enjoying a reputation for excellence both nationally and internationally. FMS attracts the brightest students from all parts of the country, from diverse academic backgrounds ranging from engineering to liberal arts. The students admission policy of FMS positively promotes diversity in terms of gender and socio-economic background. All MBA students are given the opportunity to intern with the most prominent companies in India. FMS is renowned both for the quality of its teaching and for its business and practitioner oriented research. FMS enjoys an enviable student placement record. Apart from the full time MBA program, FMS conducts the MBA Executive program, the MBA Health Care Administration program, and the Doctoral program. Alumni from FMS occupy top positions in all walks of life including business, academics, administration, policy making and public life, in both the national and international spheres.

### **Publications**

#### **Research Articles**

Das, D., Sarkar, A. and Debroy, A. (2022). Impact of COVID-19 on changing consumer behaviour. International Journal of Consumer Studies

Sharma, Sunil and Sanjana, N.M. (2022). Lessons from an emerging economy. Journal of Business Thought

Das, A. K., Bardhan, A. K., & Fageda . (2022). Evolution of Activity Based Costing technique as, Case Studies on Transport Policy

Malhotra, P., & Sinha, P. (2022). Advanced Costing Technique -A Bibliometric Analysis. IIM Ranchi Journal of Management Studies

Sinha, P., & Grover, N. (2022). What is driving the passenger demand on new regional air routes, Finance India

Aggarwal, P., & Agarwala, T. (2022). Relationship of green human resource management with environmental performance: mediating effect of green organizational culture, Personnel Review

Acharyya, M., & Agarwala, T. (2022). Relationship between CSR motivations and corporate social performance: a study in the power industry in India, *Personnel Review*

Sinha, Pankaj, and Shah, P. et al. (2022). Prediction for the 2020 United States Presidential election using machine learning algorithm: Lasso regression, *Journal of Prediction Markets*

Kalsie A., & Singh, I. (2022). Analysis of Post-Merger Performance of Merged Entity: A Study of Select Financial Sector Deals, *International Journal of Accounting & Finance Review*

Kalsie, A., and Kalra, J.K. (2022). Capital Account Liberalization and Crises: A Meta-Analysis. *The Indian Economic Journal*

Dubey, P. and Dey, S. (2022). Inflationary Effects of Agricultural Commodity Futures Market in India: Is it there and should we care?, *Vision*

Goel, N. and Dey, S. (2022). Understanding Health Insurance Coverage in India. *Empirical Economic Letters*

Gupta, G. and Nagpal, S. (2022). Chatbot for Educational Services: Confirmation and Assessment of Quality Dimensions. *IITM Journal of Business Studies*

Rani, S. and Gupta, G. (2022). Panic Buying in Stock Markets: Insights from Bibliometric Analysis. *Gitam Journal of Management*

Gupta, G. and Nagpal, S. (2022). Omni-channel Retail: The Nuances of Channel Choice and Switch Behaviour. *Tecnia Journal of Management Studies*

Nijhawan, G., Gujral, H.K. & Singh, K. (2022). The Impact of Employees' Demographic Profile on their Emotional Intelligence and Organizational Citizenship Behaviour, *Webology*

Singhania, M. & Saini, N. (2022). Quantification of ESG Regulations: A Cross Country Benchmarking Analysis. *Vision*

Saini, N., Singhania, M., Hasan, M., Yadav, M.P., & Abedin, M.Z. (2022). Non-financial disclosures and sustainable development: A scientometric analysis. *Journal of Cleaner Production*

Suneja, V. (2022). Impact of social affinity on altruism: Experimental evidence from the ultimatum game, *International Journal of Social Economics*

Suneja, V. (2022). Mindfulness as an antidote to conspicuous consumption: The mediating roles of self-esteem, self-concept clarity and normative influence, *Personality and Individual Differences*

Suneja, V. (2022). Cooperation within teams: A review of social preferences in one-shot prisoner's dilemma game. *The Indian Journal of Industrial Relations*

Suneja, V. (2022). The rationale for ethics in public procurement: A transaction costs perspective. *NIFM Journal of Public Financial Management*

Suneja, V. (2022). Study of strategies on core competencies of IT SMEs in India. *Focus WTO*

Suneja, V. (2022). Human capital strategies of IT SMEs in India. *Abhigyan*

Suneja, V. (2022). Management: A profession or a vocation?, *International Journal on Spirituality and Organisational Leadership*

Suneja, V. (2022). From Masters in Business Administration (MBA) to Masters in Business Creativity (MBC): Rejuvenating the Management Discipline. *International Journal on Vedic Foundations of Management*

Kumar, V., Das, D., and Bardhan, A.K. (2022). Carbon Footprint Implications of Demand and Supply Uncertainties in Supply Chains: A Simulation Study. *International Journal of Modelling and Simulation*

Kaur, H., and Verma, H.V. (2022). The emotion of pride in consumer behaviour and marketing: a review, classification and future research agenda. *Management Research Review*

Duggal, E., and Verma, H.V. (2022). Offline to online shopping: shift in volition or escape from violation. *Journal of Indian Business Research*

Thakur, M., Schomaker, R. M. & Yadav, M. (2022). Responding to the Clarion Call of COVID-19: A study of impact of HR function and employee engagement on post-crisis organisation recoverability. *Ramanujan International Journal of Business and Research*

Mokashi, T., Panigrahi, S., Raman, A.V., Muraleedharan V.R., and Chokshi, M. (2022). Priority Setting for Collaborative Health Systems Research in India: A Method and the Way Forward. *Journal of Health Management*

Gupta, N., and Verma, H.V. (2022). Other customers' service failure and recovery encounters: a qualitative exploration. *Asia Pacifica Journal of Business Administration*

Kumar, R. and Das, D. (2022). A performance evaluation framework of public health distribution network for essential medicines: Lessons from select Indian States. *International Transactions in Operational Research*

Shekhar and Das, D. (2022). Enablers of 'creating shared value': A Total interpretive structural modeling-polarity approach. *Global Journal of Flexible Systems Management*

Das, D. and Singh, A. (2022). Optimizing the delivery schedule of equipment in a project environment considering resource leveling of storage space and its constraint: A case study. *Journal of Advances in Management Research*

Sarkar, A., Das, D., and Debroy, A. (2022). Panic buying, product substitution and channel shifting behaviour during pandemic. *IIM Kozhikode Society & Management Review*

Bardhan, A. K., & Ashraf, S. (2022). More buyers or more sellers: on marketing resource allocation strategies of competing two-sided platforms. *Electronic Commerce Research*

Soni, V., Dey, P., Sharma, S., and Das, D. (2022). Negotiating oil and gas resource ownership for equitable sharing: A problematization approach and evidence from India. *Resources Policy*



Sinha, P., and Vodwal, S. (2023). Effect of subprime crisis on financing decisions and capital structure of Indian firms: a pre- and post- crisis study using system GMM methodology. *Journal of Advances in Management Research*, 20(3), 329-352.

Goswami, K. Thapa, D.B., Sandilya, J., & Deka, N. (2023). An assessment of economic profitability of black rice (*Oriza sativa* L. indica) production in Assam India. *Journal of Applied Research on Medicinal and Aromatic Plants*, 34(3)

Oktavio, A., Kaihatu, T.S., Kumari, D., Nugroho, A., & Adityaji, R. (2023). I slept well and I will be back: An emperical study on Hotel guests in Indonesia. *Seybold Report*, 18(3), 1371-1383.

Kohli, D., and Mehra, M.K. (2023). Impact of electoral competition, swing voters and interest groups on equilibrium policy platforms: Exploring the strategic forces at work. *Research in Economics*, 77(1), 60-75.

Soni, V., Gnekpe, C., Roux, M., Anand, R., Yaroson, E.V., & Banwet, D.K. (2022). Adaptive distributed leadership and circular economy adoption by emerging SMEs. *Journal of Business Research*, 156

Soni, V., Dey, P.K., Sharma, S., & Das, D. (2023). Negotiating oil and gas resource ownership for equitable sharing: A problematization approach and evidence from India. *Resources Policy*, 85(3), 1-22.

Goswami, M., & Goswami, A.K. (2022). A comprehensive examination of psychological capital research using bibliometric, TCCM and content analysis. *Benchmarking: An International Journal*, 30(5), 1588-1622.

Kanojia, S., Lakshmi, V., Sachdeva, S., & Verma, M. (2023). Tensegrity of Internal Control System, Board's Ability, and Corporate Governance Practices. *Global Business Review*

Antil, A., Saini, N., Sehgal, S., Aggarwal, S., and Shahzad, U. (2023). Effectiveness of metaphorical communication in the government campaign on Digitization. *FIIB Business Review*

Oliver, T.H., Bazanaah, P., Costa, J.D., Deka, N., Dornelles, A.Z. et al. (2023). Empowering citizen-led adaptation to systemic climate change risks. *Nature Climate Change*, 13(7), 1-8.

Kumar, V., Verma, A., Kumar, A. (2023). What are the best practices for End-of-Life Vehicle management – A practical assessment of estimates, perceptions and policies. *Management of Environmental Quality*, 34(6)

Shri, C., Verma, A., Gupta, G., & Kumra, R. (2023). Prioritizing Factors of Panic Buying Behaviour: A Neutrosophic Analytical Approach. *IIM Kozhikode Society & Management Review*

Verma, A., Joshi, G., Shri, C., Chaturvedi, A., & Gupta, S. (2023). Role of Fear on Consumers' Buying Tendencies: Mediating Role of Social Media Usage. *FIIB Business Review*,

Nijhawan, G., Gujral, H.K. & Singh, K. (2023). Perceived Organizational Support and Job Performance: Mediating Role of Organizational Citizenship Behavior. *Journal for Re Attach Therapy and Developmental Diversities*, 6(4), 139-151.

Suneja, V., and Das, D. (2023). Impact of Social Preferences, Trust and Behavioural Norms on Cooperation: Experimental Evidence from Prisoner's Dilemma Game. *Studies in Microeconomics*

Budhiraja, S., Thakur, M. and Yadav, M. (2023). Leveraging human resource management practices during mergers and acquisitions: a bibliometric analysis and future research agenda. *Benchmarking: An International Journal*

Siddiqi, S., Aftab, W., & Raman, A.V., et al. (2023). The role of the private sector in delivering essential packages of health services: lessons from country experiences. *BMJ Global Health*, 8(1)

Bigio, J., Hannay, E., Pai, M., Alisjahbana, B., Das, R., Huynh, H.B., Khan, U., Mortera, L., Nguyen, T.A., Safdar, M.A., Shrestha, S., Raman, A.V., Verma, S.C., Yellappa, V., & Srivastava, Divya. (2023), The inclusion of diagnostics in national health insurance schemes in Cambodia, India, Indonesia, Nepal, Pakistan, Philippines and VietNam, *BMJ Global Health*

### **Books/Chapter in Books**

A. Venkat Raman, (2022), *Harnessing the Contribution of the Private Health Care Sector toward Public Health Goals*, --, Cambridge University Press, 9781009211093, --

A. Venkat Raman, (2022), *Public–Private Partnership in Health Care Services*, --, --, 9781009211093, --

### **Research Projects**

--, 2022-2024, *e Governance Cases-Development of multimedia cases with teaching notes e Governance Initiatives of Government of India*, 1.15 Cr

IoE, University of Delhi, 2022, *Understanding Omnichannel Shoppers: A Study of Purchase and Channel Switching Behaviour*, Rs 40,000

ICSSR, 2023, *Impact of Direct Benefit Transfer Scheme of Government of India on Financial Inclusion: An Assessment*, Rs 1499000

Customized Energy Solutions India Pvt. Ltd. (CES), 2023, *Indian EVs & Battery Gigafactories: Imperatives for a Robust Supply Chain*, 300000

Institution of Eminence, University of Delhi, 2023, *Experimental Evaluation of Impact of Gamification in Education*, 300000

**Placement Details (Number and percentage of students placed):** 269, 100%

**Faculty Strength:** 41

**Number of Ph.D. Degrees Awarded:** 37

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## FACULTY OF MATHEMATICAL SCIENCE

### Computer Science

#### Brief History

The Department of Computer Science was established in the year 1981 with the objective of imparting quality education in the field of Computer Science. The Department has modern facilities for teaching, learning and research. The Department offers a wide array of research opportunities and programs of study at undergraduate and postgraduate levels. The Department started a 3-year Master of Computer Applications (MCA) programme in the year 1982, which was among the first such programmes in India. The Department started a 2-year M.Sc. Computer Science programme in the year 2004 with the aim to develop core competence in Computer Science and prepare the students to carry out development work, as well as take up challenges in research. Besides these, the Department offers a Doctor of Philosophy (PhD) in Computer Science aimed at producing quality researchers and high-impact interdisciplinary research. Undergraduate CBCS programmes - B.Sc. (H) Computer Science, B.Sc. Physical / Mathematical Sciences and B.A. Programme (Discipline Courses in Computer Applications) are offered by the University of Delhi through its constituent colleges. With rapidly evolving technology and the continuous need for innovation, the Department has produced quality professionals holding important positions in the IT industry in India and abroad.

#### Major Activities and Achievements

Ruchi Sinha CodeKaze2023 17 June 2023 Individual National Second Position Coding Ninjas

Rohit Kumar CodeKaze2024 18 June 2023 Individual National Third Position Coding Ninjas

25 March 2023 Cultural Event Alumni Meet <https://alumni.cs.du.ac.in/>

29-30 April 2023 Technical Fest Sankalan <https://ducs.in/sankalan/>

#### Honours/Distinctions

Sr. Prof. Punam Bedi's name is included in the list of Top 2% Researchers of the World by Stanford University, published by Elsevier on Oct.10, 2022.

#### Publications

#### Research Articles

Sharma, N. K., Kumar, S., Rajpal, A., & Kumar, N. (2022). MantaRayWmark: an image adaptive multiple embedding strength optimization based watermarking using Manta Ray Foraging and bi-directional ELM. *Expert Systems with Applications*, 200, 116860.

Rajpal, A., Sehra, K., Bagri, R., & Sikka, P. (2023). XAI-FR: Explainable AI-Based Face Recognition Using Deep Neural Networks. *Wireless Personal Communications*, 129(1), 663-680.

- Dwivedi, K., Rajpal, A., Rajpal, S., Agarwal, M., Kumar, V., & Kumar, N. (2023). An explainable AI-driven biomarker discovery framework for Non-Small Cell Lung Cancer classification. *Computers in Biology and Medicine*, 153, 106544.
- Rajpal, A., Sehra, K., Mishra, A., & Chetty, G. (2023). A low-resolution real-time face recognition using extreme learning machine and its variants. *The Imaging Science Journal*, 1-16.
- Kumar, S., Rajpal, A., Sharma, N. K., Rajpal, S., Nayyar, A., & Kumar, N. (2022). ROSEmark: Robust semi-blind ECG watermarking scheme using SWT-DCT framework. *Digital Signal Processing*, 129, 103648.
- Thukral, A., Dhiman, S., Meher, R., & Bedi, P. (2023). Knowledge graph enrichment from clinical narratives using NLP, NER, and biomedical ontologies for healthcare applications. *International Journal of Information Technology*, 15(1), 53-65.
- Dua, A., Jindal, V., & Bedi, P. (2022). Detecting and Locating Storage-Based Covert Channels in Internet Protocol Version 6. *IEEE Access*, 10, 110661-110675.
- Kumari, T., Sharma, R., & Bedi, P. (2022). A contextual-bandit approach for multifaceted reciprocal recommendations in online dating. *Journal of Intelligent Information Systems*, 59(3), 705-731.
- Bedi, P., & Singhal, A. (2022). Estimating cover image for universal payload region detection in stego images. *Journal of King Saud University-Computer and Information Sciences*, 34(8), 5797-5809.
- Rana, B., & Rathore, S. S. (2023). Industry 4.0—Applications, challenges and opportunities in industries and academia: A review. *Materials Today: Proceedings*, 79, 389-394.
- Kumar, M., Patel, A. K., Biswas, M., & Shitharth, S. (2023). Attention-based bidirectional-long short-term memory for abnormal human activity detection. *Scientific Reports*, 13(1), 14442.
- Singh, R., Biswas, M., & Pal, M. (2023). A transformer-based cloud detection approach using Sentinel 2 imageries. *International Journal of Remote Sensing*, 44(10), 3194-3208.
- Shakya, A., Biswas, M., & Pal, M. (2023). Fusion and Classification of SAR and Optical Data Using Multi-Image Color Components with Differential Gradients. *Remote Sensing*, 15(1), 274.
- Biswas, M. (2023). Impulse Noise Suppression in Color Images Using Median Filter and Deep Learning. *Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science)*, 16(6), 56-68.
- Kagita, V. R., Pujari, A. K., Padmanabhan, V., & Kumar, V. (2022). Inductive conformal recommender system. *Knowledge-Based Systems*, 250, 109108.
- Veeramachaneni, S. D., Pujari, A. K., Padmanabhan, V., & Kumar, V. (2022). A hinge-loss based codebook transfer for cross-domain recommendation with non-overlapping data. *Information Systems*, 107, 102002.
- Kumar, R., & Singh, K. (2022). A survey on soft computing-based high-utility itemsets mining. *Soft Computing*, 26(13), 6347-6392.

### **Books/Chapter in Books**

Sharma, N. K., Kumar, S., Rajpal, A., & Kumar, N. (2021, March). DWT and Quantization Based Digital Watermarking Scheme Using Kernel OS-ELM. In *Virtual International Conference on Soft Computing, Optimization Theory and Applications* (pp. 313-328). Singapore: Springer Nature Singapore.

Dua, A., Jindal, V., & Bedi, P. (2022, July). DICCh-D: Detecting IPv6-Based Covert Channels Using DNN. In *International Conference on Information, Communication and Computing Technology* (pp. 42-53). Cham: Springer Nature Switzerland.

### **Research Projects**

Four projects were granted an amount of 3 Lakhs each by the Institution of Eminence, University of Delhi, under the Faculty Research Programme Grant.

One project was granted an amount of Rs. 32,75,221/- by DST-SERB under a start-up grant.

Two projects were granted an amount of Rs. 15,90,000/- and 10,30,000/- each by the Institution of Eminence, University of Delhi, under the Major Research Project Scheme

One Project was granted 10 Lakhs under UGC-BSR Research Start-up Grant

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr Ankit Rajpal Delivered two sessions on “Data Handling using Python” in a two-week online FDP organized by the Department of CSE, School of Computing Department of EEE, School of Electrical Engineering Bharath Institute of Higher Education and Research, Chennai, in association with the National Institute of Technology, Warangal on 5-6 August 2022.

Dr Ankit Rajpal delivered lectures in the two-week FDP Python: Essentials, Programming and Analytics organized by the University of Delhi in collaboration with Guru Angad DevTeaching Learning Centre of the Ministry of Education (PMMMNTT scheme) from 27 Oct-03 Nov 2022.

### **National/International MoUs Signed**

MOU, University of AIZU, JAPAN for five years

### **Placement Details (Number and percentage of students placed)**

M.Sc. Computer Science: 42

MCA: 54

### **Extension and Outreach Activities**

Dr Ankit Rajpal: Invited as a subject expert to evaluate research projects in Avlokan 2022, organized by Maitreyi College, University of Delhi, India, on 28 September 2022

Dr Bharti: An expert speaker for a 15-hour workshop on 'Manipulating 2-D and 3-D data' conducted from August 2022 to September 2022 at Shaheed Sukhdev College of Business Studies, University of Delhi.

**Faculty Strength: 13**

**Number of Ph.D. Degrees Awarded: 8**

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## **Mathematics**

### **Brief History**

The Department of Mathematics at the University of Delhi was established in 1947, and ever since its inception, the department has always strived to be amongst the best mathematics departments in the country and has worked towards becoming a centre of excellence for advanced research in various areas of Mathematics including Algebra, Analysis, Topology, Differential Equations, Mathematical Programming. A strong commitment of the department to excellence in teaching and research has attracted talented students from all over the country. The department currently offers M.Sc. and Ph.D. programs in Mathematics. It provides the students with the environment and the infrastructure that helps them to develop the potential for scholarship, creative work, professional realization, and service. The department functions to create individuals with a strong foundation of the subject and their practical attributes. Department has been receiving various support and grants, including UGC's SAP-DRS, SAP-DSA, DST-FIST and DST-PURSE.

### **Major Activities and Achievements**

The Department of Mathematics QS World ranking in 2023 is 251-300, and the QS ranking within Asia is 72, which is improved from 2022. The QS ranking within India is 9th. The faculty members of the department have Research Projects of approx. Rs. 122 Lacs and have published around 87 Research papers in journals of international repute. Two post-doctoral fellows have worked in the department availing prestigious NBHM and UGC Dr. D.S. Kothari fellowships. The Department of Mathematics received the Best Website award in 2021 at the University of Delhi. The infrastructure of the Department has improved as the department's Research Scholar Room, Seminar Room, and Classrooms are well equipped with laser projectors, PTZ video conferencing cameras, etc. Department placement cell organized many webinars and workshops for students to develop skills. Approximately 25 companies visited and selected 45 students, with the highest package offered in 2022-23 is 19.5 LPA.

### **Honours/Distinctions**

Ruchi Das addressed as Chief Guest at the Valedictory Session of the 2nd International Conference on Recent Trends in Mathematical Sciences on 28th December 2022, organized by Himachal Ganita Parishad.

Ruchi Das addressed as Chief Guest at Valedictory Session in the International Conference on Analysis and its Applications; (ICAA-23) from 27th to 28th of February, 2023 at Shivaji College, University of Delhi.

Tarun Das serving as a member Academic Council, University of Allahabad, Academic Council, Delhi Technological University, Council for Academic Affairs, NSIT, Board of Studies in Mathematics, Kurukshetra University, Board of Studies in Mathematics, University of Ladakh and Faculty Board, MDU, Rohtak.

## Publications

### Research Articles

Luthra P. & Kumar A., (2022), Operator System Theory: A Survey, *Mathematics, its Applications and History*, 8.1-8.20.

Beniwal, S., Kumar, A., & Luthra, P. (2022). Local version of approximation theorem and of  $\lambda$ -tensor product of operator systems. *Advances in Operator Theory*, 7(3), 35.

Kumar, A., & Sharma, J. (2022). Uncertainty principles on nilpotent Lie groups. *Khayyam Journal of Mathematics*, 8(2), 143-162.

Bansal, P., Kumar, A., & Bansal, A. (2022). Continuous Modulated Shearlet Transform.

Kansal A. Kumar A. & Rajpal V., (2023), Inductive limit in the category of  $C^*$ -ternary rings, *Bull. Korean Math. Soc*, 1, 60, 137-148, 0.

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Arpit Kansal, Ajay Kumar, & Vandana Rajpal. (2023). REPRESENTATIONS OF  $C$  -TERNARY RINGS. *Communications of the Korean Mathematical Society*, 38(1), 123–135.

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Dutta, J., Chandra, S., Rimpi, & Lalitha, C. S. (2023). Correction to: Convexifactors, Generalized Convexity, and Optimality Condition. *Journal of Optimization Theory and Applications*, 197(1), 383-385.

Aanchal, & Lalitha, C. S. (2023). Second-order optimality conditions for locally Lipschitz vector optimization problems. *Optimization*, 1-20.

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Karuna, & Lalitha, C. S. (2022). Convergence, Scalarization and Continuity of Minimal Solutions in Set Optimization. *Journal of the Operations Research Society of China*, 1-21.

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Rimpi, & Lalitha, C. S. (2023). Constraint qualifications in terms of convexificators for nonsmooth programming problems with mixed constraints. *Optimization*, 72(8), 2019-2038.

Lalitha, C. (2022). Constraint Qualifications in nonsmooth optimization: classification and inter-relations. *Journal of Nonlinear & Variational Analysis*, 6(2). 6(2).

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Mahajan, A., Thakur, R., & Das, R. (2023, January). Multi-sensitivity with respect to a vector for semiflows defined on Hausdorff uniform spaces. In *Semigroup Forum* (pp. 1-16). New York: Springer US.

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Thakur, R., & Das, R. (2022). On variants of  $n$ -sensitivity in semiflows. *Journal of Difference Equations and Applications*, 28(8), 1039-1053.

Vasisht, R., & Das, R. (2021). Specification and shadowing properties for non-autonomous systems. *Journal of Dynamical and Control Systems*, 1-12.

Khan, A. G., & Das, T. (2023). Topologically stable and persistent points of group actions. *Mathematica Scandinavica*, 129(1).

Das, P. K., & Das, T. (2023). Mean Ergodic Shadowing. *Bulletin of the Brazilian Mathematical Society, New Series*, 54(1), 12.

Khan, A. G., & Das, T. (2022). Stability theorems in pointwise dynamics. *Topology and its Applications*, 320, 108218.

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Kumar, D., Sinha, K. B., & Srivastava, S. (2022). Quantum dynamical semigroups and stability. *Journal of Mathematical Analysis and Applications*, 516(1), 126492.

Anand, J., & Srivastava, S. (2022). A Class of Invariant Subspaces of Weighted Composition Operators on the Hardy—Hilbert Space. *Analysis Mathematica*, 48(4), 925-937.

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Mishra, P. R., Gupta, P., & Gaur, A. (2021). On full differential uniformity of permutations on the ring of integers modulo  $n$ . *Applicable Algebra in Engineering, Communication and Computing*, 1-19.

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Kumar, S., Hamid, I., & Abdou, M. A. (2021). Specific wave profiles and closed-form soliton solutions for generalized nonlinear wave equation in  $(3+1)$ -dimensions with gas bubbles in hydrodynamics and fluids. *Journal of Ocean Engineering and Science*.

Kumar, A., & Kumar, S. (2023). Dynamical behaviors with various exact solutions to a  $(2+1)$ -dimensional asymmetric Nizhnik–Novikov–Veselov equation using two efficient integral approaches. *International Journal of Modern Physics B*, 2450064.

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Dhiman, S. K., & Kumar, S. (2023). An optimal system, invariant solutions, conservation laws, and complete classification of Lie group symmetries for a generalized  $(2+1)$ -dimensional Davey–Stewartson system of equations for the wave propagation in water of finite depth. *The European Physical Journal Plus*, 138(3), 1-16.

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- Kumar, S. (2023). On approximate controllability of non-autonomous measure driven systems with non-instantaneous impulse. *Applied Mathematics and Computation*, 441, 127695.
- Upadhyay, A., & Kumar, S. (2023). The exponential nature and solvability of stochastic multi-term fractional differential inclusions with Clarke’s subdifferential. *Chaos, Solitons & Fractals*, 168, 113202.
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- Kipgen, L., & Singh, R. (2022). Collision of an acceleration wave with blast wave in van der Waals dusty reacting gases. *Physics of Fluids*, 34(5).
- Shah, S., Singh, R., & Chaudhary, B. K. (2023). Concentration and cavitation of Riemann solutions to two-phase Chaplygin flows under vanishing pressure and flux approximation. *Communications in Nonlinear Science and Numerical Simulation*, 118, 107065.
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- Gandhi, S., Gupta, P., NAGPAL, S., & Ravichandran, V. (2022). Starlike functions associated with an epicycloid. *Haceteppe Journal of Mathematics and Statistics*, 51(6), 1637-1660.
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- Kumar, V., Nagpal, S., & Cho, N. E. (2022). Coefficient functionals for non-Bazilevič functions. *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas*, 116(1), 44.

### **Books/Chapter in Books**

Kapoor, S., & Lalitha, C. S. (2022). Density Aspects in Semi-Infinite Vector Optimization. In *Continuous Optimization and Variational Inequalities* (pp. 55-70). Chapman and Hall/CRC.

Gaur, A., & Kumar, R. (2019, December). A Note on FMS Modules and FCP Extensions. In *International conference on Algebra and Related topics with Applications* (pp. 143-147). Singapore: Springer Nature Singapore.

### **Research Projects**

Seven projects were granted an amount of 3 Lakhs each by the Institution of Eminence, University of Delhi, under the Faculty Research Programme Grant.

Two projects were granted an amount of 2 Lakhs each by the Institution of Eminence, University of Delhi, under the Faculty Research Programme Grant.

Two projects were granted an amount of 6.6 Lakhs each by the DST-SERB under the MATRICS scheme.

A project was granted an amount of 31.78 Lakhs by the DST-SERB under the Core Research Grant.

A project was granted an amount of 22.5 Lakhs by the DST-SERB under the POWER grant.

A project was granted an amount of 20.74 Lakhs by the DST-SERB under the EEQ scheme.

### **Seminars/Conferences organized by the Department.**

Prof. K. B. Sinha, Professor, JNCASR, Bengaluru, -, Dilation Theory and Trace formula for contractions, 27-04-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

C.S. Lalitha delivered an invited talk entitled "Second-order Optimality Conditions for Geoffrion Proper Efficient Solutions in Nonsmooth Vector Optimization" at the International Symposium on Applied Optimization and Game Theoretic Models for Decision Making, Indian Statistical Institute, Delhi Centre on February 2, 2023.

C.S. Lalitha delivered an invited talk entitled "Some Solved and Unsolved Problems in Mathematics" at Motilal Nehru College on October 17, 2022.

C.S. Lalitha delivered an invited talk entitled "Convex Optimization and Applications, 3rd Conference on Algebra, Analysis and Applications" at Dr B. R. Ambedkar University Delhi on August 5, 2022.

C.S. Lalitha delivered an invited talk entitled "Mathematics in Medicine "at the International Webinar on Applied Mathematics, Thia-garajar College, Madurai on April 19, 2022.

Ruchi Das delivered an invited talk entitled "Sensitivity and Chaos in Nonautonomous Dynamical Systems" at the International Conference on Mathematical Analysis and Applications, NIT Tiruchirappalli on December 15-17, 2022.

Ruchi Das delivered an invited talk entitled "Chaos... from perspective of Nonautonomous Systems" at the Symposium on Dynamical Systems, Department of Mathematics, University of Ladakh, Leh, on Aug 20, 2022.

Ruchi Das delivered an invited talk entitled "Sightseeing Chaos in Non-Autonomous systems, 3rd Conference on Algebra and Applications" at the School of Liberal Studies, Dr BR Ambedkar University, Delhi, on August 05, 2022.

Tarun Das delivered an invited talk entitled "Persistent and expansive dynamical systems .. a reflection" at the International Conference on Mathematical Analysis and Applications, NIT, Tiruchirappalli, on December 15-17, 2022

Tarun Das delivered an invited talk entitled "Recurrence in Dynamical systems and beyond" at the International Conference on Recent Trends in Mathematical Theory and Applications (online mode), West Bengal State, University, Kolkata during December 14-15, 2022.

Sachi Srivastava delivered an invited talk entitled "New Challenges in Operator Semigroups" at St. John's College Oxford, University of Oxford, from 18 -22 July 2022.

Sachi Srivastava delivered an invited talk at the International Conference on Analysis and its Applications, the Shivaji College University of Delhi, from 27-28 February 2023.

Sachin Kumar delivered an invited talk entitled "Lie symmetry reductions, analytical solutions, and dynamical behaviour of wave profiles for higher-dimensional nonlinear evolutionary equations" at the Department of Mathematics, IIT Indore, on September 27, 2022.

Sachin Kumar Presented a paper entitled "Lie symmetry reductions with exact solutions and dynamical behaviour of extremely nonlinear (3+1)-dimensional generalized BKP-Boussinesq equation" at the International Conference on Applied Engineering, Architecture, Physics, and Mathematical Sciences - DUBAI 2022, Dubai, United Arab Emirates during November 16 - 17, 2022,

Sachin Kumar delivered an invited talk entitled "A (2+1)-dimensional nonlinear evolution equation: Lie symmetry reductions, Exact solutions, Dynamics of solitons" at the Department of Physics, School of Engineering and Applied Sciences, Bennett University on November 19, 2022.

Sachin Kumar delivered an invited talk entitled "Innovative Tools for computation in Sciences & Engineering" at 4. Innovative tools for computation in Sciences & Engineering Resource person Seminar Talk/ Symposium Department of Applied Sciences, CUIET, Punjab University Level December 13, 2022, Chitkara University, Punjab on December 13, 2022.

Sachin Kumar delivered an invited talk entitled "Investigation of novel exact solutions of the highly nonlinear partial differential equation via Lie symmetry analysis" at the Department of Mathematics, Gandhigram Rural Institute-DTBU, Gandhigram, Tamil Nadu, on February 02, 2023.

Sachin Kumar Presented a paper entitled "Lie symmetry analysis and a different set of exact closed-form solutions for strongly nonlinear evolution equations" at the International Conference on Applied Engineering, Architecture, Physics, and Mathematical Sciences – Thailand, 2023 on February 23 - 24, 2023.

Sachin Kumar delivered an invited talk entitled "Analytical exact solutions and dynamics of extremely challenging nonlinear evolution equations using various mathematical approaches" at the Department of Mathematics, Kamala Nehru College, University of Delhi, on January 19, 2023.

Sachin Kumar delivered an invited talk entitled "Solutions of higher-dimensional Nonlinear PDEs using the Lie symmetry method" at Srinivasa Ramanujan Department of Mathematics, Central University of Himachal Pradesh on March 14, 2023.

Surendra Kumar delivered a talk entitled "International Conference on Dynamical Systems, Control and their Applications" at IIT Roorkee, Uttarakhand, India, on July 1-3, 2022.

### **Other Inter-Institutional Collaborations**

C.S. Lalitha collaborated with Prof. J. Dutta (Indian Institute of Technology Kanpur), India, Prof. S. Chandra (Indian Institute of Technology Delhi), India, and Prof. Ralph Chill, TU Dresden, Germany.

Sachi Srivastava collaborated with Prof. Franco Fagnola, Politecnico Milano and Dr David Seifert, University of Newcastle, UK.

Pratima Rai collaborated with Prof. Kapil Sharma, South Asian University.

Sachin Kumar collaborated with Prof. Abdul-Majid Wajwaz (Saint Xavier University), USA, Prof. M.A. Abdou (University of Bisha) Saudi Arabia, Prof. Shoukry El Ganaini (Damanhour University), Egypt, and Prof. M. M. Alanazi (Princess Nourah bint Abdulrahman University, Saudi Arabia).

Sumit Nagpal collaborated with Prof. Nak Eun Cho (Pukyong National University, Korea).

### **Placement Details (Number and percentage of students placed)**

Number of Companies Visited: 25,

Highest Packed Offered: 19.5 Lacs per Annum,

Highest Package Received: 16.75 Lacs per Annum,

Average Package: 6 Lacs per Annum, and

Percentage of Students Placed: 21.63 (45 out of 208)

### **Extension and Outreach Activities**

C.S. Lalitha served as an external member of the Board of Studies meeting at the Faculty of Sciences, SGT University, Gurugram.

C.S. Lalitha served as a member of the Board of Studies in the Department of Mathematics of Delhi Technological University.

Tarun Das organized a Refresher Course in Mathematical Sciences, September 02-15, 2022, CPDHE, University of Delhi.

Tarun Das organized the International Conference on History of Mathematics (Online mode) on December 16 -18, 2021, Indian Society of History of Mathematics, Ramjas College, University of Delhi.

Sachi Srivastava organized a Refresher Course in Mathematics on the theme “Mathematics with an Emphasis on Topology, Analysis and Applications” for University and College teachers at the Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC, University of Delhi September 2022.

Sachi Srivastava organized an Outreach programme for undergraduates from Lady Shri Ram College for Women at the Department of Mathematics, South Campus in February 2023.

Hemant Singh Delivered a talk entitled “Beauty of Mathematics through Algebraic Topology” in the Refresher Course on Mathematics/ Operational Research/ Statistics and Computer Science (IDC) on the theme Mathematics with an Emphasis on Topology, Analysis and Applications held at the CPDHE, University of Delhi on 14th September 2023.

Hemant Singh Delivered a session on “Geometry and Mathematics” for the DPS Teachers teaching Mathematics to classes III-V at the Human Resource Development Centre, The Delhi Public School Society, Knowledge Park V, Greater Noida, UP on February 12, 2023.

R. Panda delivered two lectures at CPDHE University of Delhi in September 2022, in "Refresher Course on Mathematics/ Operational Research/ Statistics and Computer Science (IDC)". The titles were "Differentiation of multivariable functions and a version of Rolle's theorem" and "Arzela-Ascoli theorem and its applications.

### **Faculty Strength**

Faculty-20, Nasi Senior Scientist-1

**Number of Ph.D. Degrees Awarded: 21**

**Number of M.Phil. Degrees Awarded: 5**

### **Other Significant Information**

Ruchi Das is a Subject Expert on Mathematical Sciences; Inspire Fellowship, DST, Ministry of Science and Technology, Government of India.

Ruchi Das is a Member of the Subject Expert Committee (SEC) on Physical & Mathematical Sciences under the Women Scientists Scheme-A (WOS-A), a flagship program of the Department of Science and Technology (DST).



Ruchi Das is a member of the Subject Expert Committee (SEC) on Physical & Mathematical Sciences under the WISE-PDF program of the Department of Science and Technology (DST).

Prof. Ralph Chill, SERB-VAJRA Faculty at the Department of Mathematics, University of Delhi offered an online "Compact Course on Analysis" during March 5-26, 2023.

Sachi Srivastava extended services as a Member of the Scientific Committee, Annual Conference of Indian Women in Mathematics, held at IISER Pune in December 2022.

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## **Operational Research**

### **Brief History**

Operational Research (OR) as a subject was introduced at the University of Delhi in 1963 with the introduction of a two-year postgraduate programme. A decade later in 1973, the Department of Operational Research was independently set up under the Faculty of Mathematical Sciences with Post Graduate programme introduced in South Campus in 1994.

### **Honours/Distinctions**

Sr. Professor Chandra K. Jaggi: Distinguished Service Award by Vijnāna Parishad of India (Society for Applications of Mathematics) June 16, 2022.

Distinguished Professor Award by International Council of Social Reforms Research on April 14, 2022.

### **Publications**

### **Research Articles**

Srivastava, P. W., & Rani, S. (2022). Copula-Based Approach to Reliability Analysis of Phased-Mission Systems. *International Journal of Reliability, Risk and Safety: Theory and Application*, 5(2), 49-62.

Yadav, S., Priyamvada, P., & Khanna, A. (2023). COVID-19 Impact on a Sustainable Production Model with Volume Agility and Advertisement Dependent Demand. *International Journal of Supply and Operations Management*, 10(2), 136-150.

Maheshwari, S., Gautam, P., Kausar, A., & Jaggi, C. K. (2023). Optimal inventory replenishment policies for deteriorating items with preservation technology under the effect of advertisement and price reliant demand. *International Journal of Systems Science: Operations & Logistics*, 10(1), 2186753.

Gautam, P., Maheshwari, S., Kausar, A., & Jaggi, C. K. (2023). Sustainable retail model with preservation technology investment to moderate deterioration with environmental deliberations. *Journal of Cleaner Production*, 390, 136128.

Gautam, P., Maheshwari, S., & Jaggi, C. K. (2022). Sustainable production inventory model with greening degree and dual determinants of defective items. *Journal of Cleaner Production*, 367, 132879.

Kishore, A., Cárdenas-Barrón, L. E., & Jaggi, C. K. (2022). Strategic decisions in an imperfect quality and inspection scenario under two-stage credit financing with order overlapping approach. *Expert Systems with Applications*, 195, 116426.

Ali, H., Nasreen, R., Arneja, N., & Jaggi, C. K. (2023). Optimization of a periodically assessing model with manageable lead time under SLC with back order rebate for deteriorating items. *International Journal of System Assurance Engineering and Management*, 14(1), 241-266.

Maheshwari, S., Kausar, A., Hasan, A., & Jaggi, C. K. (2023). Sustainable inventory model for a three-layer supply chain using optimal waste management. *International Journal of System Assurance Engineering and Management*, 1-20.

Jaggi, C. K., Priyamvada, & Kamna, K. M. (2023). Sustainable production system with preservation strategy and renewable energy under different carbon tax policies. *International Journal of Modelling and Simulation*, 43(4), 523-532.

Choudhary, N., & Khaitan nee Gupta, V. (2023). Performance Modeling of Call Admission Control Policy and Handover Management in 5G Ultra-dense Cellular Network. *International Journal of Wireless Information Networks*, 30(2), 143-162.

Aggarwal, K. K., Ahmed, S., & Malik, F. (2023). Optimal Pricing and Advertisement Policy for an Advance Order Booking Inventory System with Order Cancellation under Inflationary Condition. *International Journal of Mathematical, Engineering & Management Sciences*, 8(5).

Kannan, D., Solanki, R., Darbari, J. D., Govindan, K., & Jha, P. C. (2023). A novel bi-objective optimization model for an eco-efficient reverse logistics network design configuration. *Journal of Cleaner Production*, 394, 136357.

Govindan, K., Aditi, Kaul, A., Darbari, J. D., & Jha, P. C. (2023). Analysis of supplier evaluation and selection strategies for sustainable collaboration: A combined approach of best–worst method and TOmada de Decisao Interativa Multicriterio. *Business Strategy and the Environment*.

Xu, S., Nupur, R., Kannan, D., Sharma, R., Sharma, P., Kumar, S., ... & Bai, C. (2023). An integrated fuzzy MCDM approach for manufacturing process improvement in MSMEs. *Annals of Operations Research*, 322(2), 1037-1073.

Aditi, Kannan, D., Darbari, J. D., & Jha, P. C. (2022). Sustainable supplier selection model with a trade-off between supplier development and supplier switching. *Annals of Operations Research*, 1-42.

Jain, A., Darbari, J. D., Govindan, K., Ramanathan, U., & Jha, P. C. (2022). Biobjective Optimization Model for Store Selection for BOPS Service in Omni-Channel Retail Chain. *IEEE Transactions on Engineering Management*.

Pachar, N., Darbari, J. D., Govindan, K., & Jha, P. C. (2022). Sustainable performance measurement of Indian retail chain using two-stage network DEA. *Annals of Operations Research*, 315(2), 1477-1515.

Kannan, D., Solanki, R., Kaul, A., & Jha, P. C. (2022). Barrier analysis for carbon regulatory environmental policies implementation in manufacturing supply chains to achieve zero carbon. *Journal of Cleaner Production*, 358, 131910.

Sharma, R., Kannan, D., Darbari, J. D., & Jha, P. C. (2022). Analysis of Collaborative Sustainable Practices in multi-tier food supply chain using integrated TISM-Fuzzy MICMAC model: A supply chain practice view. *Journal of Cleaner Production*, 354, 131271.

Sharma, P., Gupta, A., Malik, S. C., Jha, P. C., & Pinto, M. C. B. (2022). An application of Six Sigma DMAIRC model: case study of a manufacturing organisation. *International Journal of Advanced Operations Management*, 14(3), 280-311.

Irshad, M. S., Anand, A., & Roy, S. K. (2023). Dynamic programming approach to achieve higher view-count for YouTube videos. *International Journal of Operational Research*, 46(4), 437-450.

Kaur, J., Singh, O., Anand, A., & Agarwal, M. (2023). A goal programming approach for agile-based software development resource allocation. *Decision Analytics Journal*, 6, 100146.

Kumar, H., Singh, O., Anand, A., & Irshad, M. S. (2023). Studying Multi-Stage Diffusion Dynamics using Epidemic Modeling Framework. *International Journal of Mathematical, Engineering and Management Sciences*, 8(1), 105.

Singh, J. N., Anand, A., & Gupta, P. (2022). Modeling and monitoring multi-release software systems based on failure detection rate: a generalized approach. *International Journal of System Assurance Engineering and Management*, 1-10.

Aggrawal, D., Anand, A., Bansal, G., Davies, G. H., Maroufkhani, P., & Dwivedi, Y. K. (2022). Modelling product lines diffusion: a framework incorporating competitive brands for sustainable innovations. *Operations Management Research*, 15(3-4), 760-772.

Anand, A., Irshad, M. S., & Dwivedi, Y. K. (2022). Modeling view count dynamics for YouTube videos: a multimodal perspective. *Kybernetes*, 51(10), 2964-2986.

Anand, A., Irshad, M. S., & Aggrawa, D. (2022). Application of intuitionistic fuzzy set TOPSIS in selecting most preferred OTT platform. *Nonlinear Studies*, 29.

Singh, J., Kumar, H., Singh, O., Anand, A., & Bisht, M. (2022). Innovation adoption modeling incorporating market expansion and change point attribute. *Mathematics in Engineering, Science & Aerospace (MESA)*, (2).

Aggrawal, D., Agarwal, M., Mittal, R., & Anand, A. (2022). Assessing the impact of negative WOM on diffusion process. *International Journal of System Assurance Engineering and Management*, 13(Suppl 2), 820-827.

Anand, A., Agarwal, M., Aggrawal, D., Hughes, L., Maroufkhani, P., & Dwivedi, Y. K. (2022). Successive generation introduction time for high technological products: an analysis based on different multi-attribute utility functions. *Environment, Development and Sustainability*, 1-18.

Aggrawal, D., Anand, A., & Shahid, Z. (2022). Software Reliability Growth Modeling Based on Fault Count Increment Due to Features Enhancement. *Journal of Graphic Era University*, 27-40.

Anand, A., Das, S., Agarwal, M., & Inoue, S. (2022). An optimal scheduling policy for upgraded software with updates. *International Journal of Quality & Reliability Management*, 39(3), 704-715.

Yanagisawa, T., Tamura, Y., Anand, A., & Yamada, S. (2022). A Software Reliability Model for OSS Including Various Fault Data Based on Proportional Hazard-Rate Model. *American Journal of Operations Research*, 12(1), 1-10.

Bhatt, N., Kaur, J., Anand, A., & Alhazmi, O. H. (2022). Selecting Best Software Vulnerability Scanner Using Intuitionistic Fuzzy Set TOPSIS. *Computers, Materials & Continua*, 72(2).

Anand, A., Agarwal, M., Aggrawal, N., & Bhatt, N. (2022). Modelling the impact of lock-downs in top-4 COVID-19 spreading states of India. *International Journal of Computing Science and Mathematics*, 15(4), 408-420.

Anand, A., Das, S., Singh, O., & Kumar, V. (2022). Testing resource allocation for software with multiple versions. *International Journal of Applied Management Science*, 14(1), 23-37.

Kapur, P. K., Panwar, S., Singh, O., & Kumar, V. (2022). Joint optimization of software time-to-market and testing duration using multi-attribute utility theory. *Annals of Operations Research*, 1-28.

Panwar, S., Kumar, V., Kapur, P. K., & Singh, O. (2022). Software reliability prediction and release time management with coverage. *International Journal of Quality & Reliability Management*, 39(3), 741-761.

Bhattacharjee, N., Nath, B. K., Sen, N., Malakar, S., & Jaggi, C. K. (2022). A Production Inventory Model to Study the Supply Chain of Agri-Product for a Time Reliant Population. *International Journal of Applied and Computational Mathematics*, 8(3), 97.

### **Books/Chapter in Books**

Agarwal, M., Aggrawal, D., Das, S., Anand, A., & Bhatt, N. (2022). Modeling software vulnerability injection-discovery process incorporating time-delay and VIKOR based ranking. In *Reliability and Maintainability Assessment of Industrial Systems: Assessment of Advanced Engineering Problems* (pp. 239-256). Cham: Springer International Publishing.

Aggrawal, D., Kaur, J., & Anand, A. (2022). Modeling software patching process inculcating the impact of vulnerabilities discovered and disclosed. In *System Assurances* (pp. 143-153). Academic Press.

### **Research Projects**

Three projects were granted an amount of 3 Lakhs each by the Institution of Eminence, University of Delhi, under the Faculty Research Programme Grant.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Dr Anand Adarsh delivered an Invited talk on “Modeling and Resource Allocation for Software Vulnerability Management” during the First International Conference on Mathematical Methods and Techniques in Engineering and Sciences, organized by Graphic Era Deemed to be University, Dehradun, 9-10 December 2022

### **Placement Details (Number and percentage of students placed)**

No. of students placed: 96

Percentage of students placed: 60%

**Faculty Strength: 17**

**Number of Ph.D. Degrees Awarded: 11**

**Number of M.Phil. Degrees Awarded: 2**

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### **Statistics**

#### **Brief History**

The Department of Mathematical Statistics was established in August 1973, though the teaching of M.A. in Mathematical Statistics had been introduced as early as July 1957 at the initiative of Professor Ram Behari as part of a development programme adopted by the Department of Mathematics. Professor H.C. Gupta was the first head of the Department and he can be credited with the setting up of a good school in Stochastic Processes. In 1971, the scope of post-graduate courses in Mathematical Statistics was extended, leading to an M.Sc. degree in Statistics. In 1987, the Department of Mathematical Statistics was re-named as the Department of Statistics.

The Department imparts rigorous training and exposure to the students in computer education by way of introducing state-of-the-art programming language and computer software to enable the students to perform statistical data analysis.

#### **Major Activities and Achievements**

The Department of Statistics is involved in carrying out research and teaching in diverse fields of Statistics. It has used the power of Statistics and knowledge of computers to contribute significantly to the area of research. The main thrust of the Department is to conduct basic and applied research and to develop trained manpower in the discipline of Statistics. The Department offers two degree-oriented programmes, namely M.A./M.Sc. and Ph.D. in Statistics, with a curriculum that includes emerging and core areas in various fields of Statistics. The Department also organizes special invited talks by eminent persons from India and abroad. Distinguished Professors visited the department to deliver research talks and interact with faculty

and students. The Department has achieved great success in the suitable placement of students in reputed national and international companies/organizations.

## **Publications**

### **Research Articles**

Pandey, R., Srivastava, P., & Ali, D. (2022). Bayesian Risk Analysis for Length Biased Log Logistic Distribution Under Different Loss Functions. *Journal of Scientific Research*, 66(3).

Pandey, R., & Srivastava, P. (2022). Bayesian Estimation for the Two Log-Logistic Models Under Joint Type II Censoring Schemes. *Journal of Reliability and Statistical Studies*, 229-260.

R. Pandey and P. Srivastava, (2022), Estimation for the Length Biased LogLogistic Model Under Adaptive Progressive Type II Censoring, *International Journal of System Assurance Engineering and Management*, 2, 1-11.

Pandey, R., & Tolani, H. (2022). Crime patterns in Delhi: A Bayesian spatio-temporal assessment. *International Journal of System Assurance Engineering and Management*, 13(6), 2971-2980.

Pandey, R., & Tolani, H. (2022). Penalized splines model to estimate time-varying reproduction number for Covid-19 in India: A Bayesian semi-parametric approach. *Clinical Epidemiology and Global Health*, 18, 101176.

Pandey, R., & Tolani, H. (2023). A bayesian perspective of middle-batting position in ODI cricket. *Journal of Sports Analytics*, (Preprint), 1-10.

Pandey, R., Chand, D. B., & Tolani, H. (2023). BAYESIAN MULTIPLE LINEAR REGRESSION MODEL FOR GROSS DOMESTIC PRODUCT IN BHUTAN. *Advances and Applications in Statistics*, 87(2), 161-190.

Pandey, R., Chand, D. B., & Tolani, H., (2023), Bayesian Multiple Linear Regression Model for GDP in Nepal. *International Journal of Statistical Distributions and Applications*, 1, 9, 9-23, 3.

Kim, J., Das, M., Saha, I., Sinha, P., Singh, P., & Das, R. N. (2022). Inter-relationship between homeostasis model assessment of insulin resistance and breast cancer biomarkers. *Onkologia i Radioterapia*, 16(4).

Singh, P., & Sharma, R. (2022). CONSTRUCTION OF COMPLETE DIALLEL CROSSES PLANS USING GALOIS FIELD. *International Journal of Agricultural & Statistical Sciences*, 18(2).

Georgiou, S. D., & Efthimiou, I. (2014). Some classes of orthogonal Latin hypercube designs. *Statistica Sinica*, 24(1), 101-120.

Singh, P., Mazumder, M. D., & Babu, S. (2023). Construction of Nearly Orthogonal Arrays Mappable into Fully Orthogonal Arrays of Strength Two and Three.

Banik, S., Das, M., Saha, I., Gong, R., Singh, P., Kim, J., & Das, R. N. (2023). Prostate cancer and cardiovascular disease: Correlated? *Onkologia i Radioterapia*, 17(2).

Akhter, Z., Almetwally, E. M., & Chesneau, C. (2022). On the generalized Bilal distribution: some properties and estimation under ranked set sampling. *Axioms*, 11(4), 173.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

One invited lecture at the International Workshop on “Integrated Approaches of Stochastic Modeling and Data Science for Sustainable Development” in conjunction with Diamond Jubilee Celebrations of Department of Statistics, SV University, Tirupati, during 07-11, September 2022, jointly organized by Statistics Alumni, SV University and Indian Society for Probability & Statistics (ISPS) The topic of talk was: Biostatistics – A Methodological Introduction.

One invited lecture at the UGC-sponsored, short-term course on Research Methods in Criminology and Criminal Justice conducted from 1st July to 7th July 2022 in the Department of Criminology and Forensic Science, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar delivered on 05.07. 2022. The topic of the talk was: Multivariate Methods for Data Analysis.

Two invited lectures at the International Biostatistics Workshop “Operation Sigma” organized by the Indian Academy of Geriatrics on 26.04.2022 The topics of talk were: Introduction to Biostatistics and Introduction to STATA

### **Placement Details (Number and percentage of students placed)**

Number of students placed: 86,

Percentage of students placed: 93.48%

### **Extension and Outreach Activities**

Quespire event done under the Inclusive Development Theme on 16th April 2022.

International Yoga Day event done under the Health and Wellness theme on 21st June 2022.

Sports day event done under the Health and Wellness theme on 26th November 2022.

FreshersxUlhaas event done under the Unity and Cultural Pride theme on 03rd January 2023.

National Youth Day event done under the Cultural Pride theme on 12th January 2023.

The Saraswati Puja event was held under the Cultural Pride theme on 25th January 2023.

Cloth collection Drive event done under the Unity theme on 20th-22nd March 2023.

### **Faculty Strength**

**Permanent:** 03, **Ad-hoc:** 03, **Guest:** 04

**Number of Ph.D. Degrees Awarded:** 05

**Number of M.Phil. Degrees Awarded:** 04

### **Other Significant Information**

The Department has its own placement cell called Credence. It was created in the year 2004. With an objective to provide a platform for the placements of students pursuing M.A./M.Sc. Statistics from the University of Delhi. Through the placement cell, students get an opportunity to interact with organizations in the corporate world. In the year 2021-22, 79 (till date) students got placed through the Placement Cell. The Department has its own website, statistics.du.ac.in. The information about faculty, research scholars, other staff of the department, courses run by the department, syllabus and other relevant information can be found on the department website. The Department has two well-equipped, fully computerized laboratories with the latest computing facilities for the students and researchers.

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## FACULTY OF MEDICAL SCIENCES

### Anaesthesiology & Critical Care (MAMC)

The Department of Anaesthesiology & Intensive Care, Maulana Azad Medical College, and associated hospitals provide anesthesia services to the Lok Nayak Hospital, Sushruta Trauma Center, Guru Nanak Eye Centre, and Maulana Azad Institute of Dental Science.

#### Major Activities and Achievements

The Department of Anaesthesiology & Intensive Care, MAMC, New Delhi conducted the “MAMC Anaesthesia Update” postgraduate Exam-oriented Refresher course from 31st January to 3rd February 2023, which was attended by approximately 350 students from all over the country. The Department of Anaesthesiology & Intensive Care, MAMC, New Delhi conducted a workshop on “Mechanical Ventilation” on 18th February 2023 attended by 64 participants from various specialties.

#### Honours/Distinctions

Dr. Munisha Agarwal was conferred “Corona Warrior Award” conferred by IMA East Delhi Branch, 15th May’22. Dr. Agarwal was also conferred “MAMCOS Award” for recognition of 25 years of service as Faculty, 20th Dec’22.

Dr. Kirti N Saxena took Keynote address on Training of trainer’s program for PSA Oxygen plant by Govt of NCT on 3.3.22.

Dr. Kapil Chaudhary was conferred Young Teacher's Award 2022 at ISACON Delhi 2022 (7-9 Oct 2022). Dr. Chaudhary also received Certificate of Excellence Award for reviewing for Indian Journal of Clinical Anaesthesia for year 2021 in January 2022.

Dr. Lalit Gupta received Distinguished Service Award for services to medical fraternity by IMA EDB (Feb, 2022) and Medical Excellence Award for COVID -19 pandemic by Delhi Medical Forum (Feb, 2022).

Dr. Lalit Gupta was conferred Best Researcher Award in the International Research Award on science, Technology and Management -INSO (October 2022). Dr. Gupta also received Commendable Editor in Chief Award for Indian Journal of Clinical anaesthesia for 2022.

Dr. Lalit Gupta received Dr. APJ ABDUL KALAM Best Anesthesiologist Award 2022 in Anaesthesiology and Intensive Care (October 2022).

#### Publications

Jardine, M. J., Sradha, S., Kotwal, S., Bassi, A., Hockham, C., et al., (2022). Angiotensin receptor blockers for the treatment of covid-19: pragmatic, adaptive, multicentre, phase 3, randomised controlled trial, *BMJ*, (379), 16

Buowari, D. Y., Owoo, C., Gupta, L., Schell, C. O., Baker, T., EECC network Group. (2022). Essential Emergency and Critical Care: A Priority for Health Systems Globally, *Critical Care Clinics*, 04(38), 639-56, 02

Bharti Wadhwa, Vikas Malhotra, Sukhyanti Kerai, Farah Husain, Nalini Bala Pandey, Kirti N Saxena et al. . (2023). Phase 2 randomised placebo-controlled trial of spironolactone and dexamethasone versus dexamethasone in COVID-19 hospitalised patients in Delhi, *I*(23), 326, 02

Kerai,S., Bhatt,G., Saxena, K. N., Gaba, P., Wadhwa, B (2023). Comparison of oropharyngeal leak pressure of LMA Protector and LMA-ProSeal in different head and neck positions in anaesthetized and paralyzed patients; a prospective randomized study, *Indian Journal of Anaesthesia*, 02(67), 201-06

Awal, S., Bhalotra, A. R., Sharma, S., (2022). Effects of intra-operative infusion of lidocaine on postoperative pain and quality of recovery in patients undergoing gynecological laparoscopic surgery: A randomized controlled trial, *Journal of Anaesthesiology and Intensive Care*, 02(38), 300-08

Gupta, D., Kerai, S., Saxena, K. N., Gaur. S. (2023). Clinical evaluation of preoperative three-item questionnaire and pain experienced on the infiltration of local anesthetics to predict severity of acute pain after cesarean section, *Journal of Anaesthesiology and Intensive Care*, 02(39), 273-8

Wadhawan,S., Kerai, S., Husain, F., Labani, P., Agarwal, M., Saxena, K.N., (2023). Post COVID-19 mucormycosis; a prospective, observational study in patients undergoing surgical treatment, *Journal of Anaesthesiology and Intensive Care*.

Kerai, S., Doda, P., Saxena, K.N., (2022). Professional Quality of Life in Intensive Care Unit Professionals during COVID-19 Pandemic: A Prospective Observational Cross-sectional Study, *Indian Journal of Critical Care Medicine*, 05(26), 604-12.

Gupta, L., Agarwal, J., Saxena, K. N., (2022). Opioid free anesthesia: The conundrum and the solutions, *Indian Journal of Anaesthesia, supplementary* 66 (Suppl 2)), S91-4, 04

Magoon, R., Chaudhary, N., Wadhawan, S., (2022).Ketodex for MRI sedation in syndromic children with congenital cardiac anomalies- A case series, *Indian Journal of Anaesthesia*, 6(66), 456-9.

## **Research Projects**

2022-23, Virtual reality as an adjunctive non-pharmacological anxiolytic in patients undergoing surgery under regional anaesthesia.

2022-23, Comparative study of Pericapsular Nerve Group block versus Suprainguinal Fascia Iliaca block for facilitating preoperative positioning for Subarachnoid block and postoperative analgesia.

2022-23, Comparing block characteristics between hyperbaric 0.75% ropivacaine and hyperbaric 0.5% bupivacaine for surgeries under spinal anaesthesia.

2022-23, Evaluation of ultrasound-guided lung recruitment manoeuvre on perioperative atelectasis in patients undergoing Laparoscopic abdominal surgery under General anaesthesia.

2022-23, Comparative evaluation of onset and recovery characteristics of minimal flow sevoflurane and desflurane anaesthesia.

## **Conferences Organized**

MAMC Anaesthesia Update, 31-01-2023.

Mechanical Ventilator Workshop, 18-02-2023.

### **Seminar/Conference Presentations**

Dr. Munisha Agarwal delivered lecture on “Sedation and Anaesthesia for Difficult Airway in Pediatric Patient” in the Pediatric Airway Seed Workshop organized by Dept of Anaesthesia, LHMC, Delhi on 12th March’22.

Dr. Kirti N.Saxena was the Chairperson for weekly ICA webinar on “Intraoperative Analgesia: What is new?” on Wednesday, 12th January, 2022 and Chairperson for a session on ‘Mental health and Anesthesiologists’ hosted by ISA Delhi Branch on 31.1.22

Dr. Anju R. Bhalotra was Chairperson for session - Academic strategy in postgraduate residency (highlights on selection of appropriate learning resource material) in ISA Delhi Yuvacon 2022 on 07.10.2022.

Dr. Sonia Wadhawan moderated a panel discussion at the MID-ISACON in LHMC 2022

Dr Bharti Wadhwa was panelist for Panel Discussion on “Green Hospital: Environment and the Anaesthesiologist” at MIDCON of ISA Delhi Branch held in June 2022.

Dr Kapil Chaudhary attended ISACON Delhi 2022 (7-9 Oct 2022)

Dr Lalit Gupta delivered a lecture on ERAS - Enhanced Recovery after Anesthesia at ABVIMS, Dr. RML Hospital in Anaesthesia Postgraduate Pre-Examination Course (APPEC-22) on 07.12.2022

Dr Lalit Gupta participated as Jury Member and Faculty for Most Valuable Innovation Award in International Congress for Innovation in Global Surgery 2022.

Dr Rahil Singh presented a lecture on laryngoscope -- Direct and Videolaryngoscopes in MAMC PG Update 2022 on 2.02.202.

Dr Sukhyanti Kerai presented a lecture on Anaesthesia machine (Intermediate system) in MAMC PG Update 2022 on 2.02.202.

**Faculty Strength:** 23 (17 regular, 06 contractual)

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### **Anatomy (MAMC)**

#### **Brief history of the Department**

The College started in 1959, With Prof Bajaj as the first Head of the department. The college started with 100 students, the number was increased to 180. At present since 2012 the MBBS student strength has become 250.

## Major Activities and Achievements

The Department of Anatomy is a centralized facility for embalming under Delhi Government. The Department is a recognized center for voluntary body donation. The Department is the Institutional center for Fetal Autopsy.

## Publications

Mishra, S., Roy, T., Saini, S. (2022). Development of the Hair Cells of the Human Cochlea: A Scanning Electron Microscopic Study, *J Microsc Ultrastruct*, 11(1), 17-22.

Poonia, D., Wadhwa, S., Mahajan, A., Mishra, S. (2022). Predicting the Position of the Internal Landmarks of Middle Cranial Fossa Using the Zygomatic Root: An Attempt to Simplify Its Complexity, *Indian J Neurosurg*, (2)

Poonia, D., Jaiswal, M., Singh, H., Yaseen, S., Mishra, S. (2022). Students perception towards online teaching of human anatomy: A comprehensive survey, *Journal of Anatomical Sciences (UP chapter of ASI)*, 30(1), 1-7.

Saluja, S., Agarwal, S., Tuli, A., Raheja, S., Tigga, S. R. (2022). Morphological variations of sacrum in adult Indian population., *Int J Anat Res*, 10(1), 8230-37.

## Research Projects

ICMR, ongoing since 2022, Development of the blood nerve barrier of the human cochlear nerve funded by the ICMR. Dr Sabita Mishra and Dr Surbhi Wadhwa., Rs 13,35,168 for one year

Govt of NCT, Delhi, ongoing since 2022, Occurrence of p53 mutations and Chromosomal Anomalies of 1p in children with solid tumors, Dr Dinesh Kumar, supported by

Govt of NCT under the plan scheme “Strengthening of Medical Research at MAMC”., Rs 2,77,200/-

Govt of NCT, Delhi, ongoing since 2022, *in-silico* molecular characterisation of DNAH6 and ATPase6 (mitochondrial DNA) genes in asthenozoospermia patients in northern region of India, Dr Dinesh Kumar, supported by Govt of NCT under the plan scheme “Strengthening of Medical Research at MAMC”, Rs 2 lakh.

Govt of NCT, Delhi, ongoing since 2018-19, Expression of aquaporin 1 & 2 in developing human fetal kidney. Dr Surbhi Wadhwa supported by Govt of NCT under the plan scheme “Strengthening of Medical Research at MAMC”, Rs 1,39,000.

Govt of NCT, Delhi, ongoing since 2022, Expression of Pax 3 in human neural tube defects, Dr Swati Tiwari supported by Govt of NCT under the plan scheme “Strengthening of Medical Research at MAMC”., Rs 1,40,000.

## Seminars Organized

Families of body donors, Body donation, As part of World Anatomy day celebrations, 15-10-2022

Dr Faiyaz Ahmad Khudsar, Senior Scientist, Biodiversity Parks Programme, CEMDE, University of Delhi, Delhi Biodiversity Parks: Solution for Pollution, Foundation course for MBBS, 17-11-2022

Dr Anuj Sharma, WHO Country office India, AMR, one health and WHO, Foundation course, 19-11-2022

Dr Pandian, Pt Deen Dayal Upadhyay Institute for Physically Handicapped, New Delhi, Disability awareness and human rights of the disabled, Foundation course, 25-11-2022

Dr Bhavna Bharmi, Clinical Psychologist, Importance of Mental Health, Foundation course, 02-12-2022

### **Conferences Organized**

Principles & Practices of Embalming and Morphometry – 2023 (17th and 18th March 2023), 17-03-2023, Govt of NCT, Delhi

### **Seminar/Conference Presentations**

Dr. Anita Mahajan and Dr. Surbhi Wadhwa attended a workshop on statistics organised by Dept of Paediatrics in March 2023 at M.A.M.C.

Dr. Babita Pangtey attended online workshop on “Gender Sensitization and Prevention of Sexual Harassment of Women at Workplace” by National Academy of Human Resource Development (NAHRD) scheduled from 19.05.2022 to 20.05.2022

Dr. Deepika Poonia attended the 3rd International e-conference on “Role of Basic Medical Sciences in Academia, Diagnosis and Research Advancements; [BMSeCON 2022] on 17th-19th November 2022.

### **Other Inter-Institutional Collaboration**

Development of the blood nerve barrier of the human cochlear nerve funded by the ICMR. Dr Sabita Mishra and Dr Surbhi Wadhwa with AIIMS, New Delhi.

### **Extension and Outreach Activities**

Body donation awareness campaign  
Polio prevention program.

### **Faculty Strength: 10**

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## **Bio-Chemistry (LHMC)**

### **Brief History**

Biochemistry department of LHMC is catering to the diagnostic and screening tests required by the patient population of SSKH and KSCH as well as any referred patients. NIDAN-KENDRA was established for Beta Thalassemia and sickle cell Anaemia Carrier Screening, couple screening and pre-natal diagnosis,

DMD carrier screening. Faculties of the Department were trained in Revised Basic Course in Medical Education by organizing NMC approved MEU workshop.

### Major Activities and Achievements

Department of Biochemistry established the “Advanced Biochemistry and Molecular Biology Lab” which was inaugurated by the Director Dr. Virendra Kumar on 23-11-2022 in Old College Block, LHMC.

### Honours/Distinctions

Dr Ritu Singh, Dr. Parijat Gogoi, Dr. Rajeev Goyal, Dr. Mukesh Kumar Meena and Dr. Aditi Singh received Covid Warrior Award from the Medical Wing of Bramhakumari Organisation on 20th September, 2022.

### Publications

Chandra, S., Thomas, S., Nangia, A., Singh, R., Pathania, O. P. (2022). Association Between Endemic Vitamin D Deficiency in India and High Prevalence of Poor-Prognosis Triple-Negative Breast Cancer: a Cross-Sectional Study, *Indian Journal of Surgery*, 84(3), 657-662.

Khandare, P., Saluja, A., Solanki, R. S., Singh, R., Vani, K., Garg, D., Dhamija, R. K. (2022). Serum S100B and NSE Levels Correlate with Infarct Size and Bladder-Bowel Involvement Among Acute Ischemic Stroke Patients., *J Neurosci Rural Pract*, 13(2), 218-225.

Kumari, S., Singh, R., Chandra, S., Mehndiratta, M., Debnath, E., Dhamija, R. K. (2022). Association of Paraoxonase-2 (C1053G) Gene Polymorphism with the Expression of Paraoxonase-2 Gene in Patients of Ischemic Stroke - A Pilot Study in Indian Population, *Neurol India*, 70(4), 1575-1579.

Laltlanzovi, C., Choudhary, M., Singh, R., Sharma, S., Raghunandan, C., Hrashel, L. (2022). Study of Serum Adiponectin and Interleukin 1beta in Women with Gestational Diabetes. Indian Journal of endocrinology and Metabolism, *Journal of endocrinology and Metabolism*, 26(6 ), 581-588.

Mathew, A., Debnath, E., Chauhan, P., Naik, S., Singh, R. (2022). Application of sigma matrix and method decision chart for assessment of quality assurance in BioradD-10, *International journal of medical science and current research*, 5(2), 465-469.

Jain, P., Chauhan, P., Uppal, P., Debnath, E., Gogoi, S., Chatterjee, P.. (2022). Quantification of pre analytical quality indicators in clinical laboratory and formulating lean six sigma DMAIC strategy. *J Indian Med Assoc*, 120(2), 17-22.

Mathew, A., Naik, S., Chauhan, P., Debnath, E. (2022). Assessment of analytical performance of internal QC and external QC by six sigma using total allowable error using CLIA 88 & NGSP. *International journal of medical science and current research*, 5(5), 136-141.

Goyal, R., Singhai, M., Mahmood, T., Saxena, V. (2022). Association between the physical activity and metabolic syndrome in residents of a foot-hill area in India. *Diabetes Metab Syndr.*, 16(4), 1-4.

Meena, M. K., Singh, A., Prisi, S., Yadav, N. (2022). Effect of Sleeve Gastrectomy on the Lipid Profile of Patients with Morbid Obesity, *International Journal of Health Sciences and Research*, 12(12), 66-70.

Neeraj Yadav, Mukesh Kumar Meena, ShailataPrisi, Aditi Singh, Ritu Singh . (2023). Six Sigma metrics as an indicator for Randox International Quality Assessment Scheme in clinical biochemistry laboratory: A pilot study with thyroid function test in a tertiary care hospital., *MAMC Journal of Medical Sciences*, 9(1), 1.

### **Research Projects**

Department of Biotechnology, Government of India, 2019-2022, Establishment of Diagnostic Centre DBT-NIDAN- Kendra and Outreach programme for Aspirational district under UMMID initiative For Beta Thalassemia and sickle cell Anaemia Carrier Screening, couple screening and pre- natal diagnosis, DMD carrier screening, 400 L.

NCDC, 2022, Study of Clinico- epidemiological profile of the COVID-19 patients admitted in tertiary care hospitals for treatment and management at Delhi, 25 L

ICMR, 2022, Effect of common variations in the PCSK9 gene on lipid lowering effect of statins in North Indian population, 9.8L

### **Seminars Organized**

Jay Kalra, Professor of Medical University Canada, “Ethics in Artificial Intelligence”., Role of Artificial Intelligence”in health., 05-12-2022

### **Conferences Organized**

ACBICON 22 Pre-Conference Workshop “ Genetics in Medical Diagnostics and Prognostics”., 23-11-2022, ACBI

MEU workshop on “ Revised Basic Course in Medical Education.”, 27-02-2023, Medical Education Unit, LHMC New Delhi.

### **Seminar/Conference Presentations**

Electives of CBME: The Purpose, The Organization, The Logistics: The Role of Biochemistry by Dr. Ritu Singh at 48th ACBICON2022 Sir Ganga Ram Hospital, New Delhi

Opportunities and Challenges of HIMS and LIS in Government Hospitals by Dr. Preeti Chauhan at 48th ACBICON2022 Sir Ganga Ram Hospital, New Delhi.

Innovation of IT and Lab Services by Dr. Preeti Chauhan at Biomedical technology conclave-22, kerala

Role of Diagnostic Centre DBT-NIDAN-Kendra for Beta Thalassemia elimination by Dr. Rajeev Goyal at 29th AMBICON 2022 Bengaluru.

## Other Inter-Institutional Collaboration

Collaboration with GB Pant Hospital: Dr Ritu Singh Collaborated with G.B.Pant hospital and was CoSupervisor to two DM Cardiology students ( Delhi University ) from G.B.Pant Hospital for their genetic work.

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## Bio-Chemistry (MAMC)

### Brief History

The Maulana Azad Medical College's Department of Biochemistry was established in the year 1968. It actively engages in academic, research, and patient care activities. Academic activities of the Department include teaching MBBS, BDS, MD and BSC Nursing. The Clinical Biochemistry laboratory serves patients from Lok Nayak Hospital and other associated hospitals. Biochemistry department provides laboratory services 24X7, with a test menu of over 90 parameters. Aside from that, the college has a molecular diagnostic lab that provide molecular diagnostic service to patients attending LN Hospital.

### Major Activities and Achievements

The department conducted MAMC Biochemistry Update from 24-26th March, 2023 that was attended by more than 200 delegates. Two guest lectures were organised by the department (a) one on the Title “Health, Politics and Coke” which was given by Dr. Sigal Eilat-Adar, PhD, RD, Clinical Dietitian and Epidemiologist, Head of Masters in Healthy and Active Lifestyle Education, Levinsky-Wingate Academic College, Netanya, Israel on August 28, 2023 from 10:00 AM to 11:30 AM and (b) other on "Role of gut microbiome in health and diseases" which was delivered by Dr. Gopal Nath, Professor of Microbiology, IMS, BHU, Varanasi on 24.04.2023.

### New Facilities added:

Droplet Digital PCR (ddPCR) for diagnostics.  
Wet chemistry analyzer - TBA 120 FR.  
ABG analyzer - COBAS B 221 & ABL 800 FLEX.  
Coagulation analyzer - ACL TOP 350- 2 instruments.  
Capillary electrophoresis - MINICAP Flex piercing.

### Honours/Distinctions

The Department of Biochemistry was awarded with Flamming Trophy for the best research work in pre and para clinical department for the years 2016, 2018 and 2020.

### Publications

Kumar, A., Parashar, R., Kumar, S., Faiq, M. A., Kumari, C., Kulandhasamy, M., Narayan, R. K., Jha, R. K., Singh, H. N., Prasoon, P., Pandey, S. N. (2022). Emerging SARS-CoV-2 variants can potentially break set epidemiological barriers in COVID-19, *Journal of medical virology*, 94(4), 1300-1314.



Nag, S., Goswami, B., Mandal, S. D., Ray, P. S. (2022). Cooperation and competition by RNA-binding proteins in cancer, *Seminars in Cancer Biology*, 86(3), 286-297.

Mahilkar, S., Agrawal, S., Chaudhary, S., Parikh, S., Sonkar, S. C., et al. (2022). SARS-CoV-2 variants: Impact on biological and clinical outcome, *Frontiers in medicine*, 9(10), 995960.

Kumar, D., Oberoi, H. S., Singh, H., Shrivastav, T. G., Bhukya, P. L., et al. (2023). Development and optimization of an in-house heterologous ELISA for detection of prednisolone drug in enzyme conjugates using spacers, *Frontiers in Immunology*, 14, 1200328.

Khurana. V., Goswami, B., Kaushik, S. (2022). W182 Association between nutritional and inflammatory biomarkers in COVID-19 patients with chronic kidney disease, *Clinica Chimica Acta; International Journal of Clinical Chemistry*, 530, S367.

Irungbam, M., Chitkara, A., Singh, V. K., Sonkar, S. C., Dubey, A., et al. (2022). Evaluation of Performance of Detection of Immunoglobulin G and Immunoglobulin M Antibody Against Spike Protein of SARS-CoV-2 by a Rapid Kit in a Real-Life Hospital Setting, *Frontiers in microbiology*, 13, 802292.

Goswami, B., Ahuja, D., Pastré, D., Ray, P. S. (2023). p53 and HuR combinatorially control the biphasic dynamics of microRNA-125b in response to genotoxic stress, *Communications Biology*, 6(1), 110.

Mahapatra HS, Kulshreshtha B, Goyal P, Chitkara A, Kumari A, Arora A, Sekhar V, Gupta YP. (2022). Comparative diagnostic utility of different urinary biomarkers during pre-albuminuric stages of non-hypertensive type 2 diabetic nephropathy, *Indian J Med Res*, 156(1), 46.

Kumar, A., Asghar, A., Singh, H. N., Faiq, M. A., Kumar, S., et al. (2022). Omicron variant, scripting the end of the pandemic: An in silico analysis of SARS-CoV-2 genomic sequences and their epidemiological correlates, *JMIR Bioinformatics & Biotechnology*.

## Research Projects

ISBMR, 2022-2024, Phosphate metabolism in children with nutritional rickets: a clinical and metabolomic approach, 2 Lakh.

ICMR, 2022-2025, Pituitary Function Assessment after Traumatic Brain Injury in Children: A Prospective Cohort Study, 28 Lakh.

GNCTD, 1 Year, Evolution of genetic susceptibility of vascular endothelial dysfunction in pregnant north Indian females with pre-eclampsia, 3 Lakh.

## Seminars Organized

Dr. Sigal Eilat-Adar, Clinical Dietitian and Epidemiologist, Head of Masters in Healthy and Active Lifestyle Education, The Academic College, Lewinsky-Wingate, Netanya, Israel., Health, Politics and Coke, Lifestyle, 28-08-2023.

Dr. Gopal Nath, Professor of Microbiology, IMSBHU, Varanasi., Role of Gut Microbiome in health and diseases, Gut-Brain Interaction, 24-04-2023.

## Conferences Organized

MAMC Biochemistry Update, 24-03-2023, MAMC

## Seminar/Conference Presentations

Dr. Anubhuti attended 7th Annual Conference of Society for Indian Academy of Medical Genetics, Theme: Genomic Data for Precision Medicine Global and presented a Poster on the topic Genetic variation of Wilm's tumor- A Pilot study.

Dr. Smita Kaushik was panelist in a panel discussion on nutrition at ACBI conference held on November 23-26, 2022 conducted by Gangaram Hospital, New Delhi

**Faculty Strength:** 11

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## Bio-Chemistry (UCMS)

## Major Activities and Achievements

Apart from MBBS & MD teaching, the department participated in "In-service Training in Medical Laboratory Technology" Programme. The department has been selected by DST for sanction of grant under FIST Programme. The department had received the grant-in-aid for projects from ICMR, CPCB and DST.

## Honours/Distinctions

Dr. Mohit Mehndiratta –First runner up at 18th Annual Conference of Research Society for the study of diabetes in India-RSSDI, 2022, Delhi.

Dr. Ashok Kumar Ahirwar-Best Oral Paper Presentation Award titled at CME: Thyroid Dysfunction: Clinical-Biochemical Approach, conducted by Dr. Baba Saheb Ambedkar Medical College & Hospital, New Delhi on 25th May 2022.

Dr. Shiba Ansari- Central Executive Committee Member of Association of Clinical Chemistry & Lab Medicine Practitioners (ACCLMP) since April 2022.

## Publications

Almeida, E. A., Mehndiratta, M., Madhu, S.V., Kar, R., Puri, D. (2022). Differential Expression of Suppressor of Cytokine Signaling and Interferon Gamma in Lean and Obese Patients with Type 2 Diabetes Mellitus, *International Journal of Endocrinology and Metabolism*, 20(3), 22-25.

Ahirwar, A.K., Singh, A., Bhattacharjee, J. et al. (2022). Biological reference interval of nitric oxide in health and disease, *Hormone Molecular Biology and Clinical Investigation*, 43(3), 315-21.

Chawla, D., Kar, R., Puri, D., Madhu, S.V. (2023). Role of glucagon-like peptide 1 (GLP-1) and its association with inflammatory markers in the pathogenesis of type 2 diabetes mellitus, *GSC Biological and Pharmaceutical Sciences*, 22(03), 99–106.

Grover, S., Jain, S., Narang, S., Gupta, R., Garg, S., Sharma, D. (2023). Evaluation of cognitive function, serum 25-hydroxyvitamin D, and Vitamin D binding protein levels in chronic obstructive pulmonary disease: A case-control study, *Int J Non-Commun Dis*, 8(1), 14-20.

Mehndiratta, M., Kar, R., Almeida, E. A., Goel, A., Mehndiratta, R. (2022). Knowledge and risk perception towards human immunodeficiency virus and hepatitis B infections among medical students, *Sri Lankan Journal of Infectious Diseases*, 12(2), 12-14.

Saha, D., Mehndiratta, M., Shah, D., Gupta, P. (2022). Oxidative Stress, Mitochondrial Dysfunction, and Premature Ageing in Severe Acute Malnutrition in Under-Five Children, *Indian journal of pediatrics*, 89(6), 558-62.

Jha, P.K., Agarwal, R. (2022). Quality Tools and Strategy for Critical Alerts Process Improvements to Ensure Patient Safety, *Journal of Laboratory Physicians*, 14(4), 471.

Khan, M. A., Rabbani, G., Aggarawal, J., Ahmed, R. S. (2023). Divulging the Intricacies of Crosstalk Between NF- $\kappa$ B and Nrf-2/Keap1 Pathway in the Treatment of Arthritis by Dimethyl Fumarate, *Applied Biochemistry and Biotechnology*, 1-19.

Pavani, C., Ansari, S., Yadav, R., Datta, S. K. (2022). Deciphering The Cause of Hypercalcemia: A Case Report, *Journal of Applied Biochemistry & Laboratory Medicine*, 3(1).

Rao, R.S., Singh, M., Sharma, R., Gupta, R., Mehndiratta, M., Kar, R., Sharma, P., Kumar, P. (2022). Role of circulatory Telomere length, Oxidative stress markers, and inflammatory markers with Increasing Blood pressure in PREECLAMPSIA-A Study in western Uttar Pradesh, India, *Journal of Pharmaceutical Negative Results*, 2069-76.

### **Research Projects**

DHR-MRU, April 2022 – Dec 2022, mRNA expression of regulators of inflammation in lean and obese patient with Type 2 Diabetes Mellitus., 200000/-

DHR-MRU, Apr 22-mar 23, Role of APOA-V protein in inflammatory and oxidative pathway: in vitro study., 178000/-

AIIMS New Delhi, Oct 2021 to Oct 2023, Adaptive Immune Responses to Covaxin and Covishield: A comparative study, 1000000/-

### **Seminar/Conference Presentations**

Poster presentation-Ahmed RS, Monika K, Jha PK, Khan MA, Saifi A. Amelioration effect of a Polyherbal Unani formulation on certain biochemical parameters in a rat model of Cognitive impairment. Speaker, 48th National Conference of ACBI, ACBICON2022, 23-26th Nov 2022, New Delhi.

### **Extension and Outreach Activities**

The Department also participates in BSc, MLT training for the MLT colleges affiliated to Delhi University.

Participates in teaching activities of BSc. Nursing.

Participation in Pulse Polio Programme.

**Faculty Strength: 9**

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### **Community Medicine (MAMC)**

#### **Brief History and Major Achievements of the Department**

The department of community medicine currently has 5 urban and rural centres. Department has residential posting in rural areas under Rao Tularam Memorial Hospital, and 4 other centres - Rural Health Training Centre, Barwala, Urban Health Centre, Gokalpuri, Urban Health Centre Delhi Gate and Urban Health Centre BVK. Along with daily outpatient services, the centres also serve as a training point for MD and MBBS Students along with providing health education to the community.

#### **Honours/Distinctions**

Department was awarded "Flemmings Trophy" in the year 2021.

Dr. M.M.Singh was awarded Chikitsa Ratna by IMA, East Delhi branch for work and contribution during Covid-19

#### **Publications**

Garg, S., Bhatnagar, N., Singh, M. M., Basu, S., Borle, A., Marimuthu Y. (2022). Menstrual hygiene management and its determinants among adolescent girls in low-income urban areas of Delhi, India: a community-based study, *Osong Public Health and Research Perspectives*, 13(4), 273-281.

Gangadharan, N., Borle, A. L., Basu, S., Navya, G., Borle AL. (2022). Mobile phone addiction as an emerging behavioural form of addiction among adolescents in India, *Cureus*, 14(4).

Sharma, N., Basu, S., Manna, S., Sharma, P., Rao, S., Duggal, K., Kaur, H., Kumar, P., Malik, S. H. (2022). Health-seeking behaviour for childhood ailments in caregivers of under-five children in an urban resettlement colony in Delhi, India, *Cureus*, 14(4).

Basu, S., Sharma, P., Dushyant, K., Sharma, N. (2022). A brief behavioral intervention promotes integration of mCessation with India's TB elimination program, *pneumon*, 35(1), 5.

Sodhi, P. K., Gautam, A., Sharma, N., Rustagi, R., Jaisingh, K., Sodhi, R. (2022). Assessing contrast sensitivity change in retinal diseases with use of yellow-amber NoIR glasses, *Indian Journal of ophthalmology*, 70(7), 1679.

#### **Research Projects**

National Biopharma Mission, 2020/5 years, The development of a Health and Demographic surveillance site with focus on epidemiological survey of Dengue and Chikungunya in an urban resettlement colony and slum in Delhi: a prospective observational study, 570 Lakh.

Delhi State NTEP, 2022, Implementation of the INH-Rifapentine preventive therapy for latent tuberculosis infection in household tuberculosis contacts in India: a community-based pilot study, 5 lakh.

ICMR, 2022, 1 year, DISEASE SEQUEL IN RECOVERED COVID-19 PATIENTS: A PROSPECTIVE STUDY. [COVI-FLU STUDY], 48 Lakh.

### **Seminar/Conference Presentations**

Krishna A, Lal P, Kumar R, Bhanagar N presented “Quality of sleep and its association with obesity among adults residing in Delhi” in 3rd IAPSM Young Leaders’ National Conclave organized by IAPSM at AIIMS, Bhubneshwar, Odisha from 10-12 November, 2022.

Mishra A, Lal P : presented” Impact of Dreams on mental health: A population based study “3rd IAPSM Young Leaders’ National Conclave organized by IAPSM at AIIMS, Bhubneshwar, Odisha from 10-12 November, 2022.

Seminar presentation at national level for tobacco control and NCD by Dr Amod Borle

**Faculty Strength:** 8 permanent faculty, 2 ad-hoc.

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## **Dental Sciences (MAMC)**

### **Brief History**

Maulana Azad Medical College was inaugurated by the then Prime Minister Pandit Jawahar Lal Nehru in February 1961. Considering the dental demands of the people of Delhi, Maulana Azad Institute of Dental Sciences began, as a small department of dentistry under MAMC. 1983 was a landmark year in which the first batch of BDS students were admitted to the MAMC and Dr. P.P. Thukral was formally appointed as the first associate professor and head of the dental wing. Dr. A.N. Srivastava was appointed the head in 1984, followed by Dr. N.C. Sangal in 1991.

### **Major Activities and Achievements**

The period of 2022-23 was a blend of Covid and non Covid period for the Institute catering to more than 2000 patients along with Covid sampling and vaccinations. The institute was ranked 4th rank in NIRF and successfully renewed its NABH certification. The institute got its approval as National Resource Center for Oral Health and Tobacco Cessation under NOHP, MoHFW, Govt. of India. The independent surveys on Best Dental Colleges -2022 of Magazines Outlook, India Today and The Week have ranked MAIDS as the best dental college in India at position no.1. The institute was recipient of the award for excellence in “KAYAKALP PROGRAM FOR HOSPITALS 2020-21” in 2022 under Super Specialty hospital category, GNCTD. The institute got permission for Dental Technology Innovation (Development) Hub (DTIH) under the Bio-medical Device and Technology Development (BDTD) Program of Department of Science and technology (DST).

## Honours/Distinctions

Dr. Arundeeep K Lamba was awarded Fellowship by National Academy of Medical Sciences.

Dr. Shruti Tandon was awarded Membership by National Academy of Medical Sciences

Dr Rekha Gupta was awarded CCHPE (Certificate course in health profession education). Dr.Mridula Goswami was nominated as Clinical Director for Special Olympics Bharat.

Dr. Gyanendra Kumar was awarded TC White Observership at Department of Pediatric Dentistry, School of Dentistry, Seoul National University, South Korea.

Dr. Gyanendra Kumar was awarded TC White volunteering Award - RCPS, Glassgow.

Dr. Vikrant Mohanty was part of contributor in the Report to Tobacco Control in India by Ministry of Health and Family Welfare, Government of India and WHO India Office and PHFI.

## Publications

Nayyer, N., Tripathi, T., Ganesh, G., Rai, P. (2022). Impact of photobiomodulation on external root resorption during orthodontic tooth movement in humans – A systematic review and meta-analysis, *Journal of Oral Biology and Craniofacial Research*, 12(3), 496-480.

Tripathi, T., Ganesh, G., Singh, N., Rai, P. (2022). Serum biomarkers associated with radiographic skeletal maturity indicators: A systematic review and meta-analysis, *Journal of Orthodontics: Sage Journals*, 50(2), 127-147.

Datta, A., Lamba, A.K., Faraz, F., Tandon, S., Pandey, J. (2022). Guided Tissue Regeneration In Esthetic Zone By Whale's Tail Flap Design Using Indigenously Prepared Dfdba And Amniotic Membrane: A Case Report, *International Journal of Scientific Research*, 11(7), 1606-1611.

Bhatt, G., Gupta, S., Ghosh, S. (2022). Comparative efficacy of topical aloe vera and low – level laser therapy in the management of oral lichen planus: a randomized clinical trial, *Lasers in Medical Science*, 37(9), 2063-2070.

Chaudhary, Z., Kadanthode, M., Sharma, P., Mohanty, S., Vijayaragavan, R.,Bhandari, P. S., Maini, L., & Grover, S. (2022). Single Institute Audit of Maxillofacial Trauma Cases Before and During COVID-19 Pandemic, *Craniofacial Research & Innovation*, 7(1), 102-111.

Deepika, K., Bhatnagar, A., Bansal, R., Verma, A. (2022). Management of Feeding Problems in Infants with Cleft Palate and Review on Pierre-Robin Syndrome, *Indian Journal of Multidisciplinary Dentistry*, 3(1), 33-37.

Yadav, S., Nawal, R. R., Talwar S. (2022). Nonsurgical Management of a Large Periapical Lesion Following Instrument Retrieval From the Apical Third: A Case Report With a Three-Year Follow-Up, *cureus*, 14(5).

Garg, A., Kumar, G., Goswami, M., Verma, D. (2022). Impact of socioeconomic factors on deciduous teeth eruption among infants born after low-risk pregnancy compared to infants diagnosed with intrauterine growth restriction, *Journal of the Indian Society of Pedodontics and Preventive Dentistry*, 40(2), 118-123.

Bhatia, S., Mohanty, V., Balappanavar, A. Y., Rijhwani, K., Chahar, P., Gupta, R. (2022). Self-Perceived Halitosis and Related Factors Among the Mask-Wearing Population During the COVID-19 Pandemic in Delhi, India: A Cross-Sectional Study, *Cureus*, 14(12).

### **Research Projects**

Centre For Scientific & Industrial Research, 2018-2022, Clinical, CBCT Based Radiographic assessment and Biomechanical analysis Of Immature Permanent Teeth Treated with Different Regenerative Protocols: A multi arm Randomized Controlled Trial, 6,65,000

Indian council of Medical Research ICMR, 2019-2023, Assessment of salivary Insulin like growth factor-1 and Bone alkaline phosphatase levels with twin block therapy: an observational study., 13,06,745

Centre For Scientific & Industrial Research, 2021-2024, Development of Advanced Dental Implant for Critical Clinical Applications, 61,00,000

SERB,DST, 2019-2022, The impact of endodontic microscope on the outcome of root canal treatment of deciduous molar., 3,485,960

Centre For Scientific & Industrial Research, 2019-2022, Therapeutic assessment of zerumbone/ nano zerumbone in combination with curcumin/ nano curcumin on oral cancer cell lines, 12,66, 667

### **Patents Filed/Granted**

A herbal denture adhesive and process of its preparation.

Non contact type ultrasound approach to detect separated instruments in the tooth during root canal therapy.

### **Seminars Organized**

James L. Gutmann, Professor Emeritus, Texas A&M University College of Dentistry, Meeting the Master, Tooth Resorption and its historical perspective, 12-10-2022

Dr. Shibani Sahni, Director of CE/ Centre of lifelong Learning and Distance Education, TUFTS University School of Dental Medicine, Boston., Use of Artificial Intelligence in Dentistry – Current trends and future direction., Role of AI in Dentistry, 24-02-2023

Dr. P. V. Saravanaraja, Advocate, Supreme Court of India, Constitutional rights, Constitutional day, 26-11-2022

Dr. Rolly Mathur & Dr. Nandini K Kumar Dr. Sucheta, Scientist from ICMR FERCI, Bioethics in Clinical Research And Good Clinical Practice, Ethics Committee Workshop, 05-11-2022

Dr. Sunil Kumar, Senior Consultant and Anaesthetist, Lok Nayak Hospital, GNCT of Delhi, BLS Course, NABH training, 21-12-2022

### **Conferences Organized**

50th IPS National Conference, 10-11-2022, IPS

6th Annual Convocation of Indian Board of Forensic Odontology on, 29-10-2022, IBFO

### **Seminar/Conference Presentations**

Dr. Tulika Tripathi delivered a Keynote lecture on “ Orthodontic treatment in children with special needs” at Indian society of pedodontics and preventive dentistry on 4th September 2022.

Dr. Priyank Rai presented a clinical innovation paper on “ Skeletally Anchored Fixed Functional Appliances: In Late Adolescence” at 56th Indian Orthodontic Conference on 16th September 2022.

Dr. Rekha Gupta and Dr. Shubhra Gill presented a paper on “ Surgical obturators in bilateral maxillectomy cases: a conservative and practical approach” at 50th IPS National Conference on 10th November 2022.

Dr. Sujata Mohanty presented a paper on “ Clinical, Radiological and Histopathologic Correlation in Determining Safe Margins Following Resection of Benign Pathologic Lesion: Is Resection with Healthy Margins of 1-1.5 cm Necessary?” at Conference AAOMS on 12th September 2022.

Dr. Gyanendra Kumar delivered a Keynote lecture on “ Oral health status in South Asian countries” at United Nations headquarter on 24th May 2022.

Dr. Vikrant Mohanty presented a paper on “ Perception of dental students on leadership” at 33rd Annual Conference of Indian Society of Dental Research on 17th February 2023.

Dr. Vikrant Mohanty acted as a resource person for “ Review of NOHP of North – eastern states” at NEIGRIHMS, Shillong on 16th November 2022.

Dr. Aswini Y B presented a paper on “Ontological Approach to Oral Health: A Scoping Review” at 26th National IAPHD conference on 23rd September 2022.

Dr. J. Augustine, Dr. Priya Kumar presented a paper on “Artificial intelligence in Dental Radiographic Age Estimation: Current trends and future direction” at 4th International Conference of Forensic Odontology & Child Abuse on 28th April 2022.

Dr. Priya Kumar delivered a Guest lecture on “Haematological investigations in dentistry” at Subharti Dental College on 11th June 2022.



### **National/International MoUs Signed**

Tufts School of Dental Medicine, USA  
International Union Against Tuberculosis and Lung Disease (South East Asia)  
MoHFW (National Oral Health Program) for National Resource center  
Central Health Education Bureau, Govt of India

### **Other Inter-Institutional Collaboration**

Indian Institute of Technology, Delhi  
Indian Institute of Technology, Bombay  
A.B. Shetty memorial Institute of Dental Sciences, Mangalore  
Saveetha Dental College & Hospitals, Chennai  
Guru Gobind Singh Indraprastha University, Delhi  
M. A. Rangoonwala Dental College & Hospital, Pune

### **Student under Exchange Program(Inbound/Outbound)**

Geriatric Medicine PG Diploma students: 15  
1st year Medical students of MAMC: 200

### **Number and percentage of students placed**

Undergraduates : Total passed out - 30.

Post Graduate Admission – 8 (26.66%) JR's – 4 (13.33%) Clinics or hospitals –4 (13.33%)

Post Graduates : Total passed out - 20.

Senior Residents – 6 (30%) Clinics or hospitals – 24 (70%)

### **Number of Companies visited for campus recruitment**

Clove Dental: 1

### **Extension and Outreach Activities**

No. of dental camps – 28 and served 4258 patients.  
No. of child development centre visits – 86 and no. of children screened – 344  
Mobile dental clinics:  
Total number of patients screened– 13951

### **Faculty Strength: 31**

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## Dental Sciences (UCMS)

### Brief History

Dental Department in Hospital started in 1988 which provided basic dental services with consultants and residents. Postgraduate teaching Pediatric and Preventive Dentistry centre with residency program established in the year 2011. The services provided by the Department encompass a plethora of dental treatment modalities such as endodontic therapy, orthodontic correction of irregular teeth and major oral surgical procedures apart from the routine day to day services like tooth extractions, intra-oral radiography, scaling and oral prophylaxis.

### Publications

Bhutiani, N., Tripathi, T., Rai, P. (2022). Active Nasoalveolar molding (A-NAM) using 3 directional expansion screw for arch alignment in bilateral cleft lip and palate. *AJO-DO Clinical companion*, 2(1), 20-25.

Tripathi, T., Srivastava, D., Bhutiani, N., Rai, P. (2022). Comprehensive management of Crouzon syndrome: A case report with three-year follow-up, *Journal of Orthodontics*, 49(1), 71-78.

Bhutiani, N., Tripathi, T., Rai, P. (2022). Psychosocial Maternal Perception of the Outcome of Pre Surgical Infant Orthopedics in Infants Born with Cleft Lip and Palate, *Journal of clinical Pediatric Dentistry*, 46(4), 299-306.

Dhamija, M., Tyagi, R., Kalra, N., Khatri, A. (2022). Efficacy of resin infiltration and fluoride casein phosphopeptide amorphous calcium phosphate varnish on non-cavitated active white spot lesions in children: a randomized clinical trial. *Pesqui Bras Odontopediatria Clín Integr, Pesqui Bras Odontopediatria Clin Integr*, e210094(22), 1-10.

Singh, N., Bhutiani, N., Tripathi, T., Rai, P. (2022). Rehabilitation using dental implants following closure of large alveolar cleft defect by HYDIS-TB appliance: One-year follow-up., *Journal of cleft lip palate and craniofacial anomalies*, (9), 78-81.

Talwar, A., Grewal, H., Duggal, R., Duggal, R., Duggal, I. (2022). Queries regarding gingival recession in mandibular anterior teeth in patients with Class II malocclusion treated with elastics and Twin Force appliance, *Americal journal of orthodontics and dentofacial orthopedics*, 162(6), 803-804.

Grewal, H., Bhutiani, N., Balachandran, R. (2022). The effect of COVID-19 on orthodontic treatment demand and its delivery in India, *Indian journal of dental research*, 33(4), 367-372.

Tyagi, R., Kalra, N., Khatri, A., Goyal, T., Yangdol, P., Sabherwal, P. (2023). A Rare Case of Autoimmune Polyendocrinopathy-candidiasis-ectodermal Dystrophy Syndrome: Dental Perspective on Diagnosis and Management, *International journal of clinical pediatric dentistr*, 16(1), 139-146.

Kukreja, R., Singla, S., Bhadoria, N., Pawar, P., Gupta, K. (2022). An In Vitro Study to Compare the Release of Fluoride from Glass Ionomer Cement (Fuji IX) and Zirconomer, *International journal of clinical pediatric dentistr*, 15(1), 35-37.

Khatr, A., Goyal, T., Kalra, N., Tyagi, R., Kaushal, D., Sabherwal, P. (2022). The COVID-19 Pandemic: Role of dental professionals in a tertiary care hospital setting, *Contemporary Pediatric Dentistry*, 3(1), 1-7.

### **Seminar/Conference Presentations**

Paper presented by Dr. Neha on “Active Nasoalveolar molding (A-NAM) in neonates with bilateral cleft lip and palate: An innovative appliance for presurgical orthopedics” at Orthodontics Innovation Conclave 2022 organized by the Indian Orthodontic Society on 12th July, 2022.

Dr. Neha was invited as Rising Star Speaker at 56th Indian Orthodontic Conference at Pune from 16th -18th September, 2022.

Paper presented by Dr Deepak Khandelwal on “ A comparative evaluation of role of Gender, Age and Socioeconomic status on dental anxiety at first dental visit” at PEDOVERSE- 19th ISPPD National PG Convention organized by the ISPPD on 23-25th Feb, 2023.

Paper presented by Dr Amit Khatri on “Comparison of parental satisfaction with strip crowns and preformed zirconia crowns in 305 year old children over 1 year.” At ISPPD National conference organized by the ISPPD on 24-26th Nov, 2022.

Dr. Namita Kalra attended 33rd Annual Conference of Indian Society for Dental Research, 17-19th February 2023 at New Delhi.

Dr. Harpreet Grewal attended “Art and Science of Crafting Standout Orthodontic Research " at Jamia Millia Islamia, Department of Orthodontics, Faculty of Dentistry, Jamia Millia Islamia, 2nd- 3rd December 2022.

Dr. Harpreet Grewal attended 33rd Annual Conference of Indian Society for Dental Research, 17-19th February 2023 at New Delhi.

Dr. Neha attended the 56th Indian Orthodontic Conference, Pune from 16th -18th September, 2022.

Dr. Amit Khatri attended ISPPD National conference organized by the ISPPD on 24-26th Nov, 2022.

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## **Dermatology, Venereology & Leprosy (MAMC)**

### **Brief history of the Department**

Department of Dermatology caters to 900-1600 patients on a daily OPD basis with Special Clinics (CTD, Vesico-bullous, Leprosy, STI, Contact Dermatitis, Psoriasis, Paediatric clinic, Chemical Peeling and OT procedures) running every day of the week. Additionally, 40 beds for Inpatient care are available.

### **Major Activities and Achievements**

The department has been the primary provider of Monkeypox services since LNJP became the nodal center for the disease, in July, 2022. In March 2022, our esteemed Medical Director Dr. (Dir prof) Suresh Kumar inaugurated “Pediatric Dermatology” special clinic. This clinic was designed to provide comprehensive

care tailored to pediatric patients dealing with an array of skin conditions, ranging from ichthyosis to alopecia areata, atopic dermatitis, hemangioma etc.

### **Publications**

Shete, A. M., Yadav, P. D., Kumar, A., Patil, S., Patil, D. Y., et al. (2022 ). Genome characterization of monkeypox cases detected in India: Identification of three sub clusters among A.2 lineage, *P.J Infect*, 1(86), 66-117.

Relhan, V., Sahay, R. R., Shete, A. M., Yadav PD, Sahoo, B., et al. (2022). Clinical presentation, viral kinetics, and management of human monkeypox cases from New Delhi, India, *J Med Virol*, 1(95), e28249.

Bikash, C., Sarkar, R., Relhan, V., Singh, S. (2022 ). Role of Platelet-Rich Plasma Therapy as an Adjuvant in Treatment of Melasma, *Dermatol Surg*, 4(23 ), 429-34.

Solanki, B., Relhan, V., Sahoo, B., Sarkar, R., Choudhary, P. (2022). Microneedling in combination with 15% trichloroacetic acid peel versus 25% pyruvic acid peel in the treatment of acne scars, *Dermatol Surg*, 2(49), 155–60.

Hegde, P., Choubey, V., Sahoo, B. (2022). CLOVES Syndrome: An Unusual Presentation of a Rare Entity, *Indian J Paediatr Dermatol*, 4(48 ), 306.

Mittal, A., Singh, M., Singh, S., Jain, A., Barman, K. D.(2022). Monilethrix: A cytologist's perspective, *Cytol. J*, 4(39 ), 188–9.

Relhan, V., Bansal, A., (2022). Acute and chronic Paronychia revisited: A narrative review, *J Cutan Aesthet Surg*, 1(15 ), 1-16.

Monalisa K, Sahoo B. (2022). Congenital teeth and nail changes with Palmar keratoderma: A new entity or a rare association?, *Indian Dermatol Online J*, 1(14 ), 115-7.

Kaur A, Barman KD, Sahoo B, Choudhary P. (2022). A comparative interventional study of narrowband ultraviolet B alone and narrowband ultraviolet B in combination with microneedling in patients with stable vitiligo, *Photodermatol Photoimmunol Photomed*, 4(39), 357-63.

### **Research Projects**

MRU, 2022-23/1 year, Correlation of serum IL-6, TGF-beta and STAT3 in dermis with the extent of skin fibrosis in patients of systemic sclerosis, 3 lakhs

Delhi Government, 2022-23/1 year, Role of LRP1, Hsp70 and cxcl10 in pathogenesis of vitiligo c., 2.4 lakhs

### **Seminars Organized**

Dr. Bijaylaxmi Sahoo, Director professor and HOD MD, DNB, STI and leprosy awareness, Awareness on Leprosy and STI, 12-04-2023

### **Conferences Organized**

Connective Tissue Disease: A Multidisciplinary approach, 25-03-2023, Delhi Government

Workshop on Paediatric Dermatology, 18-03-2023, Delhi Government

### **Seminar/Conference Presentations**

Dr. Bijaylaxmi Sahoo, Guest speaker, Cuticon, J&K, Sep, 2023.

Dr. Bijaylaxmi Sahoo, Guest speaker, CME-Connective tissue disease, MAMC. March 2023

### **Other Inter-Institutional Collaboration**

Training for Doctors under the PGDHIVM Fellowship Programme, MAMC Training for PG Students of MAIDS

### **Extension and Outreach Activities**

We tried to spread awareness and diagnose occupational dermatitis among health care workers via patch testing. So that we can help the health care workers in the best possible way.

**Faculty Strength: 4**

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## **Forensic Medicine (MAMC)**

### **Brief History**

This department has been involved in academics and medicolegal work for years now. Faculty members are involved in the medicolegal work as individuals and as part of the Medical board constituted upon the orders from GNCTD, both intra and inter institutional.

### **Major Activities and Achievements**

In the department of Forensic Medicine, 983 postmortem cases were conducted in the mortuary attached to this department. Also, 65 referral Medicolegal case reports were opined upon or prepared in the department.

### **Publications**

Pradhan, M., Kaur, A., Sreenivas, M. (2022). Role of Autopsy in Allegations of Medical Negligence with analysis of the Current trends, *Indian J Med Forensic Med Toxicology*, 20(3 and 4).(2022), 84-90.

## **Research Projects**

2022, 3 years, Association of morphometry of foramen magnum and gender differentiation in North Indian population.

2022, 3 years, Association of organ weight with BMI.

2022, 3 years, Frequency and pattern of fracture of cricoid cartilage in Hanging and strangulation cases.

2022, 3 years, The study of correlation between height and distance between the two anterior superior iliac spines in young adults of North Indian population.

2022, 3 years, Distribution of pattern of lip prints in young adults.

## **Seminar/Conference Presentations**

Dr. Amandeep Kaur attended Mid year CME-cum-Conference 2022 of Punjab Academy of Forensic Medicine & Toxicology, organized by Department of Forensic Medicine, Kalpana Chawla Govt. Medical College, Karnal, Haryana on 11th June 2022 as Guest speaker.

Dr. Upender Kishore and Dr. Dhiraj D Buchade attended “Forensic Medicon-2022” 43rd Annual Conference of Indian Academy of Forensic Medicine at SGPGI Lucknow, UP held on 29th April 2022 to 1st May 2022.

Dr. Sreenivas attended the 20th Annual Conference of Punjab Academy of Forensic Medicine & Toxicology organized by Department of Forensic Medicine & Toxicology, AIIMS Bathinda conducted on 11th November 2022 as Chairperson

Dr. Dhiraj D Buchade attended training of “Purchase Management in Government” conducted online by Institute of Secretariat Training and Management (ISTM), Govt. of India New Delhi from 22nd August to 24th August 2022.

Dr. Amandeep Kaur attended Forensic CME-2022: Exploring Frontiers in Forensic Medicine, organized by Department of Forensic Medicine & Toxicology, VMMC & Safdarjung Hospital, Delhi on 10th September 2022 as Chairperson.

Dr. Sreenivas attended the conference NCHPE 2022, organized at HIMS, Dehradun from 31st October 2022 to 3rd November 2022.

## **Student under Exchange Program(Inbound/Outbound)**

BHMS Students of Nehru Homoeopathic Medical College New Delhi posted in mortuary for training in Department of Forensic medicine from 31/10/2022 to 11/11/2022 (116 students)

**Faculty Strength:** 04 (Two Director Professors and Two Professors)

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## **Medicine (UCMS)**

### **Brief history of the Department**

The University College of Medical Sciences (UCMS) was established in 1971 as a Constituent College of University of Delhi. It imparts various medical and paramedical courses.

### **Major Activities and Achievements**

Among its notable achievements, the department has successfully established a fully functional Coronary Care Unit (CCU), providing high-quality care to critically ill cardiac patients. Additionally, the department has embraced innovation in medical education by implementing Competency-Based Medical Education (CBME) for the batch of 2019 onwards, ensuring that our medical students receive a modern and comprehensive training experience as per NMC curriculum. To facilitate collaborative learning and research, the seminar room and departmental library have been upgraded to state-of-the-art facilities.

### **Honours/Distinctions**

Dr. Amitesh Aggarwal received fellowship of International College of Nutrition

Dr. Shiva Narang, Associate Editor, Journal of case reports

Dr. Amitesh Aggarwal, Member, Executive Editor, Indian Journal of Medical Specialties

### **Publications**

Aggarwal, A., Gupta, A., Agarwal, M. P., Kushwaha, S., Sharma, R., Gupta, A. K. (2022). Apparent Treatment – Resistant Hypertension in Hypertensive Stroke Patients, *J Int Med Sci Acad*, 2(35), 109-115.

### **Research Projects**

ICMR, 2023, IMPETUStroke: IMPlimentation of an Evaluation and Treatment Package for Uniform Stroke Care and outcome in the Medical college in India, 3.5 lacs

ICMR, 2023, Psychosocial impact of the pandemic on older person vaccine hesitancy and C-19 appropriate behavior across South East Asian countries: A cross sectional study, 8.5 lacs

Non Government, 2023, Phase-II, Multicenter, Randomized, Assessor-blind, Parallel-group, Active-comparator Study to Determine the Efficacy, Safety, Tolerability and Pharmacokinetics of Different Orally Administered Regimens of ZY-19489 in Uncomplicated Plasmodium Falciparum Malaria Patients, 10 lacs

### **Seminars Organized**

Dr Alpana Raizada, Professor, Thesis Protocol writing, Research, 04-03-2023

### **Conferences Organized**

UPDA-GBN 7th edition of Dialogues in Diabetes, 17-07-2022.

### **Seminar/Conference Presentations**

Dr Amitesh Aggarwal Faculty, 39th Annual conference of Association of Physicians of India – UP Chapter (UPAPICON 2022), Noida,

Dr Amitesh Aggarwal Chairperson in 13th World Congress of Diabetes India, Indore,

Dr Amitesh Aggarwal Chairperson in 7th Annual Conference of Indian Society of Atherosclerosis Research (ISAR-DCCON, 2022), Faridabad,

Dr. Smita Nath Chairperson in 7th Annual Conference of Association of Physicians of India, Noida Chapter, Noida,

Dr Shiva Narang Chairperson in 7th Annual Conference of Association of Physicians of India, Noida Chapter, Noida,

Dr Anshuman Srivastava Speaker at 77th Annual Conference of The Association of Physicians of India, APICON 2022. Jaipur. Chairperson in 30th Annual Conference on Diabetes (DIABCON 2022), New Delhi

Dr Abha Sharma Chairperson in 30th Annual Conference on Diabetes (DIABCON 2022), New Delhi,

Dr Alpana Raizada Faculty at 77th Annual Conference of The Association of Physicians of India, APICON 2022. Jaipur.

Dr Alpana Raizada Chairperson in 30th Annual Conference on Diabetes (DIABCON 2022), New Delhi,

### **Extension and Outreach Activities**

Dr Amitesh Aggarwal, Editor, Webmed Central, General Medicine Editorial Board

Dr Alpana Raizada, NACO

Dr Shiva Narang IEC

**Faculty Strength: 9**

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### **Medical Microbiology (VPCI)**

#### **Brief History**

Microbiology is one of the original departments that was established in 1953. Dr. de Monte, Dr. N.P Gupta, Prof Chandrashekhar, Prof H.S. Randhawa, Prof. AK Prasad, Prof. S.S. Thukral. Prof. Mridula Bose are some of the outstanding Microbiologists who headed this department and contributed richly to the pathogenicity of respiratory bacteria, especially M. tuberculosis, Fungi and viruses. The Dept. of Microbiology consists of three divisions: Microbiology Respiratory Virology and Medical Mycology. The department of Microbiology is engaged in diagnostic, research, and teaching. There is a regular M.D and PhD programme.



## Major Activities and Achievements

Research Activities were undertaken in the department including Multimodal analysis of the COVID-19-associated mucormycosis outbreak in Delhi, India indicates the convergence of clinical and environmental risk factors, *Candida auris* on apples: Diversity and clinical significance, generation of engineered viruses to combat influenza infection, advancing a liposome-based RNA vaccine delivery platform, clones expressing conserved viral sequences have been generated and the expression has been validated.

## Honours/Distinctions

Prof. Malini Shariff, DBT representative in the IBSC of INMAS and Advanced Genomics Institute and Laboratory Medicine Pvt Ltd.

Prof. Mandira Varma Basil, Executive Member, Indian Association of Mycoplasmologists Prof. Mandira Varma Basil, Member of WHO Strategic Advisory Group of Experts on In Vitro Diagnostics

Prof. Anuradha Chowdhary, Advisor, The Clinical and Laboratory Standards Institute (CLSI) Antifungal Subcommittee.

Prof. Anuradha Chowdhary, Organizing Committee member, Myco-clinics, The Medical Research Council Centre for Medical Mycology, University of Exeter, UK. 2022.

## Publications

Gavadia, R., Rasgania, J., Basil, M. V., Chauhan, V., Kumar, S., & Jakhar, K.. (2023). Synthesis of isoniazid analogs with promising antituberculosis activity and bioavailability: Biological evaluation and computational studies., *Journal of Molecular Structure*, 1283(0), 135325.

Abhimanyu, Bose, M., Giri, A., & Varma-Basil, M. (2023). Comparative Genetic Association Analysis of Human Genetic Susceptibility to Pulmonary and Lymph Node Tuberculosis, *Gene*, 14(1), 207.

Narang, A., Marras, S. A. E., Kurepina, N., Chauhan, V., Shashkina, E., et al.(2022). Ultrasensitive Detection of Multidrug-Resistant *Mycobacterium tuberculosis* Using Super Selective Primer-Based Real-Time PCR Assays, *International Journal of Molecular Sciences*, 23(2), 15752.

Sharma, V., Singh, A., Gaur, M., Rawat, D., Yadav, A., et al. (2022). Evaluating the efficacy of stool sample on Xpert MTB/RIF Ultra and its comparison with other sample types by meta-analysis for TB diagnostics., *European journal of clinical microbiology & infectious diseases*, 41(6), 893-906.

Salmanton-García, J., Au, W. Y., Hoenigl, M., Chai, L. Y. A., Badali, H., et al. (2023). The current state of laboratory mycology in Asia/Pacific: A survey from the European Confederation of Medical Mycology (ECMM) and International Society for Human and Animal Mycology (ISHAM), *Int J Antimicrob Agents*, 61(3), 106718.

Jamalian. A., Freeke, J., Chowdhary, A., de Hoog, G.S., Stielow, J.B., Meis, J. F. (2023). Fast and accurate identification of *Candida auris* by high resolution mass spectrometry, *J Fungi*, 9(2), 267.

Chowdhary, A., Singh, A., Kaur, A., Khurana, A. (2022). The emergence and worldwide spread of the species *Trichophyton indotineae* causing difficult-to-treat dermatophytosis: A new challenge in the management of dermatophytosis, *PLoS Pathog*, 18(9), e1010795.

Shivarathri, R., Jenull, S., Chauhan, M., Singh, A., Mazumdar, R., Chowdhary, A. (2022). Comparative transcriptomics reveal possible mechanisms of amphotericin B, *Antimicrob Agents Chemother*, 66(6), e0227621.

## Research Projects

ICMR, August 2019-June 2023, Development of a rapid phenotypic assay to differentiate between *Mycobacterium tuberculosis* and Nontuberculous *Mycobacteria*, 52

ICMR, April 2022 -May 2024, Development and Validation of Artificial Intelligence Tool For Screening/detection of Pulmonary TB and other lung diseases using Chest X-rays, 40

ICMR, 2020-2023, Exploration of azole resistance in *Candida tropicalis*: Detection of ERG11 gene mutations and azole resistant genotypes, 46.94

DST, 2020-2023, Genomic insights of azole and terbinafine resistance in clonal *Trichophyton mentagrophytes/interdigitale* spp. complex causing alarming difficult to treat dermatophytosis in North India", 56.89

## Seminar/Conference Presentations

Mandira Varma Basil. Biomedical waste management. Faculty Lecture on the occasion of Swatchchta Pakhwada organized by Vallabhbbhai Patel Chest Institute on 13th April, 2022

Mandira Varma Basil. Invited talk. Molecular Diagnosis of Drug Resistant TB: Challenges and Opportunities. International Conference cum CME on Novel insights into pathogenesis of Tuberculosis for development of Vaccines, Diagnostics and Therapeutics. 3rd May, 2023. Miranda House, University of Delhi

Prof anuradha Chowdhary speaker *Candida auris* epidemiology and IPC:guidelines versus practice, in 32nd International Congress of Antimicrobial Chemotherapy (ICC), Perth, Australia; 27th- 30th November 2022., International Society of Antimicrobial Chemotherapy

Prof. Anuradha Chowdhary Speaker: Opportunistic Resistant Filamentous Fungi International Society of Antimicrobial Chemotherapy 32nd International Congress of Antimicrobial Chemotherapy (ICC), Perth, Australia; 27th- 30th November 2022.

Prof. Anuradha Chowdhary Speaker: *Candida auris*: what is new? Indian Society of Medical Mycologists 14th National Conference of the Indian Society of Medical Mycologists (ISMM); Manipur, India: 22nd to 25th March 2023.

Chanchal Kumar, Kamal Shrivastava, Anupriya Singh, Varsha Chauhan, and Mandira Varma-Basil. A study of *Mycobacterium tuberculosis* invasion during macrophage infection. Delhi Chapter IAMM 6h August, 2022. (Second Price).

**Student under Exchange Program(Inbound/Outbound): 5**

**Number and percentage of students placed: 2**

**Faculty Strength: 4**

**Number of M. Phil and Ph.D. Degrees Awarded: 3**

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### **Ophthalmology (LHMC)**

#### **Brief history of the Department**

Department of Ophthalmology is an integral part of 107-year-old Lady Hardinge Medical College and Hospital, New Delhi. All types of Ocular disorders are diagnosed and treated in this Department. This Department is continuously progressing and incorporating newer developments in Ophthalmology.

#### **Major Activities and Achievements**

Delhi Ophthalmology Society Monthly Meeting organized at Lady Hardinge Medical College, New Delhi on 2nd April, 2023 National Eye Donation Fortnight celebrations at Lady Hardinge Medical College from 25th August to 8th September, 2022 Glaucoma week celebration at Lady Hardinge Medical College from 6th March to 12th March 2022.

#### **Publications**

Agarwal, R., Rana, N., Beri, S., Prakash, O. (2022). Insect wing case corneal foreign body: ASOCT-based findings, BMJ, 1(Aug 1;15(8)), e251578.

Chaudhuri, Z., Ramavat, P. (2022). The Wills Eye Manual (South Asian Edition), 1(1st edition ), Editors for book.

Chaudhuri, Z., Demer, J L. (2022 ). Imaging and Genetics in Strabismus , In: Strabismus and Amblyopia, 1(Chapter 2), p 4-18.

Chaudhuri, Z., Kataria, P., Garga, U. C., Singh, Y. (2022). Magnetic resonance imaging analysis of age-related distance esotropia in geriatric Indian subjects, Investigative Ophthalmology & Visual Science, 1(Jun 1;63(7)), 1843.

Madan, S., Chaudhuri, Z. (2022). Childhood hypertension, sixth nerve palsy, and renal artery stenosis, Oman Journal of Ophthalmology, 1(May;15(2)), 222.

Madan, S., Chaudhuri, Z. (2022). Persistent hyperplastic primary vitreous in a child with incontinentia pigmenti and infantile spasms, Oman Journal of Ophthalmology, 1(Sep;15(3)), 363.

Karthikeya, R., Chaudhuri, Z., Kataria, P., Garga, U. C., Singh Y. (2022). . Periventricular white matter changes in concomitant strabismus: A magnetic resonance neuroimaging study, Investigative Ophthalmology & Visual Science, 1(Jun 1;63(7)), 3269-A0321.

Kataria, P., Chaudhuri, Z., Garga, U.C., Singh, Y. (2022). Extraocular muscle and adnexal evaluation in anisomyopia: A high resolution magnetic resonance imaging study , Investigative Ophthalmology & Visual Science, 1(Jun 1;63(7)), 3286-A0338.

### **Seminars Organized**

Dr. Rajiv Garg , Professor of Excellence, Lady Hardinge Medical College, New Delhi , Glaucoma (Silent thief of Vision), Glaucoma Awareness, 11-03-2022

Dr. Sarita Beri, Director Professor, Lady Hardinge Medical College, New Delhi, Importance of Eye Donation, Eye Donation Awareness, 06-09-2022

Dr. Piyush Kumar R. Ramavat, Associate Professor, Lady Hardinge Medical College, New Delhi, Corneal transplantation in LHMC : Journey till date, Eye Donation Awareness, 06-09-2022

Dr. Rinky Agarwal, Assistant Professor, Lady Hardinge Medical College, New Delhi, Corneal transplantation in LHMC : Case summaries , Eye Donation Awareness, 06-09-2022

Dr. Dheeral Mohania, Scientist I, National Eye Bank, AIIMS, New Delhi, Current Scenario of Eye Donation in India , Eye Donation Awareness, 06-09-2022

### **Conferences Organized**

Delhi Ophthalmological Society Monthly Meeting, 02-04-2023.

### **Seminar/Conference Presentations(Maximum 10)**

Dr. Om Prakash, Paper presentation: Right anterior orbital retained bullet following novel suicidal attempt Delhi Ophthalmological Society Midterm Conference at Hotel Ashoka, New Delhi on 2nd -3rd April 2022.

Dr. Om Prakash, Oral paper presentation (Orbit and oculoplastic) All India Ophthalmological Society conference at Mumbai, June, 2022.

Dr. Sarita Beri, Chairperson for Session: Service doctors and general ophthalmology Judge: TP Aggarwal Trophy Co-chairperson: Retinal surgery session Chairperson- ROP session Delhi Ophthalmological Society 73rd Annual conference at New Delhi, on 7th - 9th October, 2022.

Dr. Zia Chaudhuri, Oral Presentation- Magnetic Resonance Imaging Analysis of Age-Related Distance Esotropia in geriatric Indian subject Association for Research in Vision and Ophthalmology (ARVO) ARVO Annual Meeting at Denver, Colorado, USA on 1st - 4th May, 2022.

Dr. Zia Chaudhuri Speaker : Management of age-related esotropia Moderator in the Pathology, Epidemiology and Surgery Session Oral Presentation: Clinical Registry of 81 pedigrees of South Asian origin with primary concomitant horizontal strabismus. XV Congress of International Strabismological Association Cancun, Mexico on 8th – 11th September, 2022.

Dr. Zia Chaudhuri Speaker: Registry of 85 informative south Asian pedigrees with primary concomitant strabismus: A meta-analysis 46th Ophthalmic Genetics Study Club Meeting at the Chicago Children's Hospital on 29th September, 2022.

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## **Ophthalmology (MAMC)**

### **Brief history of the Department**

Lok Nayak Jai Prakash Hospital was founded in 1936. It had a small Department of Ophthalmology amongst its various departments. On August 1, 1958, Delhi Medical College, later renamed Maulana Azad Medical College was established. Irwin Hospital & its various departments assumed teaching responsibilities and started teaching M.B.B.S. students. Postgraduate teaching was subsequently added in 1964. The government decided to upgrade the Ophthalmology department to a full-fledged institution and Guru Nanak Eye Centre was thus conceived in 1971 and speciality clinics namely Retina, Cornea, Glaucoma, Strabismus, Neuro-ophthalmology, Oculoplasty, Contact Lens and Low Vision were established. Today, there are 5 general wards & 1 private ward for patients requiring admission. There are total 212 beds with 184 beds in General wards. A total of 28 rooms are available in the private ward, of which 21 are air-conditioned and 7 are non-AC rooms.

### **Major Activities and Achievements**

Activities pertaining to Swacchta Pakhwada were organised from 1st April to 15th April, 2022. Orientation session on training of Sterile Practices in Hospital Settings is organized on 16 June 2022. Guru Nanak Eye Centre organized an awareness exercise among doctors about Monkey Pox on 2nd August, 2022.

37th Foundation Day of GNEC was celebrated on 14th March 2023 with release of legacy book. Eye Donation Fortnight were celebrated with different awareness activities between 25 Aug to 8 Sep, 2022.

### **Honours/Distinctions**

Dr. Kirti Singh is the Chief editor of Delhi Journal of Ophthalmology.

Dr. Kirti Singh received Distinguished Teachers Award, On Teachers Day celebrations Delhi Medical association DMA 4th Sept 2022.

Dr. Kirti Singh received Uttarakhand Society of Ophthalmic Sciences Gold medal, Dehradun 15th October 2022.

Prof. Subhash Dadeya was appointed as Provost MAMC, Member Day care committee By Govt of NCT of Delhi

Prof. Punita Sodhi - Ist Prize in Free Paper in Allied Ophthalmic Sciences and Optometry 73rd Annual DOS

Prof. Annu Joon - Associate Editor of Delhi Journal of Ophthalmology (DJO)

### **Publications**

Goel, R., Shah, S. (2022). Dysthyroid Optic Neuropathy and Barrett's Index - Revisiting the Cutoffs [Letter], *Clin Ophthalmol.*, 14;(16), 3751-3752.

Arora, R., Goel, R., Meher, R. (2022). Outcome of COVID-19-Associated Rhino-Orbital Mucormycosis, *JAMA Ophthalmol*, 1;140(5), 548.

Goel, R., Shah, S. (2022). Ganglion cell layer thickness - a marker for early dysthyroid optic neuropathy, *Eye (Lond)*, 36(11), 2224.

Goel, R., Arora, R., Shah, S., Chhabra, M., Kumar, J., et al. (2022). Clinico-Radiological-Pathological Correlation of Visual Loss in COVID-Associated Rhino-Orbito-Cerebral Mucormycosis, *Ophthalmic Plast Reconstr Surg.*, 01;38(3), 242-249.

Sodhi, P. K., Shaw, E., Gautam, A., Yadav, A., et al. (2022). Evaluating the Quantitative Foveal Avascular Zone and Retino-Choroidal Vessel Density Using Optical Coherence Tomography Angiography in a Healthy Indian Population, *Cureus*, 4;14(8), e27669.

Arora, R., Gupta, I., Sahu, J., Vishwanath, S., Gupta, P., Jain, P. (2022). Corneal aberrations, densitometry on scheimpflug imaging, and visual acuity after deep anterior lamellar keratoplasty, *Eur J Ophthalmol*, 28(2022 Sep ), 11206721221128863.

Arora, R., Gupta, P., Sahu, J., Jain, P., Vishwanath, S., Shroff R. (2022). Analysis of Corneal Scheimpflug Densitometry and Ocular Wavefront Aberrations Post Descemet Stripping Automated Endothelial Keratoplasty, *Eye Contact Lens*, 1;48(6)(2022 Jun ), 242-249.

Rastogi, A., Gaonker, T., Dhiman, S., Singh, K.J., Anand, K., Suresh, P. (2022). Retropupillary iris claw lens versus Gore-Tex assisted scleral fixated intraocular lens in children with large lens subluxations, *Indian J Ophthalmol*, 70(6)(2022 Jun), 2002-2009.

Goel, R., Shah S. (2022). Thyroid-Associated Peripapillary Vascular Remodelling - A Novel Area for Research? [Letter], *Clin Ophthalmol*, 12;16(2022 May ), 1475-1476.

Rajurkar K, Thakar M. (2022). Optical coherence tomography angiography features of dengue retinopathy manifesting as acute macular neuroretinopathy, branch vein vasculitis and neurosensory detachment, *Oman J Ophthalmol*, 2;16(1)(2022 Sep ), 177-179.

## **Research Projects**

Ongoing Research Project In Collaboration With Md Anderson Cancer Centre, Ongoing, Deep sequencing for ocular sebaceous carcinoma in an Indian cohort of patients, .

Completed, 2019-2023, The Indian Childhood Glaucoma Incidence Study. A multi centric collaborative study of the Indian subcontinent, .

## **Patents Filed/Granted**

Competency Based Medical Education Curriculum Teaching Sessions and Assessment Logbook for Ophthalmology

Post Graduate Log Book Senior Resident Log Book

## **Seminars Organized**

Miscellaneous (Dr. Kirti Singh, Dr. Anju Rastogi, Dr. Ritu Arora, Dr. Subhash Dadeya, Dr. Ruchi Goel, Dr. Annu Joon, Dr. Pooja Bansal, Dr. Arshi Singh and Dr. Nikhil, Professors and Senior Residents, GNEC, Multiple Ophthalmology topics, DOS Ophthalmology CME, 25-09-2022

Dr. Annu Joon, Asst. Prof. GNEC, Implementation of Low vision rehabilitation services at GNEC, World Sight Day Seminar, 12-10-2022

Dr. Ritu Arora and Dr. Parul Jain, Director Professor and Associate Professor (GNEC), Eye Donation Awareness, Eye Donation Fortnight celebration, 25-08-2022

Dr. Kirti Singh and Dr. Annu Joon, Director Professor and Associate Professor (GNEC), Gonioscopy and Perimetry, World Glaucoma Week Seminar, 04-03-2023

### **Seminar/Conference Presentations**

Dr. Kirti Singh attended and presented in - 80th Annual Conference of All India ophthalmological society, Mumbai 1-5th June 2022 and gave 8 lectures.

Dr. Ruchi Goel gave talk in 32nd Annual Conference of The Oculoplastic association of India, 11-13th November 2022, Mumbai

Prof Subhash Dadeya was appointed as - DOS Mid-term conference, Performed Live Surgery Mid term - SAO Conference

### **National/International MoUs Signed**

ALCON Phaco Development Programme

JIV-Daya Foundation Collaboration for spectacles for children

### **Other Inter-Institutional Collaboration**

Ongoing Research Project In Collaboration With Md Anderson Cancer Centre  
TITLE: Deep sequencing for ocular sebaceous carcinoma in an Indian cohort of patients  
Principal investigators: Dr Ruchi Goel, Dr Bitu Esmaeli (MD Anderson Cancer centre, USA)

### **Extension and Outreach Activities**

Dr. Kirti Singh, Director Professor worked as State Programme Officer of NPCB during the year in various community Ophthalmology Projects.

**Faculty Strength: 18**

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## Orthopaedics (LHMC)

### Brief history and Major Activities and Achievements of the Department

The Department of Orthopaedics at LHMC has 11 faculty members and 13 senior residents. The Department takes five postgraduate students every year. The services provided are 24 X 7 trauma and emergency services, Outpatient clinics and Special clinics for Hand, Spine, Sports injury, CTEV and cerebral palsy. The Department of Orthopaedics at present has 135 beds for care of admitted patients and all types of orthopaedics surgeries are done routinely. The Department organized LHMC Knee Arthroscopic Cadaveric Course” 11th March 2023.

### Publications

Gupta, A.K., Narang, A., Gupta, S., Kanojia, R. K. (2022). Bilateral Neck of Femur Fracture in a Child with Underlying Vitamin D Deficiency: A Case Report on Management and 10-Year Follow-Up., *Cureus.*, 3(14).

Tiwari, V., Sharma, P. K., Sampath Kumar, V., Poudel, R. R., Meena, S., Banjara, R. (2022). Changes in the Management of Malignant Bone Tumors in the COVID-19 Pandemic in Developing Countries., *Cureus.*, 5(14).

Sharma, A., Kamboj, K., Kumar, R., Sud, A. (2022). Tuberculosis Challenging Pathognomicity of Atraumatic Avulsion of the Lesser Trochanter for Malignancy: A Rare Case Report., *JBJS Case Connector*, 3(12).

Gupta, S., Parihar, A., Singh, S., Agarwal, A., Agarwal, S. (2022). Pediatric Osteoarticular Tuberculosis as a Diagnostic Dilemma and a Review of Literature, *Cureus.*, 3(12).

### Research Projects

2022, An observational study of patellofemoral malalignment in anterior knee pain patients.

2022, Outcome of initial closed reduction and immobilization in extra articular displaced fracture distal end radius.

2022, Correlation of clinico-radiologically suspected cases of musculoskeletal tuberculosis with tissue and molecular diagnosis.

2022, Evaluation of Risk of Radial and Interosseous Nerve Injury with Anterolateral and Posterolateral Portals on Cadaveric Elbow Specimen.

Outcome of cavus deformity by ponseti cast technique in unilateral, neglected /relapsed idiopathic congenital talipes equino varus feet in children between one to five year of age.

### Conferences Organized

LHMC Knee Arthroscopic Cadaveric Course”, 11-03-2023, Research Society Of Orthopaedics Department LHMC

**Number and percentage of students placed:** 5, 100%

**Faculty Strength:** 11

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## Orthopaedics (UCMS)

### Brief history of the Department

The Department of Orthopaedics at UCMS was established in 1987 and is renowned for exemplary work on the management of Osteoarticular tuberculosis. It also provided care to trauma patients and give evidence-backed treatment matching the global standards treatment to patients with Spine Ailments, Sports Injuries (Arthroscopic surgeries etc.), Paediatric problems, and Malignant and Benign Bone Tumours, all under one roof.

### Major Activities and Achievements

The department is working on various topics like multi-drug resistant tuberculosis and the role of novel agents for the same, tissue banking, complex trauma, and negative pressure wound therapy, to name a few. The department at present runs the Indian Spine Journal at present and aims to take it to better heights. The department has established a bone bank, which is recognized by the Government of NCT of Delhi.

### Honours/Distinctions

Dr A.K. Jain was conferred honorary fellowship of Indian Orthopaedic Association during IOACON 2022.

### Publications

Ahmad, S., Arora, R., Aggarwal, A. N., Haq, R. U., Khan, K., Tandon, A. (2022). Comparison between reliability of Schatzker's classification and CT based four quadrant classification for tibial plateau fractures., *Journal of Clinical Orthopaedics and Trauma*, 10198(32).

Aggarwal, S., Rajnish, R. K., Kumar, P., Srivastava, A., Rathor, K., Haq, R. U. (2022). Comparison of outcomes of retrograde intramedullary nailing versus locking plate fixation in distal femur fracture: A systematic review and meta- analysis of 936 patients in 16 studies, *Journal of Orthopaedics*, 36(36), 36-48.

Rajnish, R. K., Srivastava, A., Rathor, K., Haq, R. U. Aggarwal, S., et al. (2022). Does the femoral neck system provide better outcomes compared to cannulated screws fixation for the management of femoral neck fracture in young adults? A systematic review of literature and meta-analysis, *Journal of Orthopaedics*, 32(32), 52-59.

Tayal, A., Singh, N.P., Rai, S., Gupta, K., Gupta, A., Aggarwal, A.N., Saha, R., Kaur, I.R. (2022). First study on detection of cryptic resistance to linezolid among clinical isolates of methicillin resistant Staphylococcus aureus from India, *Indian J Med Microbiol.*, 40(3), 384-388.

Raj, Y. R., Srivastava, A., Aggarwal, A., Haq, R. U. (2022). Assessment of usefulness of CT scan in AO classification of intertrochanteric fractures: A prospective observational study., *Indian Journal of Orthopaedics*, 56(56), 392-98.

Gupta, S., Malhotra, R., Srivastava, A., Arora, R., Aggarwal, A. N., Mishra, P. (2022). Inter and intra-observer variation of Schatzker classification of tibial plateau fractures and morphological characteristics of each fracture subtype on computed tomography scan, *Journal of Orthopaedic Traumatology and Rehabilitation*, 14(1), 18-23.

Jat, S. K., Srivastava, A., Malhotra, R., Chadha, M., Tandon, A., Jain, A. K. (2023). Prevalence of lumbosacral transitional vertebra in patients with chronic low back pain: a descriptive cross-sectional study, *American Journal of Neurodegenerative Medicines*, 12(3), 89-96.

Khan, A. M., Patra, S., Jain, A.K., Madhu, S.V., Saxena, A., Aggarwal, A., et al. (2022). Development and implementation of a sustainable COVID 19 training package for healthcare workers: Experience from a teaching hospital of North India., *Journal of Family Medicine and Primary Care*, 11(11), 5345-50.

Saurav, S., Aggarwal, A. N., Shahi, P., Kamal, S., Bansal, K., Singla, S. (2022). Efficacy of Single Injection of Platelet-Rich Plasma in Shoulder Impingement Syndrome, *Cureus*, 14(6), e25727.

Shekhar, H., Srivastava, A., Rajnish, R. K., Bhatt, S., Jain, A. K., Haq, R. U. (2022). Clinical outcome and computer tomography based tunnel placement evaluation following arthroscopic anteromedial portal anterior cruciate ligament reconstruction in non-athletic population, *Int J Burn Trauma*, 12(6), 232-40.

### **Seminars Organized**

Several eminent faculty members and leading Orthopaedic surgeons from various medical colleges and institutes, MS Orthopaedics and above, Various aspects of Trauma Around knee, Knee Trauma Symposium, 19-03-2023

### **Conferences Organized**

Cadaveric Workshop on Shoulder Arthroscopy during Annual Conference of Delhi Orthopaedic Association, 04-11-2022, Delhi Orthopaedic Association

### **Seminar/Conference Presentations**

Dr Aditya N. Aggarwal, invited as Faculty in Cadaveric Workshop on Shoulder Arthroscopy during Annual Conference of DOA at UCMS and GTBH on 4th November 2022. 2

Dr Amit Srivastava, invited as faculty, and part of Organising team DOACON 2022. 2. Organising Secretary and Faculty in Cadaveric Workshop on Shoulder Arthroscopy during Annual Conference of DOA at UCMS and GTBH on 4th November 2022.

Dr. Rajesh Arora, invited as Faculty in Cadaveric Workshop on Shoulder Arthroscopy during Annual Conference of DOA at UCMS and GTBH on 4th November 2022.

Dr Rakesh Malhotra, invited as Faculty in Cadaveric Workshop on Shoulder Arthroscopy during Annual Conference of DOA at UCMS and GTBH on 4th November 2022.

Dr Rakesh Sehrawat attended 19th Annual Conference of Indian Arthroscopy Society, IASCON 2022 in Coimbatore from 15th September 2022 to 17th September 2022.

Dr Abdul Majeed was Faculty in DOA Knee Trauma Symposium at UCMS and GTBH on 19th March 2023.

**Faculty Strength: 8** (3 Director Professors, 5 Assistant Professors)

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## Paediatrics (MAMC)

### Honours/Distinctions

Fellowship of Indian Academy Of Pediatrics awarded to Dr. Anurag Agarwal (Professor, Pediatrics).

### Publications

Juneja, M. (2022). Barriers Impacting the Help-Seeking Pathway for an Autism Diagnosis in Urban North India: A Mixed Methods Study, *Autism Dev Disord*, 4(52), 1778-1788.

Jhamb, U. (2023). Severity and mortality associated with COVID-19 among children hospitalised in tertiary care centres in India: a cohort study, *Lancet*, 13(13), 1-13.

Rajeshwari, K (2022). Assesment of Liver Dysfunction using combination biomarkers in children living with HIV infection, *Journal of Pediatric Research*, 3(20), 218-223.

Kapoor, S. (2022). Genotype-phenotype spectrum of 130 unrelated Indian families with Mucopolysaccharidosis type II, *Eur J Med Genet*, (3)(65), 3.

Mantan, M. (2022). SARS-CoV-2 infection in children with chronic kidney disease. *Pediatric Nephrology*, (1)(5), 849-5.

Mishra, D. (2022). Effect of concomitant tuberculosis infection on COVID-19 disease in children, *Trop Pediatr*, (4)(68), 4, Many

Dabas, A. (2022). Ionized Blood Magnesium in Sick Children: An Overlooked Electrolyte, *Trop Pediatr*, (2)(68), PMID 35265997, Many

### Research Projects

MAMC, 2022-23, Impact of high dose oral Folinic Acid on language development in children with Autism Spectrum Disorder : A Double Blind Randomised Control Trial.

GNTCD under the scheme “Strengthening of Medical Research”, 2022-23, Effectiveness of High Dose Folinic Acid on Language Development in Children with Autism Spectrum Disorder, A Double Blinded Randomized Control Study.

ICMR (Indian Council of Medical Research), 2022-23, “National Registry for Rare and other inherited disorders”.

Delhi Government, 2022-23, Serosurvey of SARSCOV2 antibodies in children & adolescents with renal disorders.

ICMR (Indian Council of Medical Research), 2022-23, Effect of Daily Vitamin D and Calcium Supplementation on Serum Vitamin D and Calcium Levels in Children with Epilepsy Receiving Sodium Valproate Monotherapy: A Randomized Controlled Trial.

### Seminars Organized

Dr. M. Juneja, Director Professor & Head, Global Developmental Delay- Demystified for Pediatricians, IAP-Pedicon, 19-03-2022

Dr. A. Agarwal, Professor, Tuberculosis, NTEP, 06-03-2022

Dr. A. Agarwal, Professor, Complementary Feeding, Infant Feeding, 18-11-2022

Dr. P.K. Sahi, Associate Professor, Ewings Sarcorma, IAP monthly meeting, 20-10-2022

Dr. P.K. Sahi, Associate Professor, SAANS Training, SAANS, 16-09-2022

### **Conferences Organized**

Global Developmental Delay- Demystified for Pediatricians -Pedicon, 19-03-2022, IAP

NTEP, 16-03-2022, IAP

Complementary Feeding, 18-11-2022, IAP

IAP Monthly Meeting, 20-10-2022, IAP

SAANS Training, 16-09-2022, GNCT of Delhi

### **Seminar/Conference Presentations**

Pre-conference Workshop on 'Global Developmental Delay- Demystified for Pediatricians' was organised in PEDICON 2022 on 19/3/2022 with Dr. Monica Juneja as National Convener

A Symposium on NTEP was held on 6.3.22 at Gangaram Hospital with Dr. ANURAG AGARWAL\_in chair as Convener.

A Symposium on NTEP was held on 17.9.22 at MAMC with Dr. MONICA JUNEJA\_in chair as Convener.

A Symposium on COMPLEMENTARY FEEDING was held on 18.11.22 at MAMC with Dr. MONICA JUNEJA\_in chair as Convener

Dr. P.K. Sahi Conducted the IAP monthly meet under the guidance of Dr Monica Juneja on Ewings sarcoma, 20.10.2022 at MAMC

Dr. P.K. Sahi Conducted the SAANS training in 16.09.2022 at MAMC

### **Faculty Strength: 17**

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## **Paediatrics (UCMS)**

### **Brief history of the Department**

The department of Pediatrics UCMS was started in the year 1988. Currently is boasts of a 200 bedded department with state of art Pediatric and Neonatal Intensive Care Unit. Actively participates in all government programs including World Breast Feeding Weeks, World Diarrhea control week, Janani Suraksha Yojna and MR Campaign.

### **Major Activities and Achievements**

Dr. Piyush Gupta was selected and appointed as the Principal of University College of Medical Sciences in July 2022. Dr. Dheeraj Shah was selected by Appointment Committee of Cabinet (ACC) as the Director of

National Institute of Health & Family Welfare, an apex technical institute and think tank for the promotion of health and family welfare programs in the country. The Department of Pediatrics organized a 5 day International Conference of Emergency Medicine; 9th EMPART and 5th EPICON 2023 at UCMS and GTB Hospital. An Out born Neonatal Intensive Care Unit services for Extramural neonates was started in September 2022 on 3rd Floor of MCH block, Pvt side.

### **Honours/Distinctions**

Dr Piyush Gupta was awarded “Outstanding Asian Pediatrician Award” by Asia Pacific Pediatric Association in 2022.

Dr Piyush Gupta was conferred with “Fellowship of Royal College of Paediatrics and Child Health (FRCPCH)”, London, in 2023.

Dr. Anju Aggarwal became · Member, Multidisciplinary Board of Disability Certification (North East Delhi); Member, Multidisciplinary Board of Disability Certification (IBHAS) ·

Dr Dheeraj Shah was awarded the prestigious Fellowship of National Academy of Medical Sciences (FAMS) for the year 2022.

Dr Dheeraj Shah was selected by Appointment Committee of Cabinet (ACC) as the Director of National Institute of Health & Family Welfare.

### **Publications**

Samota, P., Singh, A., Aggarwal, A., Malhotra, R. (2022). Sleep Disorders and Quality of Life in Children with Cerebral Palsy, *Indian J of Pediatrics*, 6(90), 560-565.

Arunkumar, M., Aggarwal, A., Singh, A., Thakur, R., Singh, N. P., Batra, P., Malhotra, R. (2022). Viral etiology in acute encephalitic syndrome in North Indian Children, *J clin immunol Microbiol*, 2(3), 1-10.

Verma, S. K., Shah, D., Singh, A., Singh, P. K., Das, S., Gupta, P. (2023). Immunogenicity of measles-rubella vaccine administered under India’s Universal Immunization Programme in the context of measles–rubella elimination goal: A longitudinal study, *Ind J of Medical Research*, 4(157), 250-258.

Narang, M., Shah D. (2022). Oral lactase for infantile colic: a randomized double-blind placebo-controlled trial, *BMC Pediatrics*, 1(22), 1-8.

Saha, D., Mehndiratta, M., Aaradhana, Shah, D., Gupta, P. (2022). Oxidative Stress, Mitochondrial Dysfunction, and Premature Ageing in Severe Acute Malnutrition in Under-Five Children, *Indian J of Pediatrics*, 6(89), 558-562.

Singh, N., Shah, D., Singh, T., Saha, R., Das, S., Datt, S., Gupta, P. (2022). Aetiology of hospital-acquired diarrhoea in under-five children from an urban hospital in East Delhi, India, *Indian J of Medical Research*, 4-5(156), 624.

Thuluva, S., Paradkar, V., Gunneri, S., Yerroju, V., Mogulla, R. R., et al. (2022). Safety, tolerability and immunogenicity of Biological E’s CORBEVAX™ vaccine in children and adolescents: A prospective, randomised, double-blind, placebo controlled, phase-2/3 study, *Vaccine*, 49(40), 7130-7140.

Saluja, R. K., Dewan, P., Gomber, S., Madhu, S. V., Bhat, S., Gupta, P. (2022). Low dose depot oral vitamin D3v. daily oral vitamin D3 for treating nutritional rickets: a randomised clinical trial, *British Journal of Nutrition*, 12(127), 1778-1783.

Khairwa, A., Kotru, M., Dewan, P., Narang, S. (2022). Morphological markers of chromosomal instability in bone marrow aspiration and trephine biopsy of acute leukemia and myelodysplastic syndrome, *Environmental and Molecular Mutagenesis*, 8-9(63), 418-422.

### **Research Projects**

MRU, 2023/3 years, Effect of Anti-retroviral Therapy on Immunosenescence in Children Living with HIV, Rs. 1,40,000/

ICMR, 2022/3 years, Role of Levocarnitine supplementation in Recovery of Children with Complicated Severe Acute Malnutrition: A Randomized Double blind Placebo Controlled Trial, Rs. 70,70,623/

MRU, 2022/6 months, Point of care BNP estimation as marker of cardiac disease in pediatric patients, Rs. 1,20,000/

Biologicals E, 2022/6 months, A prospective multicentre phase-IV clinical study to evaluate the safety of single intramuscular dose of Biological E's typhoid conjugate vaccine in 6 months to 45 years old participants and its impact on measles immunogenicity when co-administered with licensed Measles-Rubella (MR) vaccine in a subset of 9-12 months old infants, Rs. 6,00,000/

Biologicals E, 2022/till now, A single blind randomised active-controlled phase-III study to evaluate immunogenicity, safety, tolerability of a candidate 14-valent pneumococcal polysaccharide conjugate vaccine administered to 6-8 weeks old Indian infants at 6 weeks, 14 weeks and 9 months of age (2+1 alternative dosing schedule)., Rs. 3,50,000/

### **Seminars Organized**

Dr Harish Pemde, Director Professor, Department of Pediatrics, LHMC & KSCH, New Delhi, Management of a Child/Adolescent with suspected sexual abuse, Child Abuse, 06-12-2022

Dr Rashmi Gupta, Assistant Professor, Awareness of Family Planning among Patients attendants, Family Planning, 07-10-2022

### **Conferences Organized**

9th Emergency Pediatrics Advances and Recent Trends (EMPART) & 5th Emergency Pediatrics and Injuries Congress (EPICON) 2023, 01-02-2023, INDUSEM & Academic College of Emergency Experts in India

### **Seminar/Conference Presentations**

Dr Piyush Gupta, Keynote Address. Front of Pack Label on Junk Foods: A Policy. Indian Academy of Pediatrics, South Pedicon, Belagavi, Karnataka. 15th October 2022.

Dr Anju Aggarwal participated in State Workshop for MR elimination. Organized by WHO and Government of India on 22/11/22. Delhi Secretariat.

Dr Dheeraj Shah, Delegate and Fellow Awardee in the 62nd Annual Conference of National Academy of Medical Sciences, NAMSCON-2022, Jaipur, 11-13 November 2022

Dr Aaradhana, Faculty in Webinar on gender dysphoria in children and adolescent organized by AHA in collaboration with Gangaram Hospital, February 2023

Dr Prerna Batra, Council member for convocation of Academic College of Emergency Experts at EM India, Goa, from on 8th October 2022.

Dr Pooja Dewan was invited in National Hematology Update, AIIMS, Delhi, 3-5 March 2023

Dr Piyush Gupta, AOCN Oration. State of Education and Research in Pediatric Neurology. Association of Child Neurologists. Pune, Maharashtra. 3 February 2023.

Dr Deepika Harit Delivered a lecture on Insulin therapy in T1DM at Stand Tall Meeting at Swami Dayanand Hospital, Delhi, 25/8/2022

Dr Rajesh Meena attended workshop on “Dissemination of SOPs for management of SAM children in Admission and Non-admission Facilities in Delhi” organized by the Directorate of Family Welfare, GNCT of Delhi.

Dr Sumaira Khalil presented E-Poster on paper titled “Factors Affecting Publication of Pediatric Intervention Trials” in the 9th International Congress on Peer Review and Scientific Publication held in Chicago, September 2022

### **Other Inter-Institutional Collaboration**

Dr Dheeraj Shah was selected as a member of World Health Organization (WHO) Guideline Development Group for the Consolidated Recommendations for the Management of Common Childhood Illness: Evidence for update of Pocket Book & IMCI

Dr Dheeraj Shah was Member of Expert Committee of Food Standards and Safety Authority of India (FSSAI)

Dr P Dewan was invited to participate as expert and writing group member in the development of “Guidelines for Nutritional Anemias in Children” by the Pediatric Hematology-Oncology Chapter and Nutrition Chapter of the Indian Academy of Pediatrics: A multi-institutional national collaborative effort

Dr A Singh was invited as a member of district task force on immunization regarding preparedness activities for intensified Mission Indradhanush (IM) 4.0 under the chairmanship of District magistrate, Shahdara on 22 nd February 2022.

Dr S Khalil was nominated by Principal UCMS to attend 5 days training program on “Gender Based Violence and Human Rights for Promoting Women Health” held at National Institute of Health & Family Welfare, New Delhi from 13th -17th February 2023.

### **Faculty Strength: 14**

Director Professor:3, Professor:5, Associate Professor:4, Assistant Professor:2

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## Pathology (UCMS)

### Brief history of the Department

The Department of Pathology was started way back in early 1970s in the Emergency Block of Safdarjung Hospital under the able leadership of Dr. D. N. Gupta who was also the Principal of the College. The college department had a modest beginning, having only few faculty members including Dr. Indumati and Dr. Das. The MD Pathology course was started in 1984. The Department now has well developed sections - Histopathology, Cytopathology, Haematology, Blood Bank, Molecular Pathology and Clinical Pathology including immunology. The lab is also a nodal centre for performing autopsy from East Delhi.

### Major Activities and Achievements

The department is actively involved in teaching MBBS and MD students; paramedical- MLT and BSc Physiotherapy students; in providing diagnostic services and patient care as well as in research activities. The facilities available in histopathology section include routine histopathology with special stains, immunohistochemistry, frozen section, immunofluorescence for skin and kidney specimens and autopsy services. Haematology laboratory services include complete haemogram and peripheral smear, bone marrow aspiration and biopsy, special investigations for workup of patients with hemolytic anemias, (Hb electrophoresis, HPLC etc.), nutritional anemias, coagulation disorders, leukemias and flow cytometry. The services available in cytopathology laboratory include fine needle aspiration cytology (including USG & CT guided), gynecologic cytology, fluid cytology for malignant cells, sputum smears examination and immunocytochemistry. The Blood bank is NABH accredited and recognized as Regional Blood Transfusion Centre (RBTC), East Zone of Delhi. Blood bank is also computerised centre. Immunology lab has been established for providing autoimmune and immunodeficiency workup,

### Honours/Distinctions

Dr. S Sharma, Member, Advisory Committee, National Medical Library.

Dr. S Sharma, Member, PG expert group, Medical Assessment and Rating board, National Medical Commission.

Dr. S Sharma, Secretary, Dermatopathology Society of India.

### Publications

Singal, A., Bisherwal, K., Agrawal, S., Bhat, S., & Diwaker, P. (2022). Clinico-Epidemiological Profile and Management Outcome of Subungual Digital Glomus Tumor- Indian Experience, *Dermatologic Therapy*, 35(10), e15745.

Singh, A., Diwaker, P., Agrawal, A., Agarwal, A., Rohatgi, J., Singh, R., Das, GK., Sahoo, PK., & Arora, VK. (2022). Spectral Domain Optical Coherence Tomography Findings in Vision-Threatening Rhino-Orbital Cerebral Mucor Mycosis- A Prospective Analysis, *Diagnostics*, 12(12), 3098.

Tanveer, N., Dixit, S., Jain, P., Rani, P., Gautum, HV., & Naskar, S. (2022). Static Smartphone Images Supplemented by Videoconferencing for Breast Telepathology, *Clinical Breast Cancer*, 22(5), 455-461.



Khairwa, A., Kotru, M., Dewan, P., & Narang, S. (2022). Morphological Markers of Chromosomal Instability in Bone Marrow Aspiration and Trephine Biopsy of Acute Leukaemia and Myelodysplastic Syndrome, *Environmental and Molecular Mutagenesis*, 63(8-9), 418-422.

Dixit, S., Jha, T., Gupta, R., Shah, D., Dayal, N., & Kotru, M. (2022). Practical Approach to the Interpretation of Complete Blood Count Reports and Histograms., *Indian Pediatrics*, 59(6), 485–491.

Agrawal, T., Dewan, P., Gomber, S., Agarwal, R., Sharma, S., & Kotru, M. (2022). Optimum Dose of Oral Folic Acid Supplementation in Transfusion-Dependent Thalassemia: A Randomized Controlled Trial, *Journal of Tropical Pediatrics*, 68(6), fmac087.

Agrawal, A., Jha, T., Gogoi, P., Diwaker, P., Goel, A., Khan, AM., & Saxena, AK. (2022). Effect of Convalescent Plasma Therapy on Mortality in Moderate-to-Severely Ill COVID-19 Patients, *Transfusion and Apheresis Science*, 61(6), 103455.

Singh, L., Kumari, K., & Sharma, S. (2023). Vulvar Dermatoses-Can a Pattern-Based Approach Improve Diagnostic Yield?, *Journal of Cutaneous Pathology*, 50(4), 364-370.

Dixit, S., Jain, P., Jain, S., Gupta, R., Grover, C., & Sharma, S. (2023). Introducing a Novel Histopathological Scoring System to Assess Disease Activity and Chronicity in Cutaneous Lichen Planus: A Proposal., *Journal of Cutaneous Pathology*, 50(10), 922-928.

Jain P, Wadhwa N, Diwaker P, Joshi MK, Mishra K. (2023). Alteration in key oncoprotein expression in gastric adenocarcinoma—An immunohistochemical study, *Journal of Cancer Research and Therapeutics*, 19(S1), S355-60.

### **Research Projects**

MRU, ICMR, April 2022 to 2024, Peripheral blood T regulatory cells and Th1 and Th2 and Th17 immune milieu in antenatal females with a history of recurrent pregnancy loss, Rs. 2 Lakh.

### **Conferences Organized**

Conducted qualifying rounds of Hematology quiz in HEMATOCON 2022, 01-06-2022.

### **Seminar/Conference Presentations**

Sonal S. 25th Annual Conference of Dermatopathology Society of India (DSI) from 18th- 20th November, 2022 organized by Department of Histopathology, PGIMER, Chandigarh. Nail Pathology.

Sonal S. CME on “Uterine & cervical neoplasm: Evolving Concepts and Challenges.”. APCON 2022. Endocervical adenocarcinoma - Evolving concepts and diagnostic challenges. Bangalore 30th November-4th December 2022.

Kotru M. Invited Faculty for HEMATOCON 2022 held on 3-6th November 2022 to speak on ‘ HPLC chromatogram interpretation’

Kotru M. Speaker at National hematology update XII on 3 march 2023 – “Debate on digital morphology vs microscopy.”

Diwaker P. Presented poster (PP105) titled “The Paris System for Reporting Urine Cytology revisited in Indian Scenario: A Pilot Study” in CYTOCON 2022 held in North Bengal Medical College, Siliguri, West Bengal from 4th-7th Nov. 2022.

Diwaker P. Presented poster titled “Expression of immune checkpoint regulator Cytotoxic T Lymphocyte Antigen 4 (CTLA-4) in invasive ductal carcinoma breast” 15th Annual Meeting of the Korean Society of Medical Oncology & 2022 International Conference (KSMO 2022) (Virtually Attended) held at Seoul, Korea, 1-2 September 2022.

Nakra T. Presented poster ‘Histological assessment and scoring in different phenotypes of psoriasis: A clinicopathological study’ in 25th Annual Conference of Dermatopathology Society of India (DSI) from 18th- 20th November, 2022 organised by Department of Histopathology, PGIMER, Chandigarh.

Jain P. Presented a free oral paper titled “ Navigating through complexities of bullous presentation of cutaneous lichen planus” in the 25th Annual conference Dermatopathology Society of India held at PGIMER Chandigarh on 19-20 November 2022.

Kumari K. Presented poster ‘Cerebrospinal hemoophagocytic lymphohistiocytosis: Stalking the diagnosis’ in CYTOCON 2022; held in North Bengal Medical College, Siliguri, West Bengal from 4th-7th Nov. 2022.

Singh K. Presented poster ‘ Congenital unilateral hypoplasia of kidney with mesonephric remnants: an extremely rare case report’ in 35th Annual Conference of DAPCON 2022, AIIMS, New Delhi on 31st July 2022.

### **Other Inter-Institutional Collaboration**

PG students are sent to R&R hospital, Delhi for Autopsy training for 15 days every year

### **Student under Exchange Program(Inbound/Outbound)**

One student came from Russia for Observership in Hematology under the aegis of EAFO Hematology Forum, 10-24th December, 2022

### **Number and percentage of students placed**

Every year around 15 post graduate students pass MD Pathology and all get placed as Senior residents or other appropriate jobs (100% placement)

### **Extension and Outreach Activities**

Department organized approximately 200 blood donation camps and carried out 5000 donations this year through camps, provides blood to surrounding hospitals.

Special round the clock services during COVID & Dengue outbreaks

### **Faculty Strength: 13**

Director Professor- 2, Professor-3, Assistant Professor- 8

## Pharmacology (UCMS)

### Brief history

The department of pharmacology was established as part of University College of Medical Sciences, Delhi which was founded in 1971 as a constituent college of University of Delhi. The department's thrust areas of research are neuro-pharmacology of stress, pain and convulsive disorder; neurobehavioral aspects of drug abuse, opioid and indigenous drug pharmacology and Clinical pharmacology.

### Major Activities and Achievements

New teaching and learning activities were performed in the clinical and experimental pharmacology. The emphasis was laid on problem based learning and developing prescribing skills among MBBS students. Clinical scenarios were provided for role play with objective to improve the communication skills of MBBS students for optimal use of the prescribed medications. Small group discussions were conducted to understand the treatment of common diseases like hypertension, angina, diabetes mellitus, typhoid, malaria, tuberculosis, etc. AETCOM sessions on fundamentals of communications and bioethics were designed with special reference to patient autonomy in health care decision making.

### Publications

Gupta, R., Ghosh, R., Bhatia, M. S., Tripathi, A. K., Gupta, L. K. (2023). Effect of milnacipran on brain derived neurotrophic factor and oxidative stress biomarkers in patients of major depressive disorder, *Acta Neurobiol Exp.*, 83(5), 57-62.

Gulfishan, S., Halder, S., Kar, R., Srivastava, S., Gupta, R. (2022). Association of serotonin transporter gene polymorphism with efficacy of the antidepressant drugs sertraline and mirtazapine in newly diagnosed patients with major depressive disorders, *Hum Psychopharmacol*, 37(4), e2833.

Kumar, H., Gupta, R. (2022). Anti-Disialoganglioside-2 Monoclonal Antibodies as an Emerging Therapeutic Approach in Treatment of High-Risk Neuroblastoma., *Curr Pharmacol Rep*, 8(5), 112-120.

Garg, Y., Kumar, K., Kumar, A., Gupta, A., Agnihotri, D., Kumar, S. (2023). Prevalence and Pattern of Self-Medication Practices in Patients at a Tertiary Care Centre: A Cross-Sectional Study., *Int J Tox Pharm Res.*, 13(1), 21-37.

Garg, Y., Kumar, K., Kumar, A. (2022). Drug utilization pattern in cardiovascular disease at teaching hospital, *J Cardio Dis Res.*, 13(8), 882-886.

Gautam, S. R., Jain, S., Rana, P., Banerjee, B., Kumari, P. (2022). Protective effect of N-acetylcysteine on Dipentyl phthalate (DPeP) induced cognitive dysfunction and brain oxidative stress in mice., *Pharm Biomed Res.*, 8(3), 179-188.

Grover, S., Jain, S. (2023). Current trends in the animal models for screening of nootropic agents: A Systematic Review., *Cur Rev ClinExp Pharmacol.*, 18(3), 255-69.

Grover, S., Jain, S.. (2022). Aducanumab: a review of the first approved amyloid-targeting antibody for Alzheimer's disease., *Drug Ther Perspect.*, 38(10), 443-454.

Gupta R, Arockiaraj N, Bhatia MS. . (2022). Etifoxine for the Treatment of Anxiety Disorders., *Del Psych J*, 25(2), 282-285.

Halder S, Kar R, Chakraborty S, Bhattacharya SK, Banerjee BD.. (2022). A Comparative Study of Cadmium Levels in Brain Tissue of Mice Observed Over Two Generations after Exposure During their Perinatal Period: Modulation by Quercetin., *J Biomed Res Environ*, 3(4), 327-331.

**Faculty Strength: 7**

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## **Pharmacology (MAMC)**

### **Brief history of the Department**

The Pharmacology Department was established in 1959 and has been involved in the education of healthcare professionals, including Medical (MBBS), Dental (BDS), and B.Sc Nursing students, as well as training laboratory technology personnel. The department conducts training for doctors on the rational use of medicines. In addition to its commitment to education, the department plays an active role in clinical care through pharmacovigilance, ensuring the safe and effective use of medications.

### **Major Activities and Achievements**

The Pharmacology Department implemented diverse academic programs for MBBS, Postgraduate, dental (BDS), and B.Sc Nursing students, introducing a revamped MBBS curriculum featuring two one-month elective postings. Continuous evaluations ensure the curriculum's relevance. Training sessions were organized to educate doctors and nurses on safe medicine usage. The 3rd CNE CME for nurses trained 104 participants, while the 9th CME for doctors focused on patient safety, drawing 65 attendees. Additionally, a workshop on Medicines in Public Health Facilities engaged 50 clinicians from Delhi Government hospitals.

In community outreach efforts, the Department collaborated with the Community Medicine Department to enhance drug safety awareness, reaching 2240 individuals through talks, posters, and street plays. Furthermore, the inaugural National Pharmacovigilance Week involved 700 participants, significantly boosting drug safety awareness. Recognized as an Adverse Drug Reaction monitoring centre under India's National Pharmacovigilance Program, the Department reported 4057 cases.

### **Honours/Distinctions**

Dr Vandana Roy received Chikitsak Ratan award by Indian Medical Association, South Delhi Branch, Doctors day, July 31st 2022.

Dr Vandana Roy received Scroll of Honour from Classsic (NGO promoting Music, dance & culture), Agartala, Tripura December 2023.

Dr Vandana Roy was elected as Vice President of Society of Pharmacovigilance of India.

## **Publications**

Anand, A., Kadian, T., Shetty, M. K., Gupta, A. (2022). Explainable AI decision model for ECG data of cardiac disorders, *Biomedical Signal Processing and Control*, 10(75), 103584, 25

Agrawal, A., Chauhan, A., Shetty, M. K., Gupta, M. Gupta, A. (2022). ECG-iCOVIDNet: Interpretable AI model to identify changes in the ECG signals of post-COVID subjects, *Computers in Biology and Medicine*, 1(146), 105540.

Chandel, S., Rai, G., Tayal, V., Rai, N., Singhal, S., Sharma, P. (2022). A proposed scoring system for fast triage of COVID-19 patients using basic clinical parameters: Simple Clinical Parameter (SCIP) Score., *Perspectives in Medical Research*, 1(10), 54-57.

Gahlot, R., Kumar, S., Garg, S., Chawla, S., Kalra, B. S. (2023). Efficacy and safety of Saroglitazar and Fenofibrate in the treatment of diabetic dyslipidaemia: A pilot study, *Indian Journal of Physiology and Pharmacology*, 1(67), 15-2.

Maheshwari, N., Roy, V. (2022). In search for a panacea for coronavirus disease-19: Analysis of ongoing clinical trials for the management of coronavirus disease-19 pandemic in India, *Indian Journal of Pharmacology*, 1(54), 258.

Maheshwari, N., Tayal V. (2022). Novel Class of Central Renin Angiotensin Aldosterone System Inhibitor: Firibastat., *Perspectives in Medical Research*, 1(10), 3-7.

Shetty, M. K., Kunal, S., Girish, M. P., Qamar, A., Arora, S., Hendrickson, M., et al. (2022). Machine learning based model for risk prediction after ST-Elevation myocardial infarction: Insights from the North India ST elevation myocardial infarction (NORIN-STEMI) registry., *International Journal of Cardiology*, 1(362), 6-13.

Roy, V., Tayal V., Haque, I., Ahmad, J., Verma, K., Singh, V. (2022). Pharmacovigilance activities in Maulana Azad Medical College & Associated Hospitals: A step towards Patient safety., *MAMC Journal of Medical Sciences*, 1(9), 64.

Shah, B., Kunal, S., Bansal, A., Jain, J., Poundrik, S., Shetty, M.K. et al. (2022). Heart rate variability as a marker of cardiovascular dysautonomia in post-COVID-19 syndrome using artificial intelligence., *Indian Pacing and Electrophysiology Journal*, 2(22), 70-76.

Singhal, S., Bansal, S., Negi, A., Kalra, B. S., Gupta, L., Garg, S., Sural, S., Kapoor, S., Chawla, S. (2022). Drug Utilization Pattern in the Treatment of Severe Acute Respiratory Syndrome Coronavirus-2 (SARS CoV-2) Patients at Dedicated COVID Tertiary Care Teaching Hospital: An Observational Study., *MAMC Journal of Medical Sciences*, 3(8), 218.

## **Research Projects**

MAMC, 2022, To evaluate co morbid depression in newly diagnosed patients with tuberculosis in the DOTS clinic of LN Hospital, 5 Lakh.

MAMC, 2022, To study neuroprotective effect of Zingiber officinale (Ginger) in Aluminium Chloride induced Alzheimer's disease in rat model, 3 Lakh.

MAMC, 2022, Evaluation of selected biomarkers for depression in subjects with type 2 diabetes mellitus.

MAMC, 2022, To evaluate the protective effect of Azadirachta indica leaf extract on chemically induced colon cancer in rats, 3 Lakh.

MAMC, 2022, Impact of Concomitant drug intake on outcomes in patients with COVID 19: Risk scoring method to predicting mortality and ICU admission in tertiary care hospital, New Delhi.

### **Conferences Organized**

Workshop on Improving Availability, Rational and safe use of Medicines in Public Health Facilities in Delhi, 28-03-2023, MAMC

Third CNE workshop on 'Pharmacovigilance for patient safety Nurses, 21-09-2022, MAMC

Ninth Workshop on 'Pharmacovigilance for patient safety' for doctors, 23-09-2022, MAMC

National Pharmacovigilance Week - 17th Sept to 26th Sept 2022, 17-09-2022, MAMC & PVPI

### **Seminar/Conference Presentations**

Dr. Vandana Roy was invited speaker, Workshop on Good Clinical Practices,. Organized by Department of Pharmacology, Jawaharlal Nehru Medical college, Aligarh Muslim University, held on December 1st-2nd December 2022

Dr. Vandana Roy delivered a distinguished guest lecture -Antimicrobial stewardship: Steering a path towards saving antimicrobials. Was organized by Hamdard Institute of Medical Sciences & Research, Jamia Hamdard University, New Delhi HIMSAR, held on November 23rd 2022

Dr. Vandana Roy was Chairperson in International Conference on Pharmacovigilance for Safety of Medicines. Organized by Society for Pharmacovigilance of India. Held on September 17-18th 2022,

Dr. Manu Kumar attended and delivered a talk (AI for Pharmacovigilance) in workshop on "AI in Healthcare" workshop. Held from 6th to 10th June 2022, Organized by Infosys Centre for Artificial Intelligence, IIIT-Delhi.

Dr. Manu Kumar attended and delivered a talk (Life-cycle of Artificial Intelligence) in 48th ACBI Conference and Workshop "Applied Artificial Intelligence(AI) Research" organized by Association of Clinical Biochemists of India held on 23rd Nov, 2022.

Dr. Vandana Roy was Chairperson in Symposium National Vector Disease Control Program, Organized by Government of India, World Health Organization & Rajasthan State Health Institute of Agriculture & Management held on July 28th 2022

Dr. Niket Rai attended and delivered a talk ('Future of Diabetes – Are we near cure?') in International CME (online) on 'Current therapeutic approaches to diabetes Mellitus – A comprehensive update' organized by Department of pharmacology, Gadag Institute of medical sciences, Karnataka, India held on 9 th June, 2022.

**Faculty Strength: 12**

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## Physiology (LHMC)

### Brief history of the Department

The Department of Physiology is involved in the teaching of Undergraduate (MBBS) and Postgraduate (MD) Physiology. The department is also involved in teaching the students pursuing BSc nursing from the College of Nursing, LHMC & Associated Hospitals, and the Post Trauma Training course (PTT) conducted by LHMC & Associated Hospitals. The Department has established the Yoga and Naturopathy OPD and Lifestyle Intervention Centre in collaboration with CCRYN, Department of AYUSH under the Ministry of Health and Family Welfare. The Department has Pulmonary, Autonomic, Neurophysiology laboratory and provides services for patient care.

### Major Activities and Achievements

Department has successfully Organized the 2nd Online All India Physiology Festival on 20th and 22nd September, 2022 in which 45 Medical College Participated. The department also conducted the 7th Intercollegiate Undergraduate Physiology Quiz Competition at All India level through online mode from 27th October to 4th November 2022 with 50 participating teams from across India.

### Publications

Jangpangi, D., Mondal, S., Bandhu, R., Kataria, D., Bhattacharjee, J. (2022). Correlation of Heart Rate Variability and Inflammatory Markers in Patients with Depression: A Cross-sectional Study, *JCDR*, 16(8), 8-11.

Saroha, R., Bandhu, R., Mondal, S., Kataria, D., Mondal, S. (2022). P300 wave of auditory event related potentials in childr.en diagnosed with attention deficit hyperactivity disorder, *Int J of Sc Res*, 11(7), 68-70.

Saroha, R., Bandhu, R., Monga, M., Mondal, S., Kataria, D., Mondal, S. (2022). Mismatch negativity in childr.en diagnosed with attention deficit hyperactivity disorder, *I J of App Res*, 12(7), 21-23.

Kapoor, S., Saluja, A., Margekar, S. L., Agarwal, M., Mondal, S., Dhamija, R. K. (2023). Neurogenic Supine Hypertension and Cardiovascular Autonomic Dysfunction in Patients with Parkinson's Disease., *Ann Indian Acad Neurol*, 26(1), 33-38.

### Research Projects

2022, Study of Cardiovascular autonomic dysfunction (CAD) in Idiopathic Parkinson's disease patients.

### Seminars Organized

Dr. Raghawendra Rao, CCRYN Director, 'Role of Yoga in Symptom Management of Cancer', International Yoga Day, 16-06-2022.

Dr. Rima Dada, Professor, AIIMS, "Role of yoga in complex diseases", International Yoga Day, 20-06-2022.

Organizing Chairperson: Dr. Sunita Mondal, Organizing Secretary: Dr. Anita Pawar & Dr. Madhulika Monga, “2nd All India Online Physiology Festival”, Physics in Physiology., 22-09-2022.

Organizing Chairperson: Dr. Sunita Mondal, Organizing Secretary: Dr. Anita Pawar and Dr. Madhulika Monga, 7th Intercollegiate Physiology Undergraduate Quiz at All India level on online mode, Physiology, 04-11-2022

### **Seminar/Conference Presentations**

67th Annual National Conference of Association of Physiologists and Pharmacologists of India APPICON 2021-22(13th TO 16th April 2022) organised by Department of Physiology and Pharmacology, ESIC Medical College and Hospital, Faridabad. Dr. Sunita Mondal Dr. Rajiv Bandhu Chairperson Dr. Sujata Gautam Dr. Mary Vibha Lakra Judge for free paper and poster presentation Dr. Madhulika Monga Dr. Puneet Kumar Delegate

Webinar On “Sleep-The Foundation of Health” at All India Institute of Medical Sciences, Rajkot, Gujarat held on 19th April 2022. Dr. Sujata Gautam Dr. Puneet Kumar Delegate

National Webinar on Yoga Organized by Advanced Centre for Yoga Therapy Education & Research (ACYTER) Department of Physiology, JIPMER, Puducherry titled “Yoga for Perfect Health” conducted on 21st June 2022. Dr. Madhulika Monga Delegate

CME titled "Physiological Fundamentals of Evoked Potentials" held on 29th September 2022, conducted by the Department of Physiology, ESIC Medical College, Sanathnagar, Hyderabad. Dr. Madhulika Monga Dr. T K Kishore Dr. Puneet Kumar Delegate

Faculty Development workshop on “Case based learning in Preclinical years” on 29th April, 2022 conducted by CMCL FAIMER, Regional Institute, Ludhiana in collaboration with Elsevier Dr. Sandeep Singh Chouhan Delegate

PRAKASHMAY online training conducted by AIIMS, New Delhi and Centre for Development of Advanced Computing from 22nd August to 27th August 2022 Dr Pankaj Kr Keshri Delegate

Attended a Workshop on “National Sleep Technology Workshop & National Sleep Medicine Course 2022 organised by Indian Society for Sleep Research 14th to 16th October 2022 Dr. Sunita Mondal Dr. Sujata Gautam Dr. Mary Vibha Lakra Dr. Pankaj Kumar Keshri Delegate

Workshop on “Good clinical Practices & Research Ethics” on 7th November 2022. Dr. Sunita Mondal Dr. Anita Pawar Dr. Madhulika Monga Delegate

CME and Workshop on “Electroneurography” held on 10th November 2022 at School of Medical Sciences & research Sharda University Dr. Madhulika Monga Expert Speaker

Basic life-support (BLS) training on 10th March & 20th March 2023 at LHMC, New Delhi Dr Rajiv Bandhu Dr. Sujata Gautam Dr Anita Pawar Dr. Madhulika Monga Dr. Mary Vibha Lakra Dr. Dharmendra Basu Dr. Pankaj Kumar Keshri Participant

**Faculty Strength: 13**



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## Physiology (MAMC)

### Brief history of the Department

The Department of Physiology was established in the year 1959 as one of the pillars of what was soon to become one of the most prestigious medical colleges in the country i.e., Maulana Azad Medical College. The department of physiology is concerned with teaching, research and administrative works.

### Major Activities and Achievements

Acchi Aadat Campaign was organized on 8th Feb 2023 jointly by Department of Physiology and Japan International Cooperation Association, JICA, Govt of Japan.

### Publications

Mahajan, A. S., Rakheja, G., Kaushik, S., Arora, P., Chitkara, A., Verma, R. (2022). Experiences with horizontal and vertical integration in Competency based Physiology education. *MAMC J Med S, MAMC J Med Sci*, 8(MAMC J Med Sci. 2022 8:85- 91.), 85- 91.

Chellani, G., Mahajan, A. S. (2022). Medical Student's evaluation of Competency based and Traditional educational environment using the Dundee Ready Education Environment Measure, *Res Dev Med Educ*, 6(11), 10-34.

Jain, P. (2022). Nutrigenomics-Future of Personalized Nutrition -"Can Nutrition be tailored to one's genes?", *Ind J Clin Biochem*, 1(37), 32-33.

Jain, P., Jain, P. (2023). Trait emotional intelligence as predictor of psychological health in undergraduate medical students: A hierarchical multiple regression approach., *Indian J Physiol Pharmacol*, 21(67), 8, 1

LaPelusa, A., Kaushik, R. (2022). Physiology, Proteins, *StatPearls [Internet]. Treasure Island (FL)*, 1.

Bardhan, M., Kaushik, R. (2023). Physiology, Complement Cascade, *StatPearls [Internet]. Treasure Island (FL)*, 1.

Singh, S. K., Jain, P. (2023). Acute Influence of Moderate Exercise on Smoking Urge, Mood, and Physical Withdrawal Symptoms: A Comparative Study in Smokers with and without Temporary Smoking Abstinence, *MAMC J Med Sci*, 9(1), 131-138.

### Research Projects

2022-23, To study the dynamics of mood and cognition during the different phases of the menstrual cycle: An observational study conducted on young females., 0

2019-2022, ASTRA – Addressing Smokeless Tobacco and Building Research Capacity in South Asia, 0

2021-23, Effect of single bout of mindfulness meditation on heart rate variability (HRV) and cardiovascular reactivity (CVR) to mental stress in undergraduate medical students, 0

2021-23, Neuroprotective effects of vanillin and minocycline in 6-hydroxydopamine induced rat model of Parkinson's disease., 0

2021-23, Effect of acute psychological stress on cardiovascular, adrenocortical and Heart Rate Variability (HRV) reactivity in patients of Type II Diabetes Mellitus., 0

### **Seminars Organized**

Delegates from JENESYS, JAPAN, JENESYS JAPAN, Acchi Aadat Campaign, Good Habits, 08-02-2023

### **Seminar/Conference Presentations**

Dr Preeti Jain chaired a session as a chairperson in 67th Annual National conference of Association of Physiologists and Pharmacologists of India held at ESIC Medical College and Hospital, Faridabad from 14th to 16th of April, 2022

Dr Preeti Jain presented a talk as a faculty on the topic -"Can Nutrition be tailored to one's genes? " in Symposium on Nutrigenomics-Future of Personalized Nutrition during ACBICON 2022 48th National Conference of the Association of Clinical Biochemists of India 24th to 26th of November 2022 held at ICAR CONVENTION CENTER, Pusa Road, Delhi

Dr Ravi kaushik Delivered an invited lecture (training) on "Regulation and guidelines specific to Clinical Research" in 4th Ethics Committee Training Workshop dated 28th, April 2022 at Department of Medical Education, MAMC.

Dr Ravi Kaushik Delivered guest lecture on non-communicable diseases in JENESYS (SAARC)-Japan online meeting in the month March 2023

Dr Ravi Kaushik Delivered an invited lecture in workshop "Research Methods & Statistics: Basics & Beyond" organized by the Department of Pediatrics, MAMC on 8th Feb 2023

Dr. Aarti Sood Mahajan - Speaker at symposium. Shaping the future of competency based medical education for postgraduate in physiology vision 2047 at NAMS, New Delhi on 27-September-2022. Topic - Medical education technology to be one of the core competencies of a trained physiologist of India.

### **Extension and Outreach Activities**

Dr. Dayaram Haldwani participated as nodal officer on "dengue surveillance and control measures" by Department of PSM, for session July-October 2022. Dr Ravi Kaushik in the capacity of Secretary of the National Medicos Organization (NMO)-MAMC Unit conducted health camps and educational drives in slum areas near MAMC along with residents and undergraduate students of the college.

### **Faculty Strength: 11**

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## Physiology (UCMS)

### Brief history and Achievements of the Department

The department carries forward a rich legacy as its first departmental chair was the renowned Physiologist Padma Vibhushan Dr. Autar Singh Paintal who also happened to be the first Principal of the institution. He was the first Indian Physiologist to become a Fellow of the Royal Society, London, was former Director General of the Indian Council of Medical Research and founded the Society of Scientific Values.

The Department is actively engaged in basic and applied research in the fields of Cardiovascular, Respiratory, Neurophysiology, Clinical Electrophysiology including Evoked potential, Yoga research, Academic medicine, Clinical medical ethics, and Health humanities. Many innovations in health professions education have been introduced by the department, including Virtual Patients, Trigger Films, Moodle based blended learning, Problem-Based Learning, Objective Structured Practical Examination, Health Humanities, Disability Competencies, and Physiology Ethics in teaching learning methodology.

### Honours/Distinctions

Dr. Farah Khaliq completed 1st yr of FAIMER fellowship.

Dr. Satendra Singh was invited by WHO to participate in WHO Wheelchair Service Guidelines Development Group meeting, 25-27 Oct, 2022 at Geneva.

Dr. Satendra Singh was invited as Guest of Honour and Awarded on Doctor's Day Function by IMA Raebareilly on 01.07.22.

Dr. Satendra Singh was conferred Eminent Medical & Health Education Teacher Award by DMA on Teachers' Day 2022.

### Publications

Goyal, S., Khaliq, F., Vaney, N. (2023). Implementation of the online learning management system 'Moodle' as a blended approach to online teaching, *Indian Journal of Physiology and Pharmacology*, 67(1), 64-72.

Singh, S., Meeks, L.M. (2023). Disability inclusion in medical education: Towards a quality improvement approach, *Medical Education*, 57(1), 102-7.

Khaliq, N., Ahmed, S. F., Geelani, S., Khaliq, F. (2022). Transition to Online teaching during COVID-19 pandemic: Perspective of higher education teachers from India, *Indian Journal of Physiology and Pharmacology*, 67(2), 141-6.

Raghuram, H., Parakh, S., Chidambaranathan, S., Tugnawat, D., Pillai, V., et al. (2023). Impact of the COVID-19 pandemic on the mental health of transgender persons in India: Findings from an exploratory qualitative study, *Frontiers in Global Women's Health*, 4.

Philip, S., Gangwani, N., Singh, S.. (2022). Unwelcomed and devalued: Preachers of exclusion plagiarize from documents of inclusion, *Journal of Family Medicine and Primary Care*, 11(11), 6622-29.

Gangwani, N., Singh, S., Khaliq, F. (2022). Trigger films to teach core competencies of ethics and professionalism to first-year medical and nursing students, *Advances in Physiology Education*, 46(3), 491-97.

Sethi, A., Yadav, A., Shankar, N. (2022). Effect of yogic intervention on urinary malondialdehyde levels, autonomic functions and quality of life among buffing polishing workers of an automobile industry, *IJCHR*, 5(3), 38-43.

Singh, S. (2022). Disability-inclusive vaccine equity framework for persons with disabilities in India: A call to action, *Research and Humanities in Medical Education*, 9, 10-18.

Goyal, S., Dixit, A., Vaney, N., Madhu, S. V. (2022). Serum Levels of Inflammatory Markers in Newly Diagnosed Hypothyroid Patients Before and After Levothyroxine Therapy, *Journal of Clinical & Diagnostic Research*, 16(9), 9-12.

Vishakha, Gupta, M., Singh, S., Aggarwal, A. (2022). Impact of 8 weeks of yoga in inflammatory cytokine markers in uncomplicated type 2 Diabetes Mellitus, *European Journal of Molecular & Clinical Medicine*, 9(6), 2623-30.

### **Research Projects**

Sabin Institute, Washington, USA, 01.03.23- 31.09.24, Expanding the WHO BeSD Framework and Survey Tool for the Transgender, Intersex and Disability Communities in India, \$81,449

### **Seminars Organized**

Dr. Farah Khaliq, Director Professor, UCMS, Delhi, Framing of Scenario based MCQs, Scenario based MCQs: Framing and Analysis (Faculty development workshop), 25-07-2023

Dr. Anupinder Thind, Assistant Professor, GMC Patiala, Analysis of Scenario based MCQs, Scenario based MCQs: Framing and Analysis (Faculty development workshop), 25-07-2023

Pooja Priyamvada, Academic Director, IIMM Delhi, 'Using Poetry to teach Disability Competencies', Disability Competencies for first year undergraduates, 01-04-2022

### **Conferences Organized**

International day of Yoga 2023 and the theme was "Vasudaiva Kutumbhikam", 21-06-2023, Department of AYUSH

### **Seminar/Conference Presentations**

Dr. Farah Khaliq attended FAIMER workshop (onsite session) at CMCL, Ludhiana from 11th to 16th May 2022.

Dr. Satender Singh was Speaker at 'Making Campuses Disability inclusive' at Manipal Academy of Higher Education on 16.09.22.

Dr. Farah Khaliq was Resource faculty for Thesis protocol writing workshop at UCMS on 4th March 2023.

Dr. Satendra Singh Conducted preconference workshop on Poetry as an Affirmative And Affective Tool in Healthcare at 13th NCHPE, Himalayan Institute of Medical Sciences, Dehradun on 31 Oct 2022.

### **Other Inter-Institutional Collaboration**

Dr. Satendra Singh participated in WHO Wheelchair Service Guidelines Development Group meeting, 25-27 Oct, 2022 at Geneva.

Dr. Satendra Singh was a collaborator in the year-long Sangath Bhopal project whose findings of “Voices for Vaccine Equity” were disseminated at the University of Chicago Center in Delhi on February 14, 2023.

Dr. Satendra Singh moderated panel discussion “Accessibility for All through Assistive Technology: Scope & Challenges” with panelists Dr. Rashmi Singh IAS, Ms. Gita Dang, Mr. Prateek Madhav and Mr. Aman Ali at IIT Delhi in DCPCR event on 02.02.2023. Dr. Nonita Gangwani participated in the above event & her paintings were given to dignitaries.

### **Extension and Outreach Activities**

Outreach with Sangath Delhi on Baatchet program who took a session with first year undergraduates on mental health on 20.01.23.

Suicide prevention awareness workshop for postgraduate medical students conducted by Outlive, Sangath Delhi on 25-26 September.

Dr. Satendra Singh was invited as a core group member at National Human Rights Commission’s inaugural meeting of Disability Core Group on 13 April 2022.

**Faculty Strength: 07**

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## **Physiology (VPCI)**

### **Brief history of the Department**

The Department was established in 1964 by Prof. A.S. Paintal, a doyen among Indian physiologists. The aims of the Department are to conduct fundamental and applied physiological research of the viscera in general and the heart and lungs in particular, to train post-graduate students and to devise new technology for better health care. All these research activities have resulted in publications in prestigious journals such as Nature, Science, Journal of Physiology, American Journal of Physiology, Journal of Applied Physiology, Experimental Physiology, Respiration Physiology to name a few.

### **Major Activities and Achievements**

Cardio-Pulmonary Rehabilitation Clinic at Vishwanathan Chest Hospital, VPCI is involved in management of chronic respiratory patients who have disability in activities of daily living and exercise limitation due to shortness of breath despite being on optimal pharmacological treatment.

## **Publications**

Khatri, R., Gupta, R., Vats, P., Bansal, V. et al . (2023). Hypoxic pulmonary vascular response can screen subclinical lifestyle disease in healthy populations, *Microvascular Research*, 145(January), 104454.

## **Conferences Organized**

2nd Workshop on Pulmonary Rehabilitation, 04-09-2022, VPCI

## **Seminar/Conference Presentations**

Prof. V. Bansal delivered workshop on ‘Components and Assessment of Outcome Parameters in Pulmonary Rehabilitation’ 77th National Conference of Tuberculosis & Chest Diseases, organized by Department of Tuberculosis & Respiratory Diseases, S.N. Medical College, Agra, 27th February, 2023.

Prof. V. Bansal delivered lecture on ‘Exercise Advice in Pulmonary Rehabilitation’ 77th National Conference of Tuberculosis & Chest Diseases, organized by Department of Tuberculosis & Respiratory Diseases, S.N. Medical College, Agra, 27th February, 2023.

Prof. V. Bansal delivered lecture on ‘Exercise Advise in Pulmonary Rehabilitation’ in 24th Joint National Conference on Pulmonary Diseases under the Aegis of National College of Chest Physicians (India) and Indian Chest Society (ICS) Workshop on ‘Pulmonary Rehabilitation & Smoking Cessation’ in NAPCON 2022 at RNT Medical College, Udaipur, Rajasthan, 10th November, 2022

Prof. V. Bansal was invited Speaker in 67th Annual Conference of Association of Physiologists and Pharmacologists of India, and delivered a talk on ‘Role of Exercise Training in Management of Chronic Respiratory Diseases’, Faridabad 14th – 16th April, 2022.

## **Student under Exchange Program(Inbound/Outbound)**

Five Final Year MPT (Cardiothoracic) students from MGM Allied Health Sciences Institute (MAHSI), Indore, MP attended ‘Training Program on Pulmonary Rehabilitation’ at VPCI, 1st – 31st March, 2023.

## **Faculty Strength: 1**

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## **Psychiatry (MAMC)**

### **Brief history of the Department**

The department of psychiatry was established in 1958, and since its inception has been providing evidence-based treatment to patients of psychological issues and psychiatric illness. This department takes immense pride in providing psychiatric services to both general and super specialty hospitals like GIPMER. It played a pivotal role in the care of mental health of COVID-19 patients of LNJP hospital in the recent past. The department organized public awareness program on World mental health day (10th October 2023)

## Publications

Biswas, P. S. (2021). 'Quantitative Electroencephalography in Patients with Depression and Epilepsy Spectrum Disorder and Its Correlation with Clinical Features of Depression', *East Asian Archives of Psychiatry*, 31(2), 43-46.

Biswas, P. S., Kapoor, M. (2021). 'A comparative study of the mental health impact of the COVID-19 pandemic on health care professionals in India', *Future Medicine (Microbiology)*, 16(16), 1267-76.

Biswas, P. S., Kapoor, M., Goyal, A. (2020). 'Association of demographic, clinical, laboratory, and radiological characteristics with outcomes of COVID-19 patients: A systematic review and Meta-analysis', *Journal of Microbiology and Infectious Diseases*, 10(03), 121-135.

Biswas, P. S. (2020). 'Hydroxychloroquine and chloroquine for COVID-19: psychiatric aspects of patient safety considerations', *Therapeutic Advances in Drug Safety*, 11(1), 1-3.

Biswas, P. S. (2021). "COVID 19-related Burnout among Healthcare Workers in India and ECG based Predictive Machine Learning Model: Insights from the BRUCEE- Li Study", *Indian Heart Journal*, 18(S0019-4832), 221-222.

Biswas, P. S. (2022). 'Safety and efficacy of convalescent plasma as a therapy for SARS-CoV-2: a systematic review and meta-analysis', *Journal of Anaesthesiology Clinical Pharmacology*, 38(1), S22-S33.

Biswas, P. S. (2021). 'The efficacy and safety of hydroxychloroquine (HCQ) in treatment of COVID-19 – A systematic review and meta analysis', *Indian Journal of Medical Microbiology*, 39(2), 159-170.

Jakhar, J., Kapoor, M., Biswas, P. S. (2023). Mental Health Impact of COVID-19 Infection on Postpartum Women from Lower and Middle-income Backgrounds in India and its Effects on Early Mother-infant Bonding: An Observational Study, *Psychiatric Quarterly volume*, 94(3), 385-398.

## Research Projects

2020-2023, 'A study of psychological impact of COVID-19 infection on patients and their family members giving in-hospital care and health care workers admitted in COVID-19 ward' (in collaboration with G & O department, MAMC).

2023-2025, 'A comparative study on resolution of delusion among the follow up patients of schizophrenia, delusional disorder, psychotic mania and psychotic depression'.

'The prevalence of acute complications of Covid-19 pneumonia: A systematic review and meta-analysis'.

2021-2026, 'The study of Effect of modified electro-convulsive (MECT) treatment on the clinical profile & outcome of mentally ill persons in a tertiary care general hospital psychiatry unit'.

2022-2023, 'A study of use of psychotropic in male and female psychiatric in-patients'.

## Seminar/Conference Presentations

35 departmental seminars organised

### **Other Inter-Institutional Collaboration**

With IGNOU- PG DGM course with Ahiyabai College of Nursing (ABCON), N Delhi - B.Sc Nursing St. Stephen's Hospital College of Nursing -B.Sc Nursing Rajkumari Amrit Kaur College of Nursing B.Sc Nursing IHBAS-MD(psychiatry) PGs

**Number and percentage of students placed: 100%**

**Faculty Strength: 6**

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### **Pulmonary Medicine (VPCI)**

#### **Brief history of the Department**

Vallabhbhai Patel Chest Institute was set up to address the paucity of trained personnel in the specialty of chest medicine in independent India with the Department of Pulmonary Medicine as one of the initial core departments. Department of Clinical Research (now renamed as Dept. of Pulmonary Medicine) was initiated by Prof. R. Viswanathan around 1956. The hospital serves as a tertiary referral centre and offers a wide range of specialized clinical and lab diagnostic investigations exclusively for respiratory diseases. Major components of the Department include Out Patient Department, Inpatient Department consisting of 3 Units with 128 beds, Respiratory Intensive Care Unit, 24 hour Respiratory Emergency.

#### **Major Activities and Achievements**

A new course named MSc in Respiratory Diseases started affiliated to University of Delhi with an initial intake of 02 students. At the hospital wing, the Outpatient Department registered 11,538 new patients and 48,211 follow-up patients. National Accreditation Board for Hospitals & Healthcare (NABH) awarded accreditation to the hospital in May 2023.

#### **Honours/Distinctions**

Dr. Raj Kumar was Member, National Programme for Prevention and Control on NCDs in Children in India by Directorate General of Health Services (NCD Section).

Dr. Raj Kumar was awarded the Eminent Medical and Health Education Teacher Award-2022 for outstanding contribution, hard work and dedication to medical education and education of public awareness on health issues by Delhi Medical Association on 04.09.2022.

Dr. Raj Kumar received QCI Quality Champion Award - 2021-22 for significant and holistic contributions in the field of Quality by National Board for Quality Promotion Quality Council of India, New Delhi on 06.10.2022.

Dr. Parul Mrigpuri received the Von-Pirquet Young Scientist award in December 2022 at the 56th annual convention of the Indian college of Allergy, Asthma and Applied Immunology.



## Publications

Kumar, R., Mrigpuri, P., Dubey, S. M. et al. (2022). One-year continuous abstinence rate for smoking cessation via telephonic counselling: The Indian scenario, *Monaldi Archives for Chest Diseases*, 93(2), 10.4081.

Goel, N., Goyal, N., Spalgais, S., Mrigpuri, P. et al. (2023). Initial COVID-19 severity and long-COVID manifestations: an observational analysis., *Thorac Res Pract*, 24(1), 22-28.

Spalgais, S., Mrigpuri, P., Kulshrestha, R., Gupta, V., Kumar, R. (2022). Pulmonary adenocarcinoma mimicking rheumatoid lung and delaying diagnosis for 8 months., *Egypt J Chest Dis Tuberc.*, 71(1), 405-408.

Kulshrestha, R., Negi, A., Bhutani, I., Saxena, H., Rani, M. et al. (2023). Tumor cell phagocytosis (cannibalism) in lung cancer: possible biomarker for tumor immune escape and prognosis, *Am J Transl Res*, 3(15), 1935-40.

Kumar, R., Mrigpuri, P., Sarin, R., et al. (2023). Air pollution and its effects on emergency room visits in tertiary respiratory care centres in Delhi, India., *Monaldi Archives for Chest Diseases*, Online ahead of print(2023), doi: 10.4081/monaldi.2023.2511.

Kumar, R., Kumar, D., Kumar, M., Mavi, A. K., Mrigpuri, P., Singh, K. (2022). Impact of Pollen Counts and Air Pollution Over Hospital Visits for Respiratory Illnesses in North Delhi Region., *Indian J Chest Dis Allied Sci*, 64(1), 13-18.

Mrigpuri, P., Menon, B., Spalgais, S., Kulshrestha, R., Saini, H., Gupta, A. (2022). IgG4 related disease presenting with pulmonary manifestations, lymphadenopathy and vocal cord immobility: An unusual presentation of a rare disease., *Egypt J Chest Dis Tuber*, 10.4103(71), 135-8.

Yadav, R., Nagori, A., Mukherjee, A., Singh, V., Lodha, R., et al. (2022). Geographic information system-based mapping of air pollution & emergency room visits of patients for acute respiratory symptoms in Delhi, India (March 2018-February 2019)., *Indian J Med Res.*, 156(4&5), 648-658.

Singh, K., Mavi, A. K., Nagar, J. K., Kumar, M., Spalgais, S., et al. (2022). Quantification of Indoor Respirable Suspended Particulate Matters (RSPM) and Asthma in Rural Children of Delhi-NCR., *Indian journal of pediatrics*, 1007/s12098(10), 022-04355-1.

Mrigpuri, P., Spalgais, S., Goel, N., Mehta, R., Kumar, S., Kumar, R. (2022). A low-cost pulmonary function test laboratory setup for infection control during COVID-19, *Lung India*, 1(39), 93-94.

## Research Projects

MoHFW, 2022-2023, National Tobacco Quitline Services (NTQLS) (Project period 2016-24), 159.93 L.

DHR-ICMR-MOHFW, 2022-2023, Multidisciplinary Research Unit (MRU) (Project period 2014-26), 10 Lakh.

## Seminars Organized

Various internal & external trainers/speakers, VPCI, Various topics on dates : 06.06.2022 to 10.06.2022, 45th Workshop On Respiratory Allergy: Diagnosis And Management, 08-06-2023

Various internal & external trainers / speakers, VPCI, Various topics, Allergy and Immunotherapy Sensitization, 15-03-2023.

## **Conferences Organized**

World No Tobacco Day, 31-05-2022, VPCI

The 16th Prof. Autar Singh Paintal Memorial Oration, 26-09-2022, VPCI

The 6th Dr. V K Vijayan Oration, 26-10-2022, VPCI

## **Seminar/Conference Presentations**

Dr. Raj Kumar was Faculty, in Workshop on ‘Smoking Cessation’ during 76th National Conference of TB and Chest Diseases under the aegis of Tuberculosis Association of India at Mullana, Ambala from 11th to 13th April, 2022.

Dr. Raj Kumar & other faculty and staff conducted Skin Prick Test – Practical Training, during 45th workshop on Respiratory Allergy: Diagnosis & Management from June 06 - 10, 2022 organised by NCRAAI, VPCI, Delhi.

Dr. Raj Kumar delivered Guest Lecture, on ‘Setting-up an Allergy Clinic’ during 45th workshop on Respiratory Allergy: Diagnosis & Management from June 06 - 10, 2022 organized by NCRAAI, VPCI, Delhi.

Dr. Raj Kumar was Moderator on National Framework for joint TB-Tobacco Collaborative Activities- way forward during Scientific Programme in NATCON 2022, Agra, Uttar Pradesh dt. 28st Feb, 2023.

## **Other Inter-Institutional Collaboration**

All India Institute of Medical Sciences, New Delhi.

Defence Institute of Physiology and Allied Sciences, DRDO, Delhi.

Indian Council of Medical Research (ICMR)

Institute of Nuclear Medicine & Allied Sciences, DRDO, Delhi.

Lady Harding Medical College, New Delhi.

Rajan Babu Institute for Pulmonary Medicine & Tuberculosis (RBIPMT), New Delhi.

SRM University

Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi.

Hamdard Institute of Medical Sciences & Research

**Number and percentage of students placed: 100%**

## **Extension and Outreach Activities**

Tobacco Cessation Clinic offered clinical and counselling services to beneficiaries.

The Patient Education Centre in the hospital premises offered access to audio-visual and printed educational materials to patients and visitors in the area of respiratory diseases and their effective management.

Telemedicine services were provided to over 500 patients.

**Faculty Strength: 6** (Director 01, Director Professor 01, Assistant Professor 04)

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## **Radiology, Radiotherapy, Radiodiagnosis & Radiation Medicine (LHMC)**

### **Brief history and Activities and Achievements of the Department**

The department performs various radiological investigations like X-rays, special investigations (like IVP, etc.), Ultrasound, Colour Doppler, mammography, CT scan, MRI for OPD and IPD patients, as well as for patients coming to the casualty of Smt. Sucheta Kriplani hospital. A new Ultrasound machine (GE Voluson E8) was installed in the department. This has enabled us to improve our patient care services, and also enhance resident education.

### **Honours/Distinctions**

Oral Paper (1st Prize) Dr. Neha Singhal Dr. Shaili Tomer spectrum of imaging findings in patients with pelvic postpartum complications Frontiers in women imaging October 16-2022

Oral Paper (IIIrd Prize) Dr. Priya Chaudhary Dr. Bhawna Satija Dr. R. S. Solanki Role of Ultrasound and Doppler in evaluation of superficial soft tissue masses. Ultravision Delhi IRIA December 2022

E-Poster (1st Prize) Dr. Chetna Mishra Dr. Rama Anand Dr. Vikas Yadav Right Aortic arch with Kommerell's diverticulum causing right vocal cord palsy: Unusual and rare case of hoarseness of voice SCIICON November 2022, AIIMS, Patna.

### **Publications**

Pavan, B. S., Amina, N., Anand, R., Pathania, O. P. (2022). An Unusual Presentation of Primary Hepatic Lymphoma. *Journal of Gastrointestinal and Abdominal Radiology*. 05. 10.1055/s-0042-1749673.

Agrawal, S., Puri, V., Aggarwal, K., Singh, S., Gupta, A., Satija, B. (2022) Cervical Necrosis and Detachment: A Rare Complication of Labor. *J Obstet Gynaecol India*. 72(Suppl 2):385-386.

Verma, A., Tomer, S., Solanki, R. S., Satija, B., Singh, A. (2022). Study of fetomaternal arterial doppler parameters in early onset pre-eclampsia and its correlation with perinatal outcomes. *Int J Reprod Contracept Obstet Gynecol* 11:2741-7

Garg, D., Kakkar, V., Kumar, A., Kapoor, D., Abbey, P., Pemde, H., Mukherjee, S. B., Sharma, S. (2022) Spectrum of Movement Disorders Among Children With Subacute Sclerosing Panencephalitis: A Cross-Sectional Study. *J Child Neurol*. 37(6):491-496.

Kapoor, R., Gupta, A., Abbey, P., Sethi, R. S., Yadav, P. S., Choudhury, S. C., Chadha, R. (2022) Evaluation of the outcome of pyeloplasty in children with poorly functioning kidneys due to unilateral ureteropelvic junction obstruction. *J Indian Assoc Pediatr Surg*, 27:544-52.

### **Faculty Strength: 10**

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## **Surgery (MAMC)**

### **Brief history of the Department**

Maulana Azad Medical College was started in February 1958 in the Anatomy Block of Irwin Hospital (now known as Lok Nayak Hospital). Pandit Gobind Ballabh Pant - the first Home Minister of free India laid the foundation stone of the main building of MAMC on 24th of October 1959. The site was a “Sarai “during the Mughal period. During the British rule the Sarai was taken over by the Britishers and converted to the old Delhi Jail, where tens of thousands of the freedom fighters were jailed. Located in the same jail was also the place to hang people (Phansi Ghar) where 14 patriots were hanged between 1915 and 1945. We also have a very serene memorial to the patriots on the spot where they were hanged in the Old Delhi Jail. This memorial is located roughly in the geographical centre of MAMC and Associated Hospitals Complex, adjacent to the main building of MAMC. The Department of Surgery is presently located on the second floor of the B.L.Taneja block.

### **Major Activities and Achievements**

Started Endoscopy Services for Public

Running Metabolic clinic

- Running Surgery Update, A famous program for last 41 years

### **Honours/Distinctions**

An alumni of the department, Dr Ravi Kanan awarded with Ramon Magsaysay Award

Dr. Anurag Mishra was awarded Young Researcher of the year award by Maulana Azad Medical College.

### **Publications**

Gupta, P., Lal, P., Manchanda, V. (2022). Microbial profile from peritoneal fluid and surgical wounds in patients with perforation peritonitis - A crosssectional study from New Delhi., *Tropical Doctor*, 4(17), 1.

Berg, J., Alvesson, H. M., Roy, N., Ekelund, U., Bains, L. et al. (2022). Perceived usefulness of trauma audit filters in urban India: a mixed-methods multicentre Delphi study comparing filters from the WHO and low and middle-income countries., *BMJ Open*, 6(12), 1.

Vindal, A., Gupta, A., Yashika., Lal, P. (2022). Correlation of Long-Term Gastric Sleeve Volume with Weight Loss after Laparoscopic Sleeve Gastrectomy, *Journal of the American College of Surgeons*, 5(233), 1.

Wärnberg, M. G., Berg, J., Bhandarkar, P., Chatterjee, A., Chatterjee, S. et al. (2022). A pilot multicentre cluster randomised trial to compare the effect of trauma life support training programmes on patient and provider outcomes, *BMJ Open*, 4(12), 1.

Vindal, A., Lal, P. (2022). Measurement and Accreditation of Minimal Access Surgical Skills: Challenges and Solutions., *Indian Journal of Surgery*, 1(2022), 1.

Lal, P. (2022). The Role of NBEMS in Medical Education in the Times of COVID-19 Pandemic: Converting Challenge into Opportunity for Innovation!., *Indian Journal of Surgery*, 1(2022), 1.

Webb, M. M., Bridges, P., Aruparayil, N., Chugh, C., Beacon, T. et al. (2022). The RAIS Device for Global Surgery: Using a Participatory Design Approach to Navigate the Translational Pathway to Clinical Use, *IEEE Journal of Translational Engineering in Health and Medicine*, 4(10), 1.

Bolton, W. S., Aruparayil, N., Please, H., Patel, R., Dalton, J., et al. (2022). A virtual reality training platform for surgeons, anaesthetists, and obstetricians in low and middle-income countries, *British Journal of Surgery*, 4(109), 1.

Aruparayil, N., Gnanaraj, J., Mishra, A., Bains, L., Cundill, B. et al. (2022). Registry outcomes on gasless insufflation-less laparoscopic surgery in rural North-East India, *British Journal of Surgery*, 109(2022), 1.

Mishra, A. (2022). Tripartite Gastrointestinal Recovery SBO Group. Core outcome set for clinical studies of postoperative ileus after intestinal surgery, *British Journal of Surgery*, 6(109), 1.

### **Research Projects**

2022-23, An international, cluster randomised-sequence study of a ‘Safe-anastomosis’ Quality Improvement Intervention to reduce anastomotic leak following right colectomy and ileocaecal resection (EAGLE), Academic study.

2022-23, Global patiENt reported outcomES in Inguinal hernia Surgery (GENESIS).

2018-23, Multicentre observational study- “The Trauma Triage study in India(TTRIS)-A comparison of prediction model for triage in adult trauma patients presenting to hospitals”.

2021-23, A prospective randomised double blind controlled study to evaluate the efficacy and safety of Venusmin 900 mg, a 100% pure and micronized Oral Diosmin in the cessation of bleeding and symptoms associated with haemorrhoids.

2022, Outcomes after Inguinal hernia surgery in India- a prospective multicenter IAGES Collaborative Study.

### **Conferences Organized**

Surgery Update 2022, 19-09-2022.

1st International Congress on Innovations in Global Surgery (ICIGS), 20-04-2022.

### **Faculty Strength: 15**

Director Prof 5, Prof 3, Associate Prof 4, Assistant Prof 3

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## **Surgery (UCMS)**

### **Brief history and activities of the Department**

The university college of medical sciences was established in 1971 as a constituent college of Delhi University. Surgery department is an integral part of UCMS since its establishment. The department is under the process of acquiring ultrasonic vessel sealing device and UGI and LGI endoscopy set and urodynamic system and surgical modular OT.

### **Publications**

Kumar, D. (2023). Unveiling the realities of anal melanoma in a resource constrained setting : A compelling case report, *J med sci*.

Aggarwal, H. (2023). Dr. Leslie H Blumgart - A living legend and The professor, *International journal of surgery*.

Prasad, A., Agarwal, H. (2023). Association of CD10 and VEGF expression with tumor characteristics and treatment response in patients of carcinoma breast - A prospective cohort study, *J clin diag res*.

Kaur, N. (2023). Prevalence, characteristics and correlated of fatigue in Indian breast cancer survivors. A CS study, *South Asian J cancer*.

Sharma, S., Kaur, N. (2023). Putative interactions between transthyretin and Endo sultan II and its relevance in breast cancer, *Not J book macromol*.

### **Conferences Organized**

Standards of care in breast cancer: what every surgeon should know, 12-02-2023.

### **Seminar/Conference Presentations**

Dr. Iqbal Singh, Moderator, Scope course 2023

Dr. Iqbal Singh, Chairperson, International workshop on Cancer Research

Dr. Navneet Kaur, faculty, Surgicon 2022

Dr. Navneet Kaur, faculty, UPASI 2023 BHU

### **Faculty Strength: 6**

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## University College of Medical Sciences

### Brief history of the College

University College of Medical Sciences (UCMS), a NAAC accredited constituent college of the University of Delhi, was established in the year 1971. The college ranks amongst the top colleges in the country. The college is running several academic programs including MBBS, MD, MS, MDS and DM courses in 20 broad- and super-specialties. The college has intake of 170 students every year in MBBS course and more than 190 students in various DM/MD/MS/MDS courses in pre-clinical, para clinical and clinical subjects. Several students also seek admission in Ph.D. courses in various departments every year. Additionally, the college offers various paramedical courses such as B.Sc. (Medical Technology), M.Sc. (Radiography & Medical Imaging Technology) and in-service training program for Medical Laboratory Technology. The college is well known for excellent research output and for its distinguished faculty who are have established themselves as eminent researchers and clinicians. The college has established a Multi-disciplinary Research Unit (MRU) in collaboration with the Indian Council for Medical Research (ICMR) and the Department of Health Research (DHR) to encourage and reinforce the environment of research in the college.

### Major Activities and Achievements

UCMS is ranked among top medical colleges in India. Students have excelled in academics, secured multiple distinctions and top ranks in University examinations. Apart from academic's research and publications have always been strong point of UCMS. The faculty of UCMS have published more than five hundred articles. IT infrastructure expansion of the college has been done in terms of procuring 187 computers, UPS, etc. and assisted in installation and networking of these computers. The UCMS library is fully wi-fi enabled to provide easy access to resources and also provides facility of 24 hours reading room to its users.

### Honours/Distinctions

Dr. Piyush Gupta awarded with 'Outstanding Asian Pediatrician Award' by Asia Pacific Pediatric Association in 2022.

Dr. Piyush Gupta conferred with 'Fellowship of Royal College of Pediatrics and Child Health (FRCPCH)', London, in 2023.

Dr Dheeraj Shah was selected by Appointment Committee of Cabinet (ACC) as the Director of National Institute of Health & Family Welfare, an apex technical institute and think tank for the promotion of health and family welfare programs in the country.

Dr. R.S. Rautela was conferred with the 'Eminent Medical and Health Education Teacher Award' for immense contribution to medical and health education in 2022.

Dr. A. K. Saxena was felicitated with a prestigious IASP (International Association for Study of Pain, USA) Award for 'Excellence in Pain research & Management', at Toronto Convention Centre, Toronto, Canada on 21 September 2022.

Dr. Amitesh Aggrawal conferred with ‘Honorary Professor of Clinical Nutrition’ by International College of Nutrition in 2022.

Dr A.K. Jain was conferred with honorary fellowship of Indian Orthopaedic Association during IOACON 2022.

### **Students with Distinctions**

Following students are meritorious during the year 2022-23

Ayush Jain, Ishita Agarwal and Tushar Yadav were I, II and III rank holders.

Chetan Mehra and Pranjali Garg were III rank holders in Professional studies Part I and 2 respectively.

### **Publications**

Ahmad, S., Arora, R., Aggarwal, A.N., Khan, K., Tandon, A. (2022). Comparison between reliability of Schatzker classification and CT based four quadrant classification for tibial plateau fractures. *Journal of Clinical Orthopaedics and Trauma*, 1;32, 1019-86..

Agarwal, H., Gupta, N. (2023). Dr. Leslie H. Blumgart—A ‘Living Legend’ and ‘The Professor’. *International Journal of Surgery. (London, England)*. 3:109(3), 502.

Bansal, S.C., Gupta, P. (2022). Intrauterine transfusion and Exchange transfusions for Hemolytic Disease of the newborn. *J Pediatr.*, 245, 71.

Chacham, S., Gupta, P. (2022). Fontanel: Windows to Brain Development. *J Pediatr*, 244, 78.

Chaudhary, P., Kumari, S., Dewan, P., Gomber, S., Ahmed, RS., Kotru, M. (2023). Chemotherapy-Induced Oxidative Stress in Pediatric Acute Lymphoblastic Leukemia . *Cureus*, 3(15), e35968.

Duggal, S., Tyagi, A. (2022). Coexistent peripartum cardiomyopathy and preeclampsia: A diagnostic dilemma. *J Anaesthesiol Clin Pharmacol*, 38(3), 498-499.

Khobragade, A., Bhate, S., Ramaiah, V., Deshpande, S., Giri, K. (2022). ZyCoV-D phase 3 Study Investigator Group (includes Narang S) Efficacy, safety, and immunogenicity of the DNA SARS-CoV-2 vaccine (ZyCoV-D): The interim efficacy results of a phase 3, randomized, double-blind, placebo-controlled study in India. *Lancet*, 399: 1313-21.

Raizada, N., Madhu, S.V. (2022). Long live the Liver! . *Int J Diabetes Dev Ctries*, 42(3), 377-379.

Singla, R., Gupta, G., Dutta, D., Raizada, N., Aggarwal, S. (2022). Diabetes reversal: Update on current knowledge and proposal of prediction score parameters for diabetes remission. *Diabetes Metab Syndr.*, 16(4), 1024-52.



## **Journals**

UJMS UCMS Journal of Medical sciences. *Quarterly*, 1(1), 1-50

## **Research Projects**

Indian Council of Medical Research (ICMR) funded project entitled “Role of Levocarnitine supplementation in Recovery of Children with Complicated Severe Acute Malnutrition: A Randomized Double blind Placebo Controlled Trial” and sanctioned amount of Rs. 70 lakhs.

Department of Health Research/Multi-Disciplinary Research Units (DHU/MRU) funded project entitled “mRNA expression of regulators of inflammation in lean and obese patient with Type 2 Diabetes Mellitus” and sanctioned amount of Rs. 2 lakhs.

Delhi State Health Mission under ‘Delhi State National TB Elimination Program’ funded project entitled “Barriers and Facilitators for DOTS Therapy under RNTCP among Elderly Tuberculosis Patients: A Qualitative Study”. Sanctioned amount of Rs. 4 lakhs.

Indian Council of Medical Research (ICMR) funded project entitled “Development and validation of Artificial Intelligence Tool for Screening/Detection of Pulmonary TB and other lung diseases” and sanctioned amount of Rs. 36 lakhs.

## **Seminars Organized**

Seminar entitled, “Decoding CLSI M100 Guidelines, AMSP Awareness Series: Session1.0, Stop AMR: Now or Never” was organized by Department of Microbiology on 25 May 2022.

## **Conferences Organized**

Conference on ‘9<sup>th</sup> EMPART and 5<sup>th</sup> EPICON’ was organized by Department of Pediatrics on 1 February 2023.

6<sup>th</sup> Conference on ‘Dialogues in Diabetes’ was organized by Department of Medicine on 6 July 2022.

44<sup>th</sup> Annual Conference of The Association of Otolaryngologists of India was organized by ENT department on 26 August 2022.

## **Seminar/Conference Presentations**

Dr. Piyush Gupta presented a paper entitled ‘State of Education and Research in Pediatric Neurology’ at the Association of Child Neurologists (AOCN), Pune, Maharashtra on 3 February 2023.

Dr. Piyush and Dr. Achyut Kalantare presented a paper entitled ‘Vitamin D: Basics and Advanced’ at the Indian Academy of Pediatrics, Pune, Maharashtra on 6 November 2022.

Dr. Medha Mohta delivered an invited lecture entitled ‘Prevention of Perioperative Multiorgan Dysfunction’ at the ISACON Delhi 2022, the 61st Annual Conference of the Indian Society of Anaesthesiologists, Delhi Branch, held from 8-9 October 2022.

Dr. Dinesh Puri served as a guest speaker at a Continuing Medical Education (CME) session focused on ‘Non-Invasive Prenatal Testing and Newborn Screening’, which took place at RNT Medical College in Udaipur on 10 April 2022.

Dr Grover Chander was invited to deliver a lecture on ‘Updates on common nail disorders’ during the Proceedings of Derma MeDeCon 2022 at International Dermatology Conference and Exhibition organized from 21-23 October 2022 at Dubai, UAE.

Dr. Singal Archana delivered was invited to deliver a lecture on ‘How to be a good reviewer; Perks and responsibilities’ during 51<sup>st</sup> Dermacon International 2023: 51<sup>st</sup> National Conference of IADVL, Mumbai on 23-26 February 2023.

Dr Anupama Tandon presented a paper entitled ‘Comprehensive assessment of Diabetic foot patients using B-mode and Doppler Ultrasound: A pictorial review’ at the European Congress of Radiology ECR 2023 held in Vienna, Austria in March 2023.

### **Other Inter-Institutional Collaboration**

National Candidemia Network with Department of Microbiology PGIMER Chandigarh

### **Extension and Outreach Activities**

Post graduate students and interns of the departments are posted to all health centers of the college by rotation including residential posting at a secondary level hospital viz. Satyawadi Raja Harishchandra Hospital (SRHC) Narela in North Delhi to learn and practice public health in the urban and rural areas of Delhi.

### **Library Development**

During the year 2022-2023, library purchased 235 textbooks and reference books for an outlay of Rs.11,48,938/- and subscribed 74 current journals (25 Foreign Journals and 49 Indian Journals) for Rs. 34,40,412.24/-. The total number of books in the library is 20983, in addition library has an asset of 25585 bound journals, 1534 WHO Publications, 1148 Thesis and 416 CDs.

Library is a member of NML-ERMED Consortium through which users can access 235+ e-journals from five publishers’ viz. British Medical Journal (BMJ), Cambridge University Press (CUP), Lippincott Williams & Wilkins (LWW), Oxford University Press (OUP) and Wiley.

Further, through ERMED consortium our users also has access to McGraw Hill’s Access Medicine Database which includes 160 e-book titles, around 3000 videos, audio and multimedia resources, 259,000 images, 2000 clinical cases, 600 Infographics, 130 Audio podcasts, 37,900 self-assessment questions, Board & USMLE reviews, 7000 patient education guides, etc.

Developing Library Network (DELNET) facility is also provided to all the users. This year the library renewed subscription of “UpToDate” which is an evidence-based clinical decision support resource that offers comprehensive, peer-reviewed content in 25 medical specialties and used primarily at the point of care.

The library users have the facility to access all the library resources remotely via UCMS e-Library Mobile App powered by Refread. The library is fully wi-fi enabled to provide easy access to resources and also provides facility of 24 hours reading room to its users. Other services offered by the library include access to Ouriginal (plagiarism check), reference service, article retrieval service, current awareness service, circulation, inter-library loan/document delivery, display of new acquisitions, access to old question papers, e-mail alerts. User Education Programmes are also organized from time to time for users to make best from these provisions.

**Faculty Strength: 134**, Director Professors / Professors = 76, Associate Professors = 2, Assistant Professors = 56

### **Financial Allocation and Utilization**

Grants Allocated: Rs.20447.00 lakhs

Grants Utilized: Rs.20444.21lakhs

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## **Vallabhbhai Patel Chest Institute**

### **Brief history of the College**

Vallabhbhai Patel Chest Institute is a maintained institution of University of Delhi, governed and administered by its own Governing Body constituted under Ordinance XX (2) of the University Act and is fully funded by grants-in-aid provided by Ministry of Health and Family Welfare, Government of India. The Institute has come into being as it was realized that there was a paucity of trained personnel in the specialty of chest medicine in the independent India. Sardar Vallabhbhai Patel, the first Home Minister and Deputy Prime Minister of India laid the foundation stone on 06th April 1949 and the Institute was formally inaugurated by Smt. Raj Kumari Amrit Kaur, the Union Minister of Health on 12th January 1953. The Clinical Research Centre now renamed as Viswanathan Chest Hospital was inaugurated by Dr. Rajendra Prasad, the first President of India on 24th October 1957. The mandates of the Institute are to conduct research on basic and clinical aspects of chest medicine, to train post graduates in Pulmonary Medicine and allied subjects, to develop new diagnostic technology and disseminate it to other institutions in the country and to provide specialised clinical investigative services to patients. The Institute has so far made tremendous progress with respect to furthering research, imparting training and providing patient-care in chest medicine and allied disciplines.

### **Major Activities and Achievements**

VPCI continued its ‘education’, ‘research’ and ‘patient care’ activities. Conducted postgraduate medical courses viz MD, DM and PhD in chest medicine and other pre & para-medical disciplines, short-term

training to post-graduate students of prestigious institutions. The Institute had 14 ongoing research projects by governmental agencies, MOHFW, NCDC-NRL, DHR, ICMR, DST, AYUSH which received grants during the year over Rs.3.42 Crores. VPCI has been awarded NABH EL accreditation in May 2023. The hospital wing registered 11,538 new patients and 48,211 follow-up patients. Indoor General Ward admitted 14,494 patients and Emergency Ward admitted over 2,154 patients and provided Emergency treatment to 21,792 patients. The RICU admitted 1,840 patients for intensive care. No. of diagnostic tests done were: 7,617 Pulmonary Function Tests, 1,341 CT scans, 30,489 X Rays, 5,418 ECGs, 28,238 Arterial Blood Gases, 347 Bronchoscopy, 14,330 Skin Tests, 89,161 Clinical Biochemistry, 40,477 Pathology, 8,716 Immunology Lab, 12,345 Microbiology. Cardio-Pulmonary Rehabilitation Clinic provided services to 167 patients. National Tobacco Quit Line Service registered over 1,13,085 callers for counselling on the Interactive Voice Response (IVR) out of which 27,831 quit successfully with success rate of 24.61%. Over 500 patients availed Telemedicine services offered by VPCI. At the Pollen Count Station, a total of 724 slides were mounted and analyzed. Medical mycology laboratory was designated as National Reference Laboratory for Antimicrobial Resistance in Fungal Pathogens under National Action Plan of Antimicrobial Resistance (NAP-AMR), MoH&FW, GOI. At the Multidisciplinary Research Unit 9 projects were ongoing. The Institute continued to publish reputed and indexed quarterly publication “The Indian Journal of Chest Diseases & Allied Sciences”, in collaboration with NCCP (I).

### **Honours/Distinctions**

Dr. Raj Kumar was Member, National Programme for Prevention and Control on NCDs in Children in India by Directorate General of Health Services (NCD Section), Nirman Bhawan, New Delhi on 20 February 2022; Member, Selection Committee Interview for the post of Assistant Professor on contractual basis in various medical Institutions/Hospitals under Government of NCT of Delhi, at Dean office, Administrative block, MAMC, New Delhi, 22 April 2022; Member, Selection Committee for Walk-in-Interview for the posts of Senior Resident (OBC-2) & Junior Resident (Non-PG) (UR-4, SC-1, ST-2, OBC-1 & EWS-1), at VPCI dt.18 May 2022; Member, Established Institute of Nano Medical Science (INMS) under the Ordinance XX-x University of Delhi Maintained institute affiliated to Faculty of Medical Sciences, Delhi on 14 May 2022; Eminent Medical and Health Education Teacher Award-2022 for outstanding contribution, hard work and dedication to medical education and education of public at large on health issues by Delhi Medical Association on 04 September 2022; External Examiner for DM (Pulmonary, Critical Care & Sleep Medicine Practical examination of BP Koirala Institute of Health Sciences, Dharan, Nepal on 8- 9 September 2022 and many more

Dr. Malini Shariff was DBT representative in the IBSC of INMAS and Advanced Genomics Institute and Laboratory Medicine Pvt Ltd; Chairperson of the Institutional Animal Ethics Committee. VP Chest Institute.

Dr. Mandira Varma Basil was Member Ethics committee, RajanBabu Institute of Pulmonary Medicine and Tuberculosis. Executive Member, Indian Association of Mycoplasmologists; Expert Committee member (ICMR): For development of Standard Treatment Workflow for Extrapulmonary TB; Member of WHO Strategic Advisory Group of Experts on In Vitro Diagnostics

Dr. Anuradha Chowdhary was Advisor, The Clinical and Laboratory Standards Institute (CLSI) Antifungal Subcommittee. 2022 Organizing Committee member, Myco-clinics, The Medical Research Council Centre for Medical Mycology, University of Exeter, UK. 2022; Advisor, The Clinical and Laboratory Standards Institute (CLSI) Antifungal Subcommittee. 2022 Organizing Committee member, Myco-clinics, The Medical Research Council Centre for Medical Mycology, University of Exeter, UK. 2022.

Dr. Jayeeta Bhadra was Elected as Treasurer, Biotechnology Society of India; Coordinator, NABH EL Accreditation, VP Chest Institute; Member of the Governing body, VP Chest Institute; Member in “Work Advisory Committee (Civil & Electrical)”, VP Chest Institute; Nodal Person in "Quality Management Committee", VP Chest Institute.

Dr. Kavita Gulati was awarded Fellowship of Indian Pharmacological society (FIPS), during Annual Conference of Indian Pharmacological society at Mysuru, 24 Feb. 2023; Awarded best women scientist during 3rd International hybrid conference on “Traditional and Alternative Medicine”, Panaji, Goa, 17-18th November, 2022; Executive Member of Indian Pharmacological Society; Member Expert (Pharmacology) in Institutional Human Ethical Committee (IHEC) meetings of PGIMER, RML Hospital on 14.02.2023, 13.12.2022, 28.10.2022, 07.11.2022, 18.08.2022; Coordinator of Adverse Drug Reaction Monitoring Centre (AMC) under the Pharmacovigilance Programme of India, Indian Pharmacopoeia Commission (IPC-CDSO).

Dr. Parul Mrigpuri received Von-Pirquet young scientist award in December 2022 at the 56th annual convention of the Indian college of Allergy, Asthma and Applied Immunology.

Dr. Ritu Kulshrestha was the Member of Board of Studies (BoS) for the School of Allied Medical Sciences (SAMS), Delhi Skill & Entrepreneurship University (DESU) since 16th March 2023. Dr. Ritu Kulshrestha was the Member of Curriculum drafting committee for MSc and MSc-PhD -Nano Medical Sciences course of Institute of Nano medical Sciences, University of Delhi since 26 June 2022; External Member of Specialist Panel on Soldier Health and drug development (SH&DD), Inst of Nuclear Med and Allied Sc (INMAS), Delhi project review meeting held online on 03 Jan 2023; Member, Board of Studies, Dept. of Paramedical sciences, Faculty of Allied Health Sciences, SGT University, Gurgaon held on 1st November, 2022; Member of Scientific Advisory committee for MRHRU External Member of the Scientific Advisory Group for the Dept of Health Research, MOHFW, GOI established Model Rural Health Research Unit (MRHRU) at Khotpura, Panipat, Haryana in collaboration with the Kalpana Chawla Government Medical College, Karnal under mentorship of ICMR-NICPR, Noida since March 2021

Dr. Vishwajeet Rohil was elected as Secretary, Biotechnology Society of India on 29 August 2022; Recipient of Eminent Medical and Health Education Teacher Award for immense contribution to the medical and health education received on occasion of Teacher’s Day celebration of DELHI MEDICAL ASSOCIATION on 4th September 2022 at MAMC Auditorium, Delhi; DBT Nominee for Institutional Biosafety Committee at Defence Institute of Physiology and Allied Sciences, DRDO; Convener of Symposium organized by Association of Clinical Biochemists of India (ACBI), 48th ACBICON 2022, Symposium Title -“Recent advances: Pulmonary health & Laboratory medicine” held at International Convention Centre, ICAR, New Delhi, November 25, 2022.

### Students with Distinctions

S.No.	Name of Students	Class
1	Dr Dhilnaz AS	MD (Pulmonary Medicine) (2019-22)
2	Dr Nitesh Goyal	MD (Pulmonary Medicine) (2019-22)
3	Dr Arvind Kumar Verma	DM (Pulmonary Medicine) (2019-22)
4	Dr Sonal	DM (Pulmonary Medicine) (2019-22)

## Publications

Bhadra J, Birde K.. (2023). Biclinal Gammopathy: A case report *IOSR JDMS*, 22(1), 07-09.

MR Reshi, K Gulati, M Naqvi, N Hassan, A Ray. (2022). Hepatoprotective Effects of Dawa-Ul-Kurkum, A Unani Polyherbal Preparation and the Possible Mechanisms in Experimental Model of Ethanol Induced Liver Damage in Rats . *Journal of Pharmacy and Pharmacology Research*, 6(3), 122-130.

Rahul Khatri, Rajinder Gupta, Praveen Vats, Vishal Bansal et al. (2023). Hypoxic pulmonary vascular response can screen subclinical lifestyle disease in healthy population. *Microvascular Research*, 104454(January), 104454.

Kumar R, Mrigpuri P, Dubey SM, et al.. (2022). One-year continuous abstinence rate for smoking cessation via telephonic counselling: The Indian scenario. *Monaldi Archives for Chest Diseases*, 93(2), 10.4081.

Goel N, Goyal N, Spalgais S, Mrigpuri P et al.. (2023). Initial COVID-19 severity and long-COVID manifestations: an observational analysis. . *Thorac Res Pract*, 24(1), 22-28.

Spalgais S, Mrigpuri P, Kulshrestha R, Gupta V, Kumar R.. (2022). Pulmonary adenocarcinoma mimicking rheumatoid lung and delaying diagnosis for 8 months. . *Egypt J Chest Dis Tuberc.*, 71(1), 405-408.

Kulshrestha R, Saxena H, Kumar R, Spalgais S, Mrigpuri P, Goel N, Menon B, Rani M, Mahor P, Bhutani I.. (2023). Subtyping of advanced lung cancer based on PD-L1 expression, tumor histopathology and mutation burden (EGFR and KRAS): a study from North India. . *Monaldi Arch Chest Dis.*, 0(2449), 10.4081.

Sharma, V., Singh, A., Gaur, M., Rawat, D., Yadav, A., Rajan, Kumar, C., Varma-Basil, M., Lohiya, S., Khanna, V., Khanna, A., Chaudhry, A., Singh, Y., & Misra, R. . (2022). Evaluating the efficacy of stool sample on Xpert MTB/RIF Ultra and its comparison with other sample types by meta-analysis for TB diagnostics. *European journal of clinical microbiology & infectious diseases*, 41(6), 893-906.

Kulshrestha R, Negi A, Bhutani I, Saxena H, Rani M, Menon B, Kaushik R, Pandita S, Kumar R. (2023). Kulshrestha R, Negi A, Bhutani I, Saxena H, Rani M, Menon B, Kaushik R, Pandita S, Kumar R . *Am J Transl Res*, 3(15), 1935-40.

## Journals

Dr. Raj Kumar, Editor-in-Chief .(2023). Indian Journal of Chest Diseases and Allied Sciences (IJCDAS). *Quarterly*, 65(1), 120

Dr. Raj Kumar 2. Dr.Ritu Kulshresha .(2021). VPCI News Letter. *Bi-annual*, 9(1), 16 Publication Division (2021-22). Annual Report. *Annual*, 0( 0), 122

## Research Projects

MoHFW, 2022-2023, National Tobacco Quit Line Services (NTQLS) (Project period 2016-24), 159.93

NCDC-NRL, 2022-2023, National Reference Laboratory for Antimicrobial Resistance in fungal pathogens (Project period 2021-26), 77.21

ICMR, 2022-2023, A research cum intervention multi-centric study to strengthen National TB Elimination Programmer (NTEP) by implementing programmer guidelines for TB using novel strategies to address the various challenges faced by the programmer in selected states and specific population/communities in India (Project period 2022-24), 41.71

ICMR, 2022-2023, Characterization of phenotypic and molecular determinants of Bedaquiline and Linezolid resistance in clinical isolates of Mycobacterium tuberculosis (Project period 2023-26), 21.16

DHR-ICMR-MOHFW, 2022-2023, Multidisciplinary Research Unit (MRU) (Project period 2014-26), 10.00

### **Seminars Organized**

Various internal & external trainers / speakers, VPCI, Various topics, 45th Workshop On Respiratory Allergy: Diagnosis And Management, 06 June 2022

Various internal & external trainers / speakers, VPCI, Various topics, Short-Term Course on Basic and Molecular Virology, 05 June 2022

Various internal & external trainers / speakers, VPCI, Various topics, Short Term Certificate Course in Clinical Pathology, 04 April 2022

Various internal & external trainers / speakers, VPCI, Various topics, 2nd Workshop on Pulmonary Rehabilitation, 04 September 2023

Various internal & external trainers / speakers, VPCI, Various topics, Encouraging Adverse Drug Reaction Reporting by Patients, 22 September 2023

### **Conferences Organized**

World No Tobacco Day, 31 May 2022, VPCI

Observance of 8th International Day of Yoga, 21 June 2022, VPCI

16th Prof Autar Singh Paintal Oration, 22 September 2022, VPCI

Public Lecture on Asthma-Causes, Diagnosis, Treatment and Myths and Facts, 21 February 2023, VPCI

Public Lecture on Tuberculosis a Disease Since Eternity: Cause, Types, Symptoms, Diagnosis, Treatment & Myths & Facts, 27 March 2023, VPCI

### **Seminar/Conference Presentations**

Dr Raj Kumar was Faculty, in Workshop on ‘Smoking Cessation’ during 76th National Conference of TB and Chest Diseases under the aegis of Tuberculosis Association of India at Mullana, Ambala from 11-13 April, 2022; Session Chair, during webinar on ‘Reaching the unreached millions- Accelerating tobacco

cessation support in India’ on 28 April 2022 organised by The Union, New Delhi (online); Guest Lecture, on ‘Food allergy in clinical practice’ during 45th workshop on Respiratory Allergy: Diagnosis & Management from June 06 - 10, 2022 organised by NCRAAI, VPCI, Delhi; Guest Lecture, on ‘Indian Guidelines for Diagnosis of Respiratory Allergy’ during 45th workshop on Respiratory Allergy: Diagnosis & Management from June 06 - 10, 2022 organised by NCRAAI, VPCI, Delhi and also participated in many more such activities.

Kulshrestha R, Saxena H, Raj Kumar, Spalgias S, Mrigpuri P, Goel N, Menon BK, Meenu R, Pawan M, IshitaB, Divya N, Shukla R, Singh A. Subtyping of advanced lung cancer based on PD-L1 expression, tumour histopathology and mutation burden (EGFR and KRAS): a study from North India. Paper presented in National Symposium in Frontiers in Biomedical Research Organised by Dr BR Ambedkar Center for Biomedical Research, University of Delhi, 2nd-4th November 2022.

Dr. Kavita Gulati Delivered Invited lecture on “Drug safety during management of respiratory disorders: focus on methylxanthines” Magnus group, USA International Conference and Expo on Toxicology and Applied Pharmacology, 13-14 June, 2022 (online); Dr. Kavita Gulati Delivered an invited lecture on “Role of NO modulators in airway inflammation, bronchial hyper-responsiveness and oxidative stress in bronchial asthma” Indian Pharmacological Society Indian Pharmacological Society Conference, Mysuru, 22 February, 2023

Dr Mandira Varma Basil. Biomedical waste management. Faculty Lecture on the occasion of Swatchhta Pakhwada organized by Vallabhbhai Patel Chest Institute on 13th April, 2022; Mandira Varma Basil. Invited talk. Molecular Diagnosis of Drug Resistant TB: Challenges and Opportunities. International Conference cum CME on Novel insights into pathogenesis of Tuberculosis for development of Vaccines, Diagnostics and Therapeutics. 3rd May, 2023. Miranda House, University of Delhi

Dr. Vishal Bansal. ‘Components and Assessment of Outcome Parameters in Pulmonary Rehabilitation’ Workshop on ‘Pulmonary Rehabilitation & Smoking Cessation’ in NATCON 2022, Agra 27th February, 2023; Dr. Vishal Bansal. Exercise Advice in Pulmonary Rehabilitation; Breathing Retraining / Arm & Leg Exercises / Inspiratory Muscle Training; Components and Assessment of Outcome Parameters in Pulmonary Rehabilitation; Exercise Advises in Pulmonary Rehabilitation;; in NATCON 2022, Agra, 27th February, 2023; Dr. Vishal Bansal. Components and Assessment of Outcome Parameters in Pulmonary Rehabilitation; Exercise Advise in Pulmonary Rehabilitation; Video Demonstration of Six-Minute Walk Test, Exercises and Instruments used Webinar on Pulmonary Rehabilitation Program for Physiotherapists’ through online mode 22nd – 23rd February, 2023

### **Other Inter-Institutional Collaboration**

All India Institute of Medical Sciences, New Delhi.

Defence Institute of Physiology and Allied Sciences, DRDO, Delhi.

Indian Council of Medical Research (ICMR)

Institute of Nuclear Medicine & Allied Sciences, DRDO, Delhi.

Lady Hardinge Medical College, New Delhi.

Rajan Babu Institute for Pulmonary Medicine & Tuberculosis (RBIPMT), New Delhi.

SRM University



Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi.

Hamdard Institute of Medical Sciences & Research

**Number and percentage of students placed: 100%**

### **Library Development**

The Institute has one of the best library in the field of Pulmonary Disease and Allied Sciences having 10136 Books, 25026 bound Journals, 178 CD's, 588 Thesis and 32 National and International Reports. A total 16 Journals (05 International and 11 National) are being received on exchange program with the Institute's Journal and 01 Journals are received on complimentary basis. To cover the need for daily coverage of news related to the medical field, Library is also subscribing four English and four Hindi newspapers. This has encouraged the inculcation of reading habits of all alike. VPCI is a member of National Level ERMED Consortium (e-journals) for the Calendar Since year 2018. All e-journals and other resources are configured on Static IP / IP's of our Institute. Library initiates appropriate efforts from time to time to create awareness among staff, research scholars, students, etc. to enhance maximum utilization of e-journals through customised e-journals gateway <http://www.ermmed.in> and benefit of access/download of articles from the 'Cochrane Library'. This is an initiative by 'National Medical library' which is a collection of six databases that contain different types of high-quality, independent evidence to inform healthcare decision-making, and a seventh database that provides information about Cochrane groups through single gateway <http://www.cochranelibrary.com>. Library uses "LibSys 4.0" Library Management Software, which is an integrated multi-user library management system that supports all in-house operations of the Library. The 'LibSys' consists of modules on acquisition, cataloguing, circulation, serials, article indexing and OPAC.

### **Faculty Strength**

Designation	Sanctioned	Filled	Vacant
Director	01	01	00
Professor	08	00	08
Associate Professor	18	04	14
Assistant Professor	17	13	04
Total	44	18	26

### **Financial Allocation and Utilization**

Grant Sanctioned: 70.09 Crores

Grant Utilized: 67.69 Crores

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## FACULTY OF MUSIC AND FINE ARTS

### Department of Music

#### Brief History

At the Dept. of Music, Faculty of Music and Fine Arts, University of Delhi, we are proud to look at sixty years of effectuating the strategies of adapting our classical music from the traditional Gurukul system to that of the university system. The conceptual foundation was laid by Dr. V.K.R.V. Rao, the famous economist and former Education Minister, who was also the Vice Chancellor of this university at the time of its inception. With the aid of an endowment fund from Sir Shankar Lal Foundation, the Department of Music, University of Delhi, was instituted in the year 1960. The translation of the concept into reality was commenced by pioneers such as Prof. R.L. Roy, Shri C.S. Pant, Shri Pran Nath, Prof. V.V. Sadagopan, Smt. Ambujam, Shri Debu Chaudhuri and Shri V.K. Aggarwal, along with staff artists - Shri Chhanna Khan, Shri Faqir Chand and Shri Ram Swaroop. They were followed by Ustad Yunus Hussain Khan, and thereafter by Vidushi Prof. Sumati Mutatkar as the Dean and head, of the Faculty of Music & Fine Arts, University of Delhi. It was under the inspiration of Prof. Mutatkar, and with Yunus Khan ji as the first Choir Director, that the Department started the 'Sargam Choir', a vocal and instrumental ensemble, in 1971.

Started with a modest batch of twelve students of Hindustani music (both Vocal and Instrumental) and Karnatak music, (only Vocal), the Department was initially situated at the Barracks at the back side of Miranda House. Since then, it has expanded to over four hundred and fifty students at its current location, just at the intersection of University Road and Mall Road, next to the Sir Shankar Lal Concert Hall on the North Campus of the University. During this period, the two main disciplines of music in India, viz, Hindustani and Karnatak music have grown parallel to each other in this Department. With the passage of time, new courses were introduced. In 2013-14, a B.A. (Hons.) in Hindustani music - Percussion (Tabla/Pakhawaj) was introduced, followed by M.A. in the same in 2016-17, with its M.Phil. starting from 2018-19 onwards.

The Department has constantly been in the process of enhancing the skills of our students, which leads to an increase in their productivity and output. Keeping these in mind, the Department has always strived to innovate and introduce new courses from time to time. Starting from 2008-09, the Department has introduced special courses, which are job-oriented in keeping with the objectives of the University. Many Diploma and Short-Term Courses have been introduced to fulfil this purpose. A Two-Year Diploma course in Harmonium was started in 2015-16. In 2017-18, the said course and the decades-old Sangeet Shiromani Diploma Course of two years duration were restructured from the Annual to the Semester mode, in tune with the main undergraduate and postgraduate programmes.

The Department has also introduced Short-Term Courses in many genres, namely Tabla, Harmonium, Satoor, Thumri-Dadra, Post-Pallavi compositions in Karnatak music, Veena, Violin and Mridangam, as also Journalism and Sound Engineering: Techniques and Equipment. Thus, at present, the Department conducts B.A. (Hons.), M.A., M.Phil. and Ph.D. programmes in both Hindustani and Karnatak music, Diploma and Short-Term Courses of six months (Advance) and four months (Certificate) duration in the aforesaid and other genres; as also One Year Certificate Course for Foreign nationals in both Hindustani and Karnatak music.

With a sanctioned strength of forty-one teachers and the contribution of noted personalities, artists and music lovers, the Department has seen many fruitful and prosperous years with rapid development. Equal

emphasis is being laid on both theoretical knowledge and practical orientation. Music being a performing art, emphasis is laid upon Oral Tradition within classroom teaching. Noted experts are being invited regularly to share their knowledge with the students. We have the proud privilege of having many reputed artists, both in the past and at present, in our teaching faculty, who have been a guiding force for our students. No wonder, quite a few of our alumni are performing artists with Radio and TV grading, while others are placed in eminent positions in various universities, colleges and many government and private organizations.

One salient feature of the infrastructure of this Department is its vast and well-equipped library with several wings. It has recently been upgraded to being partly automated. The reading and lending section of the library has around 16,000 books, some of them are very old and rare, and provide valuable source material for regular as well as research-oriented study. The Braille section for the visually challenged has a large collection of 304 Braille books and relevant material transcribed into Talking Books, which is made available to the students in the form of CDs. The audio section has a listening room and lending facilities for over 2, 200 cassettes and CDs. Students are encouraged to listen more and more, so as to absorb the finer nuances of this great art form.

Apart from this, a separate Computer section with internet connection, printers and e-material facilities has been set up for the benefit of the teachers and research scholars. Two computers, fitted with the JAWS software, are allocated for the differently-abled visual students. While developing the deep-rooted base for Indian classical music, the main aim of this section is to encourage everyone to be acquainted with the growth, development and research of music worldwide.

The Department has a Museum too, displaying old and rare instruments with their history so as to provide a valuable source of data for researchers. At present, the studio is upgraded with an archival section, where priceless archival music of stalwarts and connoisseurs of music, recorded earlier at the Department, is being made available to students and teachers.

The lending and reference sections of the Library, as well as the Museum, are fitted and monitored with CCTV cameras. All of the 16,200 books and 2,300 Ph.D. thesis and M.Phil. dissertations have been entered into the 'Troodon' e-resource subscribed by DULS and can be accessed online through the Troodon Library Management Software (version – 4.0) link <http://dulsopac.du.ac.in/catalogue.aspx>

The Department is proud to have had on its rolls, students from not just India, but also from abroad, such as the U.S.A., Japan, China, Mauritius, Thailand, Iran, The Netherlands, Kuwait, South Korea and Fiji, as well also from neighbouring countries like Nepal, Bangladesh and Sri Lanka. The Department also enjoys the distinct achievement of regularly conducting Short Term courses for the students of Soka University (Japan) and UCLA (U.S.A.) as the MOU has been signed between them and the University of Delhi. There has also been an exchange programme with the Thummasat University (Thailand). In this sense, the Department can rightly claim to have attained a unique status vis-à-vis expanding the horizons of Indian classical music far outside of our borders. As the saying goes, music has no boundaries!

Music being foremost, a practical art, special attention and continuous stress is laid on achieving excellence in performance, not only amongst the students but also upon the teachers as well. In order to orient them with the fine art and nuances of performance, the Department organizes concerts from time to time, where teachers and students alike are given a platform to display the richness of their talent in the league and company of national-level artists, who are invited to perform. One of the prime concerts organized every year is the Malhar Utsav to celebrate the spirit of the rainy season with varieties of Malhar ragas. Another

notable concert series is the ‘Sadhyayan’, which is a baithak (seated on the floor) organized by the Department from time to time. The Department also provides a regular forum for Lecture-cum-demonstrations and workshops, which includes a vast variety of programmes in the vocal, instrumental and percussion fields of both Hindustani Music and Karnatak Music. Supportive teaching and interaction with experts enhance the regular classroom teaching programmes.

The Department celebrates the annual festival of Vasantotsav (Saraswati Puja) with zeal and vigour, which is well attended by renowned artists, scholars and the university community.

### **Major Activities and Achievements**

**YOGA DAY:** On 21 June 2022, the Department celebrated International Yoga Day by holding a workshop on Yoga.

**MALHAR UTSAV:** The Malhar Utsav is a two-day Annual festival of Indian Classical Music, organized by the Dept. of Music, University of Delhi, held every year in the month of September. This festival, as the name suggests, celebrates the spirit of the rainy season. The many varieties of Raga Malhar are rendered by artists of national repute. Students through such a festival get the opportunity to understand the importance of seasonal ragas and their treatment in various traditions (Gharanas).

On the 1<sup>st</sup> of September 2022, the Festival commenced with Mangal Dhawani. The program included a Welcome Address delivered by Prof. Alka Nagpal, Dean & Head, Faculty of Music & Fine Arts, University of Delhi. This was followed by the Karnataka Vocal Duet Recital by Vidushi Sudha Raghuraman Vocal, Vidwan G Raghuraman Flute, Vidwan V. S. K. Annadurai Violin, Vidwan N. Padmanaban Mridangam and Tabla Recital by Ustad Akram Khan, Harmonium Dr Vinay Mishra.

On the 2<sup>nd</sup> September 2022, the Festival commenced with ‘Mangal Dhawani’ The Programme included a Santoor Recital by Pandit Abhay Rustam Sopori, Tabla Ustad Rafiuddin Sabri, Pakhawaj Sh. Rishi Shankar Upadhyay, Ghatam Sh. Varun Rajaswkhara. This was followed by a Hindustani Vocal Recital by Vidushi Meeta Pandit, accompanied by Pandit Ashish Sengupta on Tabla and Dr. Vinay Mishra on Harmonium.

**Vasant Panchami Utsav:** Vasant Panchami Utsav was Celebrated by the Faculty of Music and Fine Arts on 26 January 2023

### **Honours/Distinctions**

Prof. T. V. Manikandan – National Award “Acharya Ratna” by AIMA Chennai on 17/09/2022

### **Publications**

#### ***Journal(s) Published by the Department***

Vageeshwari, (Dec. 2022), *Department of Music*, Volume 36

### **Seminars/Conferences organized by the Department**

Delhi University, two days National Workshop on Tabla at 11 & 12 January 2023, Expert is Pandit Swapan Chaudhary, 12-01-2023

Delhi University, Two-days National Seminar organized at 23 – 24 February 2022 on “Multidimensional Aspects of Indian Music.”, 24-02-2023

**Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Ojesh Pratap Singh - 01 Seminar

Prof. Shailendra Kumar Goswami – 05 International Performances.

Prof. Ojesh Pratap Singh. -08 (One Orientation & One Workshop)

Prof. T. V. Manikandan – 01 (Attended the Board of Studies Meeting at Music Department of I. K. S. Vishwavidyalaya, Khairagarh, Meeting at CBSE curriculum Committee as an expert of Carnatic Music)

Prof. Shailendra Kumar Goswami - 01 (Workshop) and one Devotional Presentations at Chhattarpur Temple, Delhi.

Dr. Vineet Goswami – 01 (Workshop)

Dr. Deepak Dabhade - 01

**Faculty Strength: 41**

Sanctioned strength: 41

Total teachers working: 27 (Professor: 07, Associate Professor: 03, Assistant Professor: 14, Guest lecturer: 03)

**Number of Ph.D. Degrees Awarded: 12**

**Number of M.Phil. Degrees Awarded: 14**

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## **FACULTY OF SCIENCES**

### **Anthropology**

#### **Brief History**

The Department of Anthropology, University of Delhi was founded in 1947 with the sole aim of undertaking holistic research and teaching in different aspects of human living. The first batch of students, admitted a year later, produced some of the finest anthropologists of international repute, who contributed significantly to the administrative and corporate life of the University of Delhi. Students trained in our department diffused to other universities, founding academic departments and centres, carrying forward the exemplary tradition of the University of Delhi therein. The Department flourished, moving from one success to the other, and was also instrumental in the spread of anthropology to other parts of the country. Our department has always been the leader, in research and teaching and with the efforts of the teaching faculty, the glorious status of the department continues and will continue to be so in future.

#### **Major Activities and Achievements**

The Department of Anthropology was selected to host the 19th IUAES-WAU World Anthropology Congress 2023 by The International Union of Anthropological and Ethnological Sciences (IUAES). The Congress was held on 14-20 October 2023 with the theme 'Marginalities, Uncertainties, and World Anthropologies: Enlivening Past and Envisioning Future'. In addition to this, the faculties in the department received academic recognition in terms of awards, fellowships and research projects.

#### **Honours/Distinctions**

Professor M. N. Srinivas Memorial Prize 2022 to Dr. Chakraverti Mahajan by the Indian Sociological Society.

#### **Publications**

##### **Research Articles**

Adam, G. B., Supreet, K., & Rao, P. D. (2022), Gender and Sexual Violence: Challenges of Female Education in Maiduguri Internally Displaced Persons Camps, Northeast Nigeria, *International Journal of Special Education*, 37(13s), 1181-1195

Adam, G. B., Supreet, K., & Rao, P. D. (2022), Study on Gender and Sexual Violence in Maiduguri Internally Displaced Persons Camp, Northeast Nigeria, *International Journal of Science Technology and Management*, 11(6), 88-100

Laar, A. K., Addo, P., Aryeetey, R., Agyemang, C., Zotor, F., Asiki, G., Rampalli, K. K., Amevinya, G. S., Tandoh, A., Nanema, S., Adjei, Laar, M. E., Mensah, K., Laryea, D., Sellen, D., Vandevijvere, S., Turner, C., Osei-Kwasi, H., Spires, M., Blake, C., Rowland, D., Kadiyala, S., Madzorera, I., Diouf, A., Covic, N., Dzudzor, I. M., Annan, R., Milani, P., Nortey, J., Bricas, N., Mphumuzi, S., Anchang, K. Y., Jafri, A., Dhall, M., Lee, A., Mackay, S., Oti, S. O., Hofman, K., Frongillo, E. A., & Holdsworth M. (2022), Perspective: Food Environment Research Priorities for Africa—Lessons from the Africa Food Environment Research Network, *Advances in Nutrition*, 13(3), 739–747

- Ansari, S. N., Rajkumari, S., Rawat, S., Chandel, S., Devi, N. K., Saraswathy, K. N., & Joshi, P. C., (2022), Psycho-social correlates of depression and anxiety disorder among Bhil indigenous population of India, *Advances in Mental Health*, 21(3), 103-114
- Chaudhary, V., Saraswathy, K. N., & Sarwal, R., (2022), Dietary diversity as a sustainable approach towards micronutrient deficiencies in India, *The Indian Journal of Medical Research*, 156(1), 31-45
- Devi, T. C., Singh, H. S., & Gupta, V. (2022), Relationship Between Taste Sensitivity of Phenylthiocarbamide (PTC) and obesity among male and female population of Udaipur, Rajasthan, *Applied Biological Research*, 24(2), 168-174
- Dhall, M., Tyagi, R., Tungdim, M. G., Nilupher, Gupta, U., Devi, K. S., Kaur, J., Kapoor, A. P., Saini, M., Dhall, P., Rulu, P., Bhasin, P., & Kapoor, S., (2022), Nutrition, physical activity and psychological status during lockdown due to covid-19, *Acta Scientiarum. Health Sciences*, 44, e57231
- Goswami, V., & Gupta, V. (2022), Child Undernutrition among the Bhoksa Tribe of Uttarakhand in India, *Online Journal of Health and Allied Sciences*, 21(4), 10
- Gupta, A., Saluja, A., Saraswathy, K. N., Imnameren, L., Yadav, S., & Dhamija, R. K. (2022), PON1 (paraoxonase 1) Q192R gene polymorphism in ischemic stroke among North Indian Population, *Annals of Indian Academy of Neurology*, 25(1), 100–105
- Kamboj, N., Saraswathy, K. N., Babu, N., Puri, M., Sachdeva, M. P., & Mahajan, C. (2022), Infertility and Obesity: A Cross-Sectional Study in North Indian Women, *Collegium antropologicum*, 46(2), 97-103
- Kataria, S., Dabas, P., Saraswathy, K. N., Sachdeva, M. P., & Jain, S. (2022), Investigating the morphology and genetics of scalp and facial hair characteristics for phenotype prediction, *Science & Justice*, 63(1), 135-148
- Kaur J., & Dhall M. (2022), Reproducibility and reliability of fingerprint microfeatures: Effect of immersing hand in water at different temperatures, *Journal of Forensic and Legal Medicine*, 91, 102424
- Kaur, G., Gaur, R., & Saraswathy, K. N. (2022), Somatotype Characteristics of a Mendelian Population from North India and Its association with Cognitive Impairment and Depression, *The Oriental Anthropologist*, 22(2), 278-292
- Kaur, J., & Dhall, M. (2022), Reproducibility of fingerprint microfeatures, *Egyptian Journal of Forensic science*, 12, 7
- Konyak, E. W., & Zhimo, A. G. (2022), Body Aesthetics: Contextualizing the Tattooing Culture of the Konyak Naga, *Journal of Indian Anthropological Society*, 57(1), 61-77
- Kulshreshtha, M., Malik, S. L., & Chandel, S. (2022), Health-related components of physical fitness and adiposity indicators: a comparative study among Kathak dancers and non-dancers of North India, *Research in Dance Education*, 2159357
- Mishra, D., Longkumer, I., Saraswathy, Rupalika, K. N., & Devi, N. K (2022), Obesity and dyslipidemia among Bhil tribal population: A cross-sectional study from India, *International Journal of Diabetes in Developing Countries*, 42(1), 116-25
- Rajkumari, S., Chaudhary, V., Kasaudhan, S., & Saraswathy, K. N. (2022), Incidence and determinants of hysterectomy among North Indian women: An 8-year follow-up study, *Frontiers in Public Health*, 10, 1065081

- Rajkumari, S., Ningombam, S. S., Chhungi, V., Newmei, M. K., Devi, N. K., Mondal, P. R., & Saraswathy, K. N., (2022), Association of ACE I/D gene polymorphism and related risk factors in impaired fasting glucose and type 2 diabetes: a study among two tribal populations of North-East India, *Molecular Biology Reports*, 49, 1037-44
- Sharma, A., Kamboj, N., Saraswathy, K. N., Puri, M., Babu, N., & Mahajan, C., (2022), Knowledge, attitude, and practice of infertility: a comparative study in infertile and fertile Indian women, *Journal of Biosocial Science*, 55(5), 947-959
- Sharma, A., Mahajan, C., Saraswathy, K. N., Puri, M., & Babu, N., (2022), Struggling with Primary Infertility: Psychological Well-Being and Associated Factors in North Indian Women, *Journal of the Anthropological Survey of India*, 71(1), 68-83
- Sinha, S., Mondal, P. R., & Gupta, V. (2022), Assessing the role of Socioeconomic factors and Place of Residence on the burden of Stillbirth in India: A Comprehensive Review, *The Open Public Health Journal*, 15, 1-13
- Srivastava, M. (2022), Women Empowerment in Buddhism; an anthropological encounter with three Buddhist nuns, *Serial Publications*, 22, 2
- Talwar, S., Prasad, S., Kaur, L., Mishra, J., Puri, M., Sachdeva, M. P., & Saraswathy, K. N., (2022), MTR, MTRR and CBS gene polymorphism in recurrent miscarriages: A case control study from North India, *Journal of Human Reproductive Sciences*, 15(2), 191-196
- Gupta, U., Devi, N. K. S., Kaur, K., & Dhall, M. (2022), Baseline characteristics of menstruation among adolescent girls of Delhi, *Antrocom Journal of Anthropology*, 18(1), 299-312
- Vats, H., Saxena, R., Sachdeva, M. P., Walia, G. K. and Gupta, V. (2022), Maternal Risk Factors Associated with term low birth weight in India, *Anthropological Review*, 85(4), 61-81
- Yadav, N., Chaudhary, V., Saraswathy, K. N., & Devi, N. K., (2022), Vitamin intake in obesity and hypertension: A population-based study from Haryana, North India, *Clinical Epidemiology and Global Health*, 18, 101178
- Yadav, S. K., Hadda, V., & Saraswathy, K. N. (2022), One carbon metabolic pathway and smoking mediated altered global DNA methylation in Chronic Obstructive Pulmonary Disease: A vegetarian community-based study from rural India, *European Respiratory Journal*, 60, 4151
- Bindhani, B., Devi, N. K., & Nayak, J. K. (2023), Vitamin D Deficiency in India: An Overview, *South Asian Anthropologist*, 23(1), 29-35
- Dabas, P., Khajuria, H., Jain, S., Dutt, S., Saraswathy, K. N., Nayak, B. P. (2023), A cross-sectional assessment of quantitative epidermal melanin and erythema indices among North Indians, *Indian Dermatology Online Journal*, 14(3), 366–370
- Dahal, S., Longkumer, I., Bhattacharjee, D., and Devi, N. K. (2023), Association of CBS 844ins68, MTR A2756G and MTRR A66G gene polymorphisms with depression: A population-based study from North India, *Gene Reports*, 30, 101714
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Khate, K., Chaudhary, V., Longkumer, I., Saraswathy, K. N., & Devi, N. K. (2023), Gender-specific association of blood lipids and reproductive trajectory with cognitive impairment: A community based cross-sectional study from India, Frontiers in Psychology, 14, 736

Lalnuneng, A. (2023), PS-P11-5: Biosocial Correlates Of Hypertension In Northeast India Indigenous Population, Journal of Hypertension, 41(1), e489-490

Mishra, D., Longkumer, I., Khate, K., Saraswathy, K. N., and Devi, N. K. (2023), eNOS Glu298Asp (rs1799983) and AGT Met235Thr (rs699) polymorphisms in adverse cardiometabolic phenotypes: A study among Bhil tribal population of India, Human Gene, 35, 201152

Tyagi, R., Dhall, M., Jain, S., & Kapoor, A. K. (2023), Aging and health challenges of tribal population: An empirical study among Car Nicobarese of Nicobar islands of India, The Oriental Anthropologist, 23(1), 225-35

Singh, N., Chaudhary, V., Khate, K., Bhattacharjee, D., Longkumer, I., Kataria, S., Kaur, G., Devi, N. K., Babu, N. & Saraswathy, K. N. (2023), Cognitive impairment viz-a-viz genetic and biochemical variations in one carbon metabolic pathway: A population-based study from North India, Gene Reports, 30, 101720

Sinha, S., Mondal, P. R. and Gupta, V. (2023), Impact of Socioeconomic Factors on Nutritional Status among Women of reproductive age in India: a Review, Journal of Indian Anthropological Society, 58(1), 69-88

### **Books/Chapter in Books**

Jain, S. & Dhall, M. (2022), Social Isolation in COVID-19: Impact of Loneliness and NCDs on Mental and Physical Health of Older Adults, Singapore, Springer, 978-981-16-1914-4, 1-18

Gupta, V., and Sachdeva, M. P. (2022), Social Epidemiology of maternal and Child health in India, Delhi, Concept Publishing Company Pvt. Limited, 9789354390869, 9354390862, 340-351

Sachdeva, M. P., Kumar, N., Tandon, A., & Gupta, V. (2022), Building a Bio-Social Understanding of Diseases: An Overlooked Sine Qua Non, Delhi, Concept Publishing Company Pvt., 9789354390869, 9354390862, 111-126

Sachdeva, M. P., Kumar, N., Tandon, A., & Gupta, V., (2022), Medicalization of Health Systems: Anthropology on Vigil, Delhi, Concept Publishing Company Pvt., 9789354390869, 9354390862, 180-194

Zhimo, A. G (2022), Gendered Body, Performance and Inscription: Shifted Meanings of Personal Adornments among the Sumi Naga of Nagaland, The Cultural Heritage of Nagaland, Publisher: Manohar/Routledge, 227-238

### **Journal(s) Published by the Department**

Indian Anthropologist, (1971 and till date), Indian Anthropological Association.

### **Research Projects**

National Institute of Health (NIH), USA, 2022-27, GEOHealth Health Effects of Selected Environmental Exposomes Across the Life Course (HEALS), 5.00 Crore

Institute of Eminence, University of Delhi, 2022-23, Role of Lipids in Determining the Birth Weight of Newborn, 5.00 Lakhs

Indian Council of Social Science Research (ICSSR), 2022-24, An Assessment of Social and Mental Health of Communities Living on the India-Pakistan Border in Jammu and Kashmir, 10.00 Lakhs

Bule Hora University, Bule Hora, Ethiopia, 2022-24, Perspective on Illness and Ethnomedicine among Guji in Southern Ethiopia, 10.00 Lakhs

Indian Council of Medical Research (ICMR), 2022-25, A study on Thalassemia Awareness, Screening and Counselling among Youth Adults of Delhi and NCR (India), 1.00 Crore

Indian Council of Medical Research (ICMR), 2023-26, Folate Metabolism in Pregnancy Progression and its outcome: A follow up observational genetic and epigenetic study, 90.00 Lakhs

Institute of Eminence, University of Delhi, 2022-23, Epigenetics, early menopause, and cardio-metabolic health: A study from Mansa district (Punjab), 5.00 Lakhs

Institute of Eminence, University of Delhi, 2022-23, MTHFR gene polymorphism in Cognitive impairment: A Biosocial study among Punjab population, 5.00 Lakhs

Institute of Eminence, University of Delhi, Institute of Eminence, University of Delhi, Identification signatures of cardiac abnormalities in Long Covid, 5.00 Lakhs

### **Seminars/Conferences organized by the Department**

Prof. P.C. Joshi, Prof. Frederick L Coolidge, Prof. Daniel Negers, Dr. Anup Adhikari, Prof. Subho Ray, Prof. Arup R Bandyopadhyay, Dr. Thingnganing Longvah, Dr. Thingnganing Longvah, Prof. Abhik Ghosh, Prof. Roumi Deb, Prof. Alahari Paparao, Prof. S Sumathi Rajesh, Prof. Sonia Suri, N. M. Rabiul Awal Chowdhury, Dr. Sanjenbam Yaiphaba Meitei, Dr. Huidrom Suraj Singh, Dr. Ratika Samtani, Dr. Yumnam Luxmi Devi, Dr. Harvinder Kaur, Dr. Abhishikta Ghosh Roy, Dr. Gagandeep Kaur Walia, Dr. Koel Mukherjee, Dr. Ksh Beliya Luxmi Devi, Prof. Suparna Sanyal Mukherjee, Dr. Urfat Anjem Mir, Dr. Urfat Anjem Mir, Dr. Prashant Khattri, Dr. Lovitoli Jimo, Dr. Priyasha Kaul, Dr. Priyanka Jain, Dr. Ahanthem Romita Devi, Dr. Snigdha Vishnoi, Dr. Kumari Vibhuti Nayak, Dr. Debashree Sinha, Dr. Ujjwala Gupta, Dr. Geetanjali Panda, Dr. Drabita Dutta, Nivedita Singh, Prof. Surya Prakash, Dr. Dolly Florence Murmu, Dr. Oinam Hemlata Devi, Dr. Nongthombam Achoubi, Dr. Prakash Tripathi, Dr. Rongsenzulu Jamir, Dr. Kokila Khanna, Dr. Pranjal Baruah, Prof. Swapan Kumar Kolay, Prof. Mohan Kumar K P, Dr. Mithun Sikdar, Dr. Rupak Mukhopadhyay, Dr. Deepak V., Dr. Bhubon Mohan Das, Prof. Vijoy S Sahay, Prof. S Jibonkumar Singh, Prof. S.P. Singh, Dr. Ashish Joshi, Prof. Kewal Krishan, Dr. Sarabjit Mastana, Prof. K.M. Venkat Narayan, Prof. P. Vijaya Prakash, Prof. Elena Godina, Dr. Antoinette E. DeNapoli, Prof. Barry Bogin, Prof. Vibha Joshi Parkin, Retired Professor, DU, University of Colorado, Colorado Springs, United States of America, Institut National Des Langues & civilisations Orientales (Inalco), Paris, France, Canadian Red Cross Training Partner Toronto, Ontario, Canada, Department of Anthropology, University of Calcutta, West Bengal, Department of Anthropology, Panjab University, Centre of Anthropology, Amity University, Department of Anthropology, Sri Venkateswara University, Tirupati, Department of Anthropology, University of Madras, William James College, Massachusetts, USA, Department of

Anthropology, Comilla University., Department of Anthropology, University of Manipur., Department of Anthropology, University of Manipur, Indian Institute of Health Management Research, Department of Anthropology, University of Manipur, Postgraduate Institute of Medical Education & Research, Chandigarh, Anthropological Survey of India, Public Health Foundation of India, Anthropological Survey of India, North East Regional Centre, Shillong, Meghalaya, Pravabati College, Manipur, Indian Department of Social Sciences, Seacon Skills University, Kendradanj, School of Liberal Studies, Dr. B R Ambedkar University, Delhi., Department of Anthropology, University of Allahabad, Ambedkar University, Delhi, School of Liberal Studies, Dr. B R Ambedkar University, Delhi, Department of Sociology, Noida International University, University of Manipur, School of Liberal Studies, Dr. B R Ambedkar University, Delhi, Centre for Studies in Social Sciences, Kolkata, School of Humanities Social Sciences and Education, G D Goenka University, Delhi., Yenepoya Deemed to be University., BJB Autonomous College, Bhubaneswar, Odisha, Punjab University, Chandigarh, Department of Human Development and Childhood Studies, Lady Irwin College, University of Delhi, Dr. B R Ambedkar University, Delhi, Department of Anthropology, Mangolganbi College, Ningthoukhong, Manipur, Delhi School of Public Policy and Governance, Institution of Eminence, University of Delhi, Delhi School of Public Policy and Governance, Institution of Eminence, Delhi University & IIT Gandhinagar, School of Liberal Studies, Dr. B.R Ambedkar University, Delhi, Department of Anthropology, Dibru College, Dibrugarh, Assam, School of Anthropology and Tribal Studies, Shaheed Mahendra Karma Vishwavidyalaya, Jagdalpur, Professor, Department of Oral Pathology, College of Dental Sciences, Davangere., Anthropological Survey of India, Mysore, Amity Institute of Anthropology, Amity University, Noida, Assistant Professor, M R Ambedkar Dental College and Hospital, Rajiv Gandhi University of Health and Sciences, Karnataka, Department of Anthropology, Haldia Government College, West Bengal Education Service, Cultural Research Officer (CRO), Cultural Research Institute, Ambedkar Bhavan, Kolkata, Department of Anthropology, University of Allahabad, Allahabad, India, Department of Anthropology, University of Delhi, Department of Human Genetics, Punjabi University, School of Public Health, University of Memphis, Memphis, Tennessee, USA, Department of Anthropology, Panjab University, School of Sport, Exercise and Health Sciences, Loughborough, Emory University School of Medicine, Emory University, USA, Department of Anthropology, Andhra University, Andhra Pradesh, Anuchin Research Institute and Museum of Anthropology, Lomonosov Moscow State University, Russia, Texas Christian University, Texas, United State of America, Loughborough University, United Kingdom, EK University of Tuebingen., DBT, DST-SERB, ICSSR, University of Delhi, Anthropological Survey of India, Rescripting the anthropocene: Health, Happiness and Hope, 13-01-2023

Dr. Seema, Prof. Renu, MoHFW, AIIMS, Thalassemia Diagnosis, Treatment and Prevention: Individual to Community, 08-05-2022

Juan Franciso Cuyas, University of Barcelona, Ethnographic Photography', 07-02-2022

Prof. Maruska Svasek, Queen's University, Belfast, Emotions, Creativity and Ethnographic Work, 28-11-2022

Seminar/Conference Presentations (National/International) by Faculty Members  
Zhimo, A.G., 2022. "Co-imagining alternative intellectualism: an open space" in 17th EASA Biennial Conference EASA2022: Transformation, Hope and the Commons School of History, Anthropology, Philosophy and Politics at Queen's University, Belfast, 26-29 July, 2022.

Srivastava, M., 2023. “Transnational Buddhism at Bodh Gaya; a Foucauldian perspective” in International Conference and Pre-congress, World Anthropology Congress (WAC-2023). Re Scripting the Anthropocene: Health, Happiness and Hope. 11th -13 th January, 2023. Department of Anthropology, University of Delhi. (Paper presentation)

Yadav S, Hadda V, Saraswathy KN, 2022. “One carbon metabolic pathway and smoking mediated altered global DNA methylation in Chronic Obstructive Pulmonary Disease: A vegetarian community-based study from rural India” at European Respiratory Society Conference, Barcelona, Spain.

Yadav, S. 2023. “Hypertension Care Cascade - The Role of Anthropology in Bridging the Gap between National Programme and it's Beneficiaries” in International Conference and Pre-congress, World Anthropology Congress (WAC-2023). Re-Scripting the Anthropocene: Health, Happiness and Hope. 11th -13 th January, 2023. Department of Anthropology, University of Delhi. (Paper presentation)

P. Durga Rao, 2022. “Gadaa System in Southern Ethiopia: An Anthropological Perspective” in International Conference on Changing Trends in Diasporic Literature, organized by Government College Una, held during 22-23 April 2022 at Government College Una, Himachal Pradesh, India. (Paper presentation online).

P. Durga Rao, 2022. “Gender and Sexual Violence: Challenges of Female Education in Maiduguri Internally Displaced Persons Camps, Northeast Nigeria” in association with Adam Gana Bawa in the International Conference (online) on Recent Trends in Engineering, Technology & Management, during 26-27 May, 2022, organized by SND College of Engineering Research Center, Yeola, Nashik, Maharashtra. (Paper presentation online).

Lalnuneng, A. 2022. “Biosocial correlates of hypertension in Northeast India indigenous population” In the 29th Scientific Meeting of the International Society of Hypertension, Kyoto, Japan, October 12 to 16, 2022.

Lalnuneng, A. 2022. “Hypertension and Obesity: Anthropological Perspectives” Insights, The Royal Thimphu College Academic Seminar Series, 12th Series, Royal Thimphu College, Royal University of Bhutan, Thimphu, Bhutan, September 1, 2022.

Zhimo, A.G. 2022. “Cultural Appropriation and India's Scheduled tribes” Tribal Anthropology Seminar, Jharkhand Janjatiya Mahotsav, 9 – 10th August 2022 (paper presentation).

Lalnuneng, A. 2022. “Demography Studies in Anthropology”. Department of Nursing & Midwifery, Royal Thimphu College, Khesar Gyalpo University of Medical Sciences of Bhutan, Thimphu, Bhutan, September 12, 2022. (Invited lecture)

#### Other Inter-Institutional Collaborations

Collaborations with - AIIMS, New Delhi, IGIB, New Delhi, PHFI, Gurgaon, Amity University, Noida, Punjab University, Chandigarh, Thalassemia Society, Delhi, Lady Hardinge Medical College, Delhi

#### **No. of Students under Exchange Programme: 6**

#### **Placement Details**

Dr. Imnameren - Scientist -C, AIIMS, New Delhi

Dr. Nupur Mahajan - WHO, India Office, Delhi

Dr. Kevingu Khate - Royal College, Thimphu, Bhutan

Dr. Sunanda Rajkumari - Research Associate, ICMR-NIOP, Delhi

Dr. Varhlunchhungi Varte - Research Associate, AIIMS, New Delhi

Dr. Rupalika - Scientist C, AIIMS, New Delhi

### **Extension and Outreach Activities**

Dr. N. Kiranmala Devi, 2023. Delivered lecture on “Diet and Obesity: A biocultural context” at Department of Zoology, Miranda House, University of Delhi, dated 22 March 2023.

Dr. N. Kiranmala Devi, 2023. Delivered lecture on “Thalassemia awareness and counselling” at, Zakir Hussain College, University of Delhi, dated 21 February 2023.

Zhimo, A.G. 2023. Delivered lecture on "Portrayal of Women and the gazes it invokes: Reflections on the colonial monographs of tribes in Northeast India" organized by Women's Development Cell in collaboration with Northeast Cell of Hindu college, University of Delhi on 28 February 2023.

Zhimo, A.G. 2022. Domain specific - Anthropology. Online Orientation Cum Guidance Program for Common University Entrance Test (CUET) 2022 under the aegis of Dean Student's Welfare in collaboration with Institute of Lifelong Learning (ILL), University of Delhi from June 27th – July 7th, 2022.

P. Durga Rao, 2022, Delivered lecture on “Biodiversity and Culture: An Anthropological Perspective” under Osborne Celebrating Biodiversity conducted by AMITY Institute of Social Sciences, AMITY University, Noida on 26 May 2022.

Meenal Dhall, 2023. Resource person in International workshop on Public Health organized by Department of Biochemistry, Daulat Ram College & Delhi School of Public Health, IoE, University of Delhi on 17-18 January 2023.

Suniti Yadav - Mentor and Judge for IRIS National Fair and Regeneron International Science and Engineering Fair supported by Department of Science and Technology, GOI for year 2022-23. Suniti Yadav - Resource person for Lead STEM citizenship - Creative STEM Solutions Teachers Workshop supported by CBSE, New Delhi held on 07 February 2023

Lalnuneng, A. 2022. Delivered lecture on “Demography Studies in Anthropology”. Department of Nursing & Midwifery, Royal Thimphu College, Khesar Gyalpo University of Medical Sciences of Bhutan, Thimphu, Bhutan, September 12, 2022.

### **Faculty Strength: 19**

**Number of Ph.D. Degrees Awarded: 12, M.Phil. Degrees Awarded: 7**

### **Other Significant Information**

The Department of Anthropology also successfully completed Annual Fieldwork for B.Sc. Sem-VI and M.Sc Part-II Sem-IV at Mandi, Himachal Pradesh and Jaisalmer, Rajasthan.

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## Botany

### Brief History

The Department of Botany was established in the year 1947 with about 50 students and a couple of faculty members, including the then Head, Dr. J.J. Chinoy. Since then, the Department has expanded to more than 300 post graduate students and research scholars. Dynamic and visionary Professor Panchanan Maheshwari joined the Department in 1949 and served as Head from 1950-1966 that led to its international fame and recognition by UGC as a Centre of Advanced Study (CAS) in Botany and as Centre for Excellence in 1963 especially in the field of morphology and embryology. The International Society of Plant Morphologists (ISPM) was founded by late Prof P. Maheshwari in 1950 that publishes an International Journal – Phytomorphology. The Delhi University Botanical Society (DUBS) was also founded in 1950 that is till date active in arranging lectures by eminent scientists, organizing symposia, nature photography, quiz contests and philately competitions among students and also brings out an Annual Magazine – The Botanica, that publishes popular / semi-technical articles on diverse areas of plant sciences.

### Major Activities and Achievements

Department of Botany has organized Professor Panchanan Maheshwari Memorial Lecture-2022 on 9th Nov. 2022.

Department of Botany organized the H.Y. Mohan Ram Memorial Lecture 2022 (Hybrid Mode) Prof. Douglas E. Soltis, Distinguished Professor, Florida Museum of Natural History and Department of Biology, University of Florida has delivered a lecture on the topic "BUILDING, USING & EXPLORING THE GREEN PLANT TREE OF LIFE" on 26th September, 2022.

### Honours/Distinctions

Dr. Shruti Kasana received Certificate of Merit, Indian Fern Society (November 25-27, 2022)

### Publications

#### Research Articles

Ambreen, H., Oraon, P. K., Wahlang, D. R., Satyawada, R. R., Katiyar-Agarwal, S., Agarwal, M., Jagannath, A., Kumar, A., Budhwar, R., Shukla, R. N., & Goel, S., (2022), Long-read Based Draft Genome Sequence Of Indian Black Gram (*Vigna mungo* L.) Variety 'IPU-94-1 (Uttara)': Insights Into Disease Resistance and Seed Storage Protein Genes, *The Plant Genome*, 03, 15:e20234

Dhyani, A., Baishya, R., Uniyal, P. L., & Rao, K. S., (2023), Assessment of coverage percentage, biomass and photosynthetic pigments of bryophytes in Kanasar forest range, Uttarakhand, India, *Proceedings of National Academy of Sciences, India. Sec. B. Biological Sciences*, 93, 189-194

Patel, K., Chaurasia, M., & Rao, K.S., (2023), Heavy metal accumulation in leaves of selected plant species in urban areas of Delhi, *Environmental Science and Pollution Research*, 30, 27622-27637

Patel, K., Chaurasia, M., & Rao, K.S., (2023), Urban dust pollution tolerance indices of selected plant species for development of urban greenery in Delhi, *Environmental Monitoring and Assessment*, 195, 6

Nautiyal, S., Goswami, M., Prakash, S., Rao, K. S., Maikhuri, R. K., Saxena, K. G., Baksi, S., & Banerjee, S., (2022), Spatio-temporal variations of geo-climatic environment in a high-altitude landscape of central Himalaya: An assessment from the perspective of vulnerability of glacial lakes, *Natural Hazards Research*, 2, 343-362

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Department of Biotechnology (DBT), 2020-2023, Global perspective of transcriptome, proteome and metabolome of root-knot nematode effectors conferring host specificity and host response to them during disease development, 1.64 Crore

Science and Engineering Research Board (SERB), 2020-2023, Deciphering the mechanisms of reduced uptake and accumulation of Arsenic (As) in grain by arbuscular mycorrhizal fungi to develop mitigation strategies for wheat irrigated with As-contaminated ground water in India, 36.33 Lakhs

Department of Biotechnology (DBT), 2020-2025, Exploiting Genetic Diversity for Improvement of Safflower through Genomics-Assisted Discovery of QTLs/Genes Associated with Agronomic Traits, 4.81 Crore

Institution of Eminence, University of Delhi, 2022-2023, Investigation on titanium dioxide nanoparticles mediated protective mechanisms in *Helianthus annuus* L. at morphophysiological, biochemical, and cellular attributes against chromium (VI) accumulation, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2021-2022, Nitric oxide mediated regulations of mitotic aberrations, DNA damage and ascorbate- cycle under salinity stress in *Allium cepa* L, Rs. 3.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Effect of seasonal variability and moss cover on soil enzymatic activity and microbial biomass carbon and nitrogen in temperate forests of Indian Central Himalaya, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Effect of climatic change on functional floral ecology of *Rhododendron arboreum*, Rs. 5.00 Lakhs

Department of Science and Technology, Gov. of India, 2019-2022, Identification of miRNAs from contrasting lines of *Carthamus* and their contribution in tolerance against *Fusarium* wilt, Rs. 40.35 Lakhs

Department of Biotechnology (DBT), 2021-2026, Deciphering the role of SIX genes in virulence and host-specificity of *Fusarium oxysporum* f. sp. *Carthami*, Rs. 73.49 Lakhs

National Mission on Himalayan Studies (NMHS), 2020-23, Diversity and Indigenous Knowledge on Macrofungi in Trans Himayalan District of Kargil, Rs. 56.46 Lakhs

Science and Engineering Research Board (SERB), 2020-2023, Deciphering evolution of dioecy and gender determination mechanism in Himalayan Seabuckthorn using molecular and cytogenetic tools, Rs. 23.87 Lakhs

Science and Engineering Research Board (SERB), 2023-2026, Molecular mechanistics of sex-expression pattern in *Tinospora cordifolia*, a nutritionally and medicinally important dioecious liana, Rs. 32.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Assessment of Himalayan Seabuckthorn populations using molecular and biochemical approaches, Rs. 5.00 Lakhs

Department of Biotechnology (DBT), 2022-2025, Characterisation of MIR395 and MIR399 regulated by bidirectional promoter from *Brassica juncea* to understand Sulphate and Phosphate uptake, and designing novel promoters for crop improvement, Rs. 65.00 Lakhs

Department of Biotechnology (DBT), 2019-2023, Characterization of role of miR159 in male-meiosis and filament elongation in *Brassica juncea* and *Arabidopsis thaliana*: strategies for crop improvement, Rs. 67.00 Lakhs

Institution of Eminence, University of Delhi, 2022-23, Studies on phosphatidic acid interaction with Ascorbate peroxidase 1 (APX1) from *Arabidopsis*, Rs. 5.00 Lakhs

Department of Biotechnology (DBT), 2019-2023, A biotechnological approach to elucidate adaptation mechanism, migration pattern and reproductive biology of indicator temperate alpine plants in Himalayas in response to changing climate, Rs. 89.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Molecular characterization of CcKIP1 promoter in *Arabidopsis thaliana*, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Development of Simple Sequence Repeats/Microsatellites markers using Next Generation Sequencing to assess genetic variation in *Pittosporum eriocarpum* (Royle): An endangered medicinal taxon, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Deciphering nano-bio interactions in Indian mustard (*Brassica juncea*) following a nano-proteomics approach, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-23, Taxonomy and Molecular Phylogeny of the genus *Jurinea* Cass. (Asteraceae) in India, Rs. 5.00 Lakhs



National Agricultural Science Fund, ICAR, 2018-2023, Delineating the effector biology of phytoplasma affecting selected crop taxa in India with special emphasis on sesame (*S. indicum* L.), Rs. 90.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Analysis of development related alterations associated with leafy flower transition in Sesame induced by, Rs. 5.00 Lakhs

Institution of Eminence, University of Delhi, 2021-2023, Study of epigenetic changes associated with phytoplasma infection in selected plant taxa, Rs. 3.00 Lakhs

### **Seminars/Conferences organized by the Department**

Dr. Ratul Baishya and SPA, Delhi, Conducted Two days hands-on training on “Factors affecting Plants growth and pollution mitigation ability” for GSDP Course on "Green Belt Development for Industries" conducted by SPA, Delhi. Hands-on held on 7 & 8 April, 2022 at Department of Botany, University of Delhi.

Professor Renu Deswal, Department of Botany & DUBS, Organized “National Symposium on Recent Developments in Plant sciences for a Resilient Future” organized by DUBS, Department of Botany University of Delhi on 9th-10th November, 2022.

Professor Renu Deswal, Department of Botany, Conducted an online session on “Osmolysis, Plasmolysis, Plant Tissues” for the Teachers of the Delhi Public School teaching Biology, 02-12-2022

University of Delhi organised Professor Panchanan Maheshwari Memorial Lecture-2022, 09-11-2022

University of Delhi organised H.Y. Mohan Ram Memorial Lecture 2022, 26-09-2022.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Singh, V., 2022. 2nd International Conference on Natural Products and Human Health, Deshbandhu College, DU, online mode

Baishya, R., 2023. Biodiversity conservation, environmental protection, sustainability and livelihood options through community led REDD+ mechanism in North-East India. One day National Seminar on "Environmental protection, conservation and sustainability" JB College (A), Jorhat

Baishya, R., 2022. Biodiversity conservation, ecosystem services and climate mitigation through traditional knowledge system. Two-Day Online National Conference on "Sustainable Environmental Perspectives: A Journey from Ancient India" Deen Dayal Upadhyaya College, University of Delhi.

Baishya, R., 2022. New Insights To Climate Change Research: The Carbon Angle” Organized by Vasundhara, the Botanical Society, Daulat Ram College, University of Delhi on the occasion of its Annual Fest "Orchidz" 22

Kapoor, R., 2023. “Mycorrhizal Technology: A Potential and Sustainable Tool in Promoting Medicinal Plant Cultivation” in National Conference on ‘Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants’ and One Day Workshop cum Buyers-Sellers Meet on Medicinal Plants’ organized at Department of Botany, Savitribai Phule Pune University, Pune.

Kapoor, R., 2023. “Arbuscular Mycorrhiza in sustainable cultivation of medicinal plants” in International conference on "Microbes for Sustainable Agriculture, Animal Husbandry and Environment" organised by K.B.P. Mahavidyalaya, Pandharpur Solapur, M.S., India

Kapoor, R., 2023. "Decrypt novel factors of virulence in *Botrytis cinerea*" in Delhi Chapter of Indian Phytopathological Society, e-Symposium on "Pathogen Profile and Pathogenesis in Relation to Crop Disease Management".

Kapoor, R., 2023. “Arbuscular Mycorrhiza in Augmenting the Yield of Medicinal Plants: Delving into the Roots of Mechanism” in the Section Plant Science in the 108th Indian Science Congress organized by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Kapoor, R., 2022. “Exploring the Potential of Arbuscular Mycorrhiza in Augmenting the Productivity of Medicinal Plants and their Sustainable Cultivation” in the International Conference “International Conference on Modernization of Traditional Indian Medicine: Industrial Perspectives” organized by Patanjali Research Institute.

Kapoor, R., 2022. “Understanding the Physiology and Biochemical Mechanisms to Harness Maximum Benefit of Arbuscular Mycorrhiza in Sustainable Cultivation of Medicinal Plants” in National Webinar on "Advances in Plant Science", going to be held in department of Botany, Goa University.

Kapoor, R., 2022. “Understanding the Nuances of Sponsored Research Projects” in three day online FDP at Hansraj College, University of Delhi.

Kapoor, R., 2022. “Long-cherished friendship of plants with fungi” on Fascination Plant Day organized by AMITY University.

Tandon, R., 2023. Keynote speaker, National Conference on Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants and One Day Workshop cum Buyers and Sellers Meet on Medicinal Plants, Savitribai Phule University.

Tandon, R., 2023. Invited Lecture, 108th session of the Indian Science Congress to be held at RTM Nagpur University, Nagpur (Maharashtra).

Das, S., 2022. International symposium on “Advances in Plant Biotechnology and Nutritional Security-APBNS-2022” and “43rd Annual Meeting of Plant Tissue Culture Association (India); ICAR-National Institute for Plant Biotechnology, New Delhi.

Das, S., 2022. “The Full Circle Of Omics Driven Database Driven Omics: An Integrated Approach Towards Trait Modification And Crop Improvement For Climate Resilience” in International Conference Cum Workshop On Proteomics, Transcriptomics, And Molecular Drug Design: An Integrated Omics Approach at Zakir Hussain Delhi College; University Of Delhi

Mudgil, Y., 2023. “Understanding Molecular Basis of Plant Stress Mechanisms using NDL-AGB1 module from *Arabidopsis thaliana*”. International conference on ‘Biotechnology and Human Welfare: Vision 2030 and Beyond (ICBHW-23)’ at Chaudhary Devi Lal University, Haryana.

Mudgil, Y., 2023. DNA, Downstream and Down the memory lane. Indian Society for Plant Physiology (ISPP) satellite event of its annual meeting on 7th January, at ICGEB, New Delhi.

Bhat, V., 2022. “Harnessing apomixis for capturing heterosis” during an International conference on Harnessing innovations and entrepreneurship in Sciences (HIES 2022) organized by Amity University, Jaipur

Deswal, R., 9th IBP virtual seminar by Dr. Ran Drori entitled- “Inhibition and acceleration of crystal growth by biomolecular and supermolecular agents” on 23rd March 2022.

Deswal, R., 2022. “Brassica Leaf Cuticle Proteome- A Treasure Trove” at 3rd International Conference on Genome Biology (ICGB-3) & 53rd Aqua Terr Day at School of Biological Sciences, Madurai Kamaraj University, Madurai, Tamil Nadu, India.

Kasana, S., Uniyal, P.L. and Pandey, A.K., (2022). Diversity of Genus *Jurinea* Cass. (Asteraceae) in India, in XXVIII Annual Conference of Indian Association for Angiosperm Taxonomy & International Symposium on “The contribution of angiosperm diversity to human wellbeing and the risks associated with its decline” organized by Karnataka University’s Karnataka Science College, Dharwad, Karnataka.

Kasana, S., Uniyal, P.L. and Pandey, A.K., (2022). “Phylogenetic analysis of sub-tribe *Saussureinae* (Asteraceae: *Cardueae*) in India using morphological and molecular data” in National Seminar on Plant Taxonomy and Traditional knowledge in the Himalayan and North East India, organized by Rajiv Gandhi University and Botanical Survey of India.

Kasana, S., 2023. "Role of Molecular data in Plant Taxonomy" at Kirori Mal College, University of Delhi.

Kasana, S., 2023. "Potential of Molecular data in Plant Systematics" at Gokhale Education Society’s HPT Arts and RYK science college, Nashik, Maharashtra.

Kasana, S., 2022. “Steer your future: A career counseling session” at Miranda House College, University of Delhi, Delhi.

Kasana, S., 2022. “A botanical perspective to the mighty Himalayas” at South Konkan Education Society’s Govindram Seksaria Science College, Tilakwadi, Belagavi, Karnataka.

### **Other Inter-Institutional Collaborations**

Prof. Arun Jagannath: Collaborative research work with Department of Genetics and CGMCP, Delhi University South Campus

Prof. DB Sahoo: Collaborative research work with Department of biotechnology, Govt. of India

Prof. DB Sahoo: Collaborative research work with North Eastern Council, Ministry of Department of North East Region

Prof. Rupam Kapoor: Collaborative research work with National Mission on Himalayan Studies (NMHS)

Prof. Rupam Kapoor: Collaborative research work with Fábio Sérgio Barbosa da Silva, Institute of Biological Sciences, University of Pernambuco, Brazil

The Department of Botany, in collaboration with Delhi University Botanical Society is offering an introductory course entitled “Biostatistics: The Bare Essentials” conducted by Professor T.R. Rao, Department of Environmental Studies, University of Delhi to the research scholars of the department from 15th September, 2022.

#### **No. of Students under Exchange Programme**

Anshu Siwach, Ph.D. scholar selected in January 2023 for Science and Engineering Research Board (SERB) Overseas Visiting Doctoral Fellowship Program (OVDF) at Purdue University, USA, for a period of ONE year.

#### **Placement Details (Number and percentage of students placed): 3**

#### **Extension and Outreach Activities**

Ratul Baishya delivered invited talk on “Biodiversity conservation, ecosystem services and climate mitigation through traditional knowledge system” in Two-Day Online National Conference on "Sustainable Environmental Perspectives: A Journey from Ancient India" Deen Dayal Upadhyaya College, University of Delhi, 5th and 6th June 2022.

Students, faculty and staff of Botany Department has participated in (Unity Run) Rashtriya Ekta Diwas organized by the University of Delhi on 31st October, 2022.

Department of Botany and Delhi University Botanical Society (DUBS) has organized 'OFiesta' the quiz competition on 23rd September, 2022.

On 17th August, 2022: Hosted class XII biology students of an east Delhi school for a day hand-on experience in simple biotechnological techniques.

Department of Botany and Delhi University Botanical Society (DUBS) celebrated Independence Day and "Har Ghar Tiranga" on 12th August, 2022.

Dr. Vibhuti Singh: Conducted Awareness campaign for Dept lab staff and cleaning staff ‘Herbal India, Healthy India’: 14th Feb 2023

Mudgil, Y., SHAKTI – A National Movement for Women initiates STREE, (Science Technology Research and Entrepreneurship Enhancement), National Conference and Expo on “Role of Women in Science & Technology for Sustainable Development of Atmanirbhar Bharat” in collaboration with Jawaharlal Nehru University, New Delhi on 25-26th Nov 2022"

#### **Faculty Strength: 21**

#### **Number of Ph.D. Degrees Awarded: 17**

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## Chemistry

### Brief History

The chemistry teaching started in 1922 with three-constituent colleges St. Stephens, Hindu and Ramjas. The chemistry department made an inconspicuous beginning in the Viceregal kitchen in Oct 1933. In June-1949, Professor T. R. Seshadri took over as head of the department and led the department to attaining international reputation. Since its inception, the Department has distinguished itself as a center for excellence in teaching and cutting-edge pioneering-research. Several faculty members have joined the department and contributed significantly in various interdisciplinary fields related to Nanochemistry - Electrochemistry-Biophysical Chemistry-Supramolecular Chemistry-Organometallic- Coordination Chemistry - Computational Chemistry-Crystal Engineering-Drug Discovery-Medicinal Chemistry-Synthetic Organic Chemistry-Sensors-Structural Chemistry-Catalysis-Polyoxometalates, etc. In recognition of the research achievements, it has received the status of a UGC Centre of Advanced Study-1963/1965 and a DST-FIST sponsored Department-1982. The Department was recognized as the best performing Chemistry Department in the country by DST in 2011. Faculty members are engaged in state-of-the-art research as well as guiding Ph.D.-M.Sc.-and post-doctoral students.

### Major Activities and Achievements

The Department of Chemistry is one of the premier teaching and research Departments in the country. The spectrum of research areas pursued here is broad, ranging from experimental to theoretical studies on chemical biology, synthetic methodology development, electrochemistry, polymers, bio-organic, coordination, green material, medicinal, natural products, nano-, and synthetic chemistry. In the last one-year, faculty members published more than 200 research papers in high-impact peer-reviewed journals and 74 Ph.D. degrees were awarded. Apart from collaborating internationally, faculty members were invited to share their work through keynote, plenary and invited lectures in national/international conferences and various institutions. Extramural research projects secured by faculty facilitated in developing and upgrading state-of-the-art laboratory facilities and in training young research scholars. Many faculty members were conferred prestigious medals, honors and awards. Several M.Sc students graduating from the Department chose to pursue Ph.D. in chemistry in reputed global institutions.

### Honours/Distinctions

Prof. Rama Kant: Guest Editor Rama Kant for special issue on: Fundamental and theoretical electrochemistry as a tool for developing electrochemical science and technology for Current Opinion in Electrochemistry 36, 101162. Prof. Ram Kant: Elected Convener of CRSI Local Chapter of the region, CRSI (2020-2023).

Prof. Raj K. Sharma: Prof S.T. Nandibewoor Award, Indian Council of Chemists during its XXXXI Annual Conference, Indian Council of Chemists.

Prof. Diwan S. Rawat: Vasvik Research Award, Vividhlaxi Audyogik Samshodhan Vikas Kendra. Associate Editor, Scientific Reports

Member International Editorial Board: ACS Bioconjugate Chemistry (American Chemical Society); Journal of Biochemical and Molecular Toxicology (Wiley); Anti-Cancer Agents in Medicinal Chemistry (Bentham); Indian Journal of Heterocyclic Chemistry; Journal of Indian Chemical Society.

Prof. R. Nagarajan: SMC Silver Medal/Society for Materials Chemistry/Innovation Fellowship of the Indian Academy of Science, Bangalore.

Prof. P. Biswas: Fellowship of the Indian Academy of Science, Bangalore.  
Prof. Rajeev Gupta:

Council Member, Chemical Research Society of India (CRSI) (2020 – 2023).

Member, Editorial Board, Journal of Chemical Sciences, jointly published by the Indian Academy of Sciences, Bangalore & Springer (2017 – 2022).

Prof. S. Deka: Editorial board member, PeerJ Materials Science.

## **Publications**

### **Research Articles**

Rana, P., Dixit, R., Sharma, S., Dutta, S., Yadav, S., Arora, B., Kaushik, B., Rana, P., & Sharma, R. K. (2022). Magnetic boron nitride nanosheets decorated with cobalt nanoparticles as catalyst for the synthesis of 3, 4-dihydropyrimidin-2(1H)-ones/thiones. ACS Applied Nanomaterials, 5(4), 4875-4886.

Kaushik, B., Rana, P., Rawat, D., Solanki, K., Yadav, S., Rana, P., & Sharma, R. K. (2022). Magnetically separable type-II semiconductor based ZnO/MoO<sub>3</sub> photocatalyst: a proficient system for heteroarenes arylation and rhodamine B degradation under visible light. New Journal of Chemistry, 46(18), 8478-8488.

Kaushik, B., Yadav, S., Rana, P., Rana, P., Solanki, K., Rawat, D., & Sharma, R. K. (2022). Precisely engineered type II ZnO-CuS based heterostructure: A visible light driven photocatalyst for efficient mineralization of organic dyes. Applied Surface Science, 590, 153053.

Kumar, V., Singh, D., Kumar, P., Chaudhary, G., Singh, A. P., & Gupta, R. (2022). Turn-on fluorescent detection of nickel and zinc ions by two related chemosensors containing naphthalimide ring(s). Journal of Molecular Structure, 1261, 132901.

Yadav, P., Pandey, J., & Nagarajan, R. (2022). Tuning the thiophilicity of Pr<sub>6</sub>O<sub>11</sub> (PrO<sub>1.833</sub>) through Pb-substitution to append efficient adsorption characteristics. Applied Surface Science, 591, 153111.

Shrivastava, V., & Nagarajan, R. (2022). Chemical pressure-induced structural, optical, and magnetic property transformations of PrAlO<sub>3</sub>. Ceramics International, 48(15), 22105-22112.

Kumar, N., & Kaur-Ghumaan, S. (2022). 2-Mercaptobenzimidazole ligand-based models of the [FeFe] hydrogenase: synthesis, characterization and electrochemical studies. Journal of Chemical Sciences, 134(2), 53.

Bawa, R., Deswal, N., Negi, S., Dalela, M., Kumar, A., & Kumar, R. (2022). Pyranopyrazole based schiff base for rapid colorimetric detection of arginine in aqueous and real samples, RSC Advances, 12(19), 11942-11952.

Sethi, A., Uma, S., & Nagarajan, R. (2022). Boosting defects through divalent ion substitution to tailor the optical, textural, catalytic, and photocatalytic properties of Th<sup>4+</sup>-stabilized  $\delta$ -Bi<sub>2</sub>O<sub>3</sub>. *Materials Science in Semiconductor Processing*, 141, 106441.

Pachisia, S., & Gupta, R. (2022). Tailored Inorganic-Organic Architectures via Metalloligands. *The Chemical Record*, 22 (11), e202200121.

Gupta, R., Kumar, G., & Gupta, R. (2022). Encapsulation-Led Adsorption of Neutral Dyes and Complete Photodegradation of Cationic Dyes and Antipsychotic Drugs by Lanthanide-Based Macrocycles. *Inorganic Chemistry*, 61(20), 7682–7699.

Goyal, H., & Gupta, R. (2022). Sensing and formation of a stable gel in the presence of picric acid by a low-molecular-weight-gelator. *Journal of the Indian Chemical Society*, 99(7), 100521.

Bawa, R., Deswal, N., Kumar, A., & Kumar, R. (2022). Scrutinizing the Interaction of Bovine Serum Albumin and Human Haemoglobin with Isatin- triazole Functionalized Rhodamine through Spectroscopic and In-silico Approaches. *Journal of Molecular Liquids*, 360, 119558.

Kumar, R., Yadav, N., Jain, H., Deswal, N., Upadhyay, R. K., Leekha, A., Verma, A. K., Kareem, A., Chikati, R., & Kumar, L. S. (2022). Microwave-assisted synthesis of 4-aryl-1, 4-dihydropyridines as potent anticancer agent and their in-silico studies. *ChemistrySelect*, 7(19), e202104129.

Rawat, M., & Rawat, D. S. (2022). Cu<sub>2</sub>O decorated MHAM (Marigold hollow alumina microspheres) nanoparticles as robust and efficient catalyst for the synthesis of isoquinolone. *ACS Sustainable Chemical Engineering*, 10(30), 10014–10023.

Gagandeep, Kholiya, Kidwai, S., Singh, P., Singh, R., & Rawat, D. S. (2022). Design and Synthesis of Benzimidazole derivatives as anti-mycobacterial agents. *Journal of Biochemical and Molecular Toxicology*, 36(9), e23123.

Chandel, S., Zulkifli, Kim, J., & Rai, A. K. (2022). Effect of vanadium doping on the electrochemical performances of sodium titanate anode for sodium ion battery application. *Dalton Transactions*, 51(31), 11797-11805.

Chandel, S., Zulkifli, Singh, J., Kim, J., & Rai, A. K. (2022). Facile synthesis of Na<sub>0.23</sub>TiO<sub>2</sub> nanoparticles anode wrapped within full carbon network with high-rate capability for sodium ion battery application. *Materials Chemistry and Physics*, 290, 126600.

Antil, B., Kumar, L., Das, M. R., Deka, S. (2022). N-doped graphene modulated N-rich carbon nitride realizing a promising all-solid-state flexible supercapacitor. *Journal of Energy Storage*, 52, (Part A), 104731.

Singh, A., Singh, P., & Nath, M. (2022). Bronsted acidic surfactants: efficient organocatalysts for diverse organic transformations. *Physical Sciences Reviews*, 7(4-5), 469-506.

Chauhan, D., Kumar, Y., Chandra, R., & Kumar, S. (2022). 2D transparent few layered hydrogen substituted graphdiyne nano-interface for unprecedented ultralow ANXA2 cancer biomarker detection. *Biosensors and Bioelectronics*, 213, 114433.

Kaim, V., Joshi, M., Stein, M., & Kaur-Ghumaan, S. (2022). Mononuclear manganese complexes as hydrogen evolving catalysts. *Frontiers in Chemistry*, 10, 1-13.

Gopalaiah, K., Choudhary, R., & Sambasiva Rao, K. R. S. (2022). Pd-catalyzed one-pot approach for installation of 9-aminoacridines via Buchwald-Hartwig amination and cycloaromatization. *Arkivoc*, 2022(6), 24-37.

Upadhyay, R. K., Saini, K. K., Deswal, N., Singh, T., Tripathi, K. P., Kaushik, P., Shakil, A. A., Bharti, A. C., & Kumar, R. (2022). Synthesis of benzothiazole-appended bis-triazole-based structural isomers with promising antifungal activity against *Rhizoctonia solani*. *RSC Advances*, 12(37), 24412-24426.

Singh, D., Ibrahim, A., Kumar, P., & Gupta, R. (2022). Methylene spacer mediated detection switch between copper and zinc ions by two coumarin-pyrene based chemosensors. *ChemistrySelect*, 7 (22), e202202574.

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Kumar, N., & Kaur-Ghumaan, S. (2022). Synthesis, Characterization and Electrochemical Studies of bis(Monothiolato) {FeFe} Complexes  $[\text{Fe}_2(\mu\text{-SC}_6\text{H}_4\text{-OMe-}m)\text{2(CO)}_5\text{L}]$  (L = CO, PCy<sub>3</sub>, PPh<sub>3</sub>). *ChemistrySelect*, 7 (44), e202203392.

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## Books/Chapter in Books

Devi, Rai, A. K., & Singh, R. K. (2022). Chapter 13: Nanocomposites of 2D materials for enhanced electrochemical properties, Boca Raton, Florida: CRC Press (Taylor & Francis Group), 223-244.

Antil, B., & Deka, S. (2022). Chapter5: Porous Graphitic Carbon Nitride Nanostructures and Their Application in Photocatalytic Hydrogen Evolution Reaction, New Jersey, USA: John Wiley & Sons Ltd., 133-163.

Nath, M., Singh, A., Ghatak, T., Agarwal, S., & Pratap, R. (2022). Applications of CuFe<sub>2</sub>O<sub>4</sub> magnetic nanoparticles in organic synthesis, Berlin/Boston: De Gruyter, 157-190.

Singh, J., Singh, R. K., & Rai, A. K. (2022). Metal phosphide based 2D nanomaterials for batteries. Boca Raton, Florida: CRC Press (Taylor & Francis Group), 233-249.

Tomar, A.K., Kumar, D., Joshi, A., Singh, G., & Sharma, Raj K. (2023). Synthesis and Fabrication of Advanced Carbon Nanostructures. In: Grace, A.N., Sonar, P., Bhardwaj, P., Chakravorty, A. (eds) Handbook of Porous Carbon Materials. Materials Horizons: From Nature to Nanomaterials, Springer, Singapore, 3-19.

Gupta, R., Pachisia, S., & Gupta, R. (2023). Chapter 3 - Supramolecular coordination complexes from metalloligands: Heteronuclear complexes and coordination polymers and their applications in catalysis, Editor(s): Shanmugaraju, S. Supramolecular coordination complexes-Design, synthesis, and applications, Elsevier, 43-68.

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Singh, A., Khan, S., Nain, N., & Kukreti, S. (2023). 7 - Deciphering plausible role of DNA nanostructures in drug delivery, Editor(s): Sharma, N., & Butola, B. P. In: The Textile Institute Book Series, Fiber and Textile Engineering in Drug Delivery Systems, Woodhead Publishing, 215-251.

Mittal, A., Roy, I., & Gandhi, S. (2022). Drug delivery applications of metal-organic frameworks (MOFs). IntechOpen. doi: 10.5772/intechopen.103684.

## Research Projects

Institute of Eminence, University of Delhi (PI-Rakesh Kumar), 2022/6 months, Nanoparticle catalysed synthesis and evaluation of 1,4-Dihydropyridine based Antihypertensive and antimicrobial candidates, 5,00,000

Institute of Eminence, University of Delhi (PI- M. D. Milton), 2022/6 months, Quinoxaline and pyridopyrazine-based donor-acceptor molecules and their applications, 5,00,000

Institute of Eminence, University of Delhi (PI-F. Hussain), 2022/6 months, Synthesis, Characterization of YIII-substituted Arsenotungstate and its Catalytic application in thioether oxidation, 5,00,000

SERB (PI-S. Uma), 2022/3 years, A systematic probe to develop functional materials with structures organized by oxyanions, 46,42,906

SERB (PI-P. Venkatesu), 2022/3 years, Nanomaterials-induced conformational transition of stimuli responsive polymeric materials, 44,00,000

SERB (PI-S. Deka), 2022/3 years, Development of single atom catalysts (SAC) for superior and robust photocatalytic applications, 60,06,000

Institute of Eminence, University of Delhi (PI-S. Kaur), 2022/6 months, Design and Development of Versatile Hydrophilic Ligand-based Iron Complexes as Hydrogen Evolution Reaction (HER) catalysts, 5,00,000

SERB (PI-R. Gupta), 2022/3 years, Tuning Catalytic and Sensing Applications of Designer Architectures by the Judicious Introduction of Hydrophilic and Hydrophobic Functional Groups, 37,25,056

CSIR (PI-P. Venkatesu), 2021/3 years, The biocompatible validity of deep eutectic solvents for structural stability and activity of proteins, 13,00,000

### **Seminars/Conferences organized by the Department**

Prof. Govind Gupta, Prof. M. D. Milton, Prof. Saibal Sarkar, Dr. R. H. Narula, Dr. S. D. Mahajan, Prof. D. S. Negi, Prof. M. T. Swihart, Dr. S. Kaushik, NPL-Delhi, Univ. of Delhi, IIT Bombay, CCRH, Univ. of Buffalo, HNB Garhwal Univ., SUNY Univ. of Buffalo, DG Ministry of Ayush, University of Delhi, International conference on Smart materials-perspectives and prospectives (SMPP-2023) in association with Indian Science Congress Delhi Chapter, 28-03-2023

Prof. S. A. Schwartz, Dr. R. Aalinkeel, Dr. P. P. Hazari, Dr. S. P. Singh, Dr. S. D. Mahajan, Prof. D. G. Schwartz, Dr. S. N. Sharma, Univ. at Buffalo, CSIR-NPL Delhi, University of Delhi, International conference on Nanomedicine: Chemistry Medicine Interface (NCMI-2022), 06-12-2022

Prof. G. Basu, Prof. P. K. Chowdhury, Dr. S. V. Eswaran, Prof. G. Ramanathan, Prof. S. Sen, Bose Institute Kolkata, IIT Delhi, St. Stephen's College Univ of Delhi, IIT Kanpur, JNU, NA, National Conference on Recent Trends in Chemistry and Nano-Biotechnology (RTCN-2022), 13-12-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Diwan S. Rawat, "NMR Spectroscopy: Basic introduction to structure determination" CPDHE Refresher course, University of Delhi, July 12, 2022 and CPDHE Refresher course, Kumaun University, Nainital, July 9, 2022."

Diwan S. Rawat, "Research Methodology and Research Ethics" CPDHE Refresher course, Kumaun University, Nainital, July 8, 2022.

Diwan S. Rawat, "Research Publication During Post-graduation" COMMONWEALTH POSTGRADUATE FORUM "Postgraduate Publications – Opportunity or Necessity" Commonwealth Tertiary Education Facility (CTEF), Malaysia, June 30, 2022.

Diwan S. Rawat, "Science of medicinal chemistry in the discovery of medicines: From ideas to-trenches-to-the bed" 15th Uttarakhand State Science Congress, June 23-25, 2022 (Keynote Speaker).

M. Nath, "Role of Disconnection Approach in Organic Synthesis" in the Refresher course in Chemistry organized by CPDHE and Department of Chemistry, University of Delhi (Date: 15th July 2022).

R. Kant, "Electron Transfer in Nano-structured and Atomically Stepped Electrode: Theoretical Aspects (Invited Talk), International Conference on Nanomaterials for Electro-catalysis Technology, 20th -22nd March 2023, Indian Institute of Technology, Delhi."

R. Kant, "Prof S K Rangarajan Memorial Award Lecture on 26th August 2022 at the National Convention of Electrochemists, SAEST, Coimbatore."

R. Kant, "Electron Transfer in Nano-structured and Atomically Stepped Electrode: Theoretical Aspects (Invited Talk), National Symposium on Brainstorming Meeting on Chemistry at the Interface (BSCI-2022), Department of Chemistry, Banaras Hindu University, Varanasi, 26-27th December 2022." Electron Transfer in Nano-structured and Atomically Stepped Electrode: Theoretical Aspects (Invited Talk), International Conference on Nanomaterials for Electro-catalysis Technology, 20th -22nd March 2023, Indian Institute of Technology, Delhi. R. Kant, "Electron Transfer in Nano-structured and Atomically Stepped Electrode: Theoretical Aspects (Invited Talk), Conference on Electrochemistry in Industry, Health and Environment (EIHE-2023), ISEAC & Analytical Chemistry Division, BARC, 7-11th February 2023."

S. Deka: International "Significantly improved Hydrogen and Oxygen Evolution Reaction by Nanostructured Electrocatalyst" 1st International Conference on "Recent Trends in Chemical Sciences and Sustainable Energy" March 24-25, 2023, Department of Applied Sciences, National Institute of Technology (NIT) Delhi, Delhi.

International "Advanced nanomaterials for electrochemical energy conversion and energy storage" International Conference on "Recent Advances in Materials Chemistry and Catalysis, (RAMCC-2023)" during 1-3 March, 2023, Department of Chemistry, Dibrugarh University, Assam, India.

International "Significantly improved Hydrogen and Oxygen Evolution Reaction by Nanostructured Electrocatalyst" International conference on electron microscopy & XLI annual meeting of electron microscope society of India (EMSI-2023) during February 08-10, 2023, University of Delhi, Delhi.

Invited talk: "Development of Nanostructured Materials for Electrochemical Energy Storage Devices" 30th edition of National Conference on Condensed Matter of physics "Condensed Matter Day (CMDAYS 2022), 14-16 December, 2022. National Institute of Technology Nagaland, Chumukedima-797103, Nagaland.

Invited talk: "Robust and Promising Hydrogen and Oxygen Evolution Reaction by Nanostructured Electrocatalyst" National conference on "Science for Society, Environment, and Sustainability (SSES-2022)" CSIR-North East Institute of Science & Technology (CSIR-NEIST), Jorhat, Nov. 24-26, 2022.

Resource person "Nanochemistry and useful instrumentation: Transmission and scanning Electron Microscopy" FDP on Recent Advances in Experimental Tools & Theoretical Techniques RAETTT-2022. 10 NOV. –16 NOV. 2022 Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh-273010.

Resource person "Sustainable and Clean Energy: Application of Electrochemistry on Nanomaterials" FDP on Recent Advances in Experimental Tools & Theoretical Techniques RAETTT-2022. 10 NOV. –16 NOV. 2022 Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh-273010.

Resource person "Chemical Safety and Ethical Handling of Chemicals: Few Selected Topics of Research Methodology in Chemistry" Refresher Course on Chemistry, 21st July 2022, CPDHE, UGC-HRDC, University of Delhi, Delhi, Delhi.

Key Note lecture “Sustainable and Clean Energy: Application of Nanomaterials”, 5th June 2022, in National symposium on ‘Environmental sustainability, Industrialization and health issues’ organized by Eastern Karbi Anglong College and Assam Science Society, Assam.

Popular lecture “Nanoscience: Big world of Small Things” 26th April, 2022, Pragjyotish College, Guwahati, Assam.

M. D. Milton, "Multi-stimuli responsive fluorochromic switching in phenothiazine derivatives, in the Young Scientist Conclave (online) held on July 30-31, 2022 Organized by The Indian Chemical Society".

Alok K. Rai: Invited Speaker: International Conference on Nanomaterials for Electrocatalysis Technologies (I-CONNECT-2023) March 20-22, 2023, IIT Delhi. International Conference on Frontiers in Materials Engineering (ICFME-2022) December 14-16, 2022, IIT Indore. 5th International Conference on Soft Materials (ICSM 2022) December 11-16, 2022, Malaviya National Institute of Technology (MNIT), Jaipur.

3rd International Conference on Soft Materials (ICSM 2018) December 09-14, 2018, Malaviya National Institute of Technology (MNIT), Jaipur.

P. Venkatesu: International Conference on “Recent Advances in Chemical Sciences (RACS-2022)” Nov 10-11, 2022, Central University of Jammu, India (Invited lecture).

International Conference on “Future of Energy with Science and Technology” (FEST-2022), talk on “Expanding the Potential role of Deep Eutectic Solvents Toward Facilitating The Structural and Thermal Stability of Enzymes” Nov. 29-30, 2022, ITEX, New Delhi (Invited Talk).

Prof. Rakesh Kumar: Expert group meeting on nanomedicine. (Presentation) central council for research in homoeopathy. An Autonomous Body of ministry of Ayush, Govt. of India). Nehru Bhartiya Chikitsa Avum Homoeoparhv Anusandhan Bhavan Janak Puri Delhi. February 2, 2023.

International conference on Nanomedicines: Chemistry Medicine Interface (NCMI-2022) Convener- Department of Chemistry. University of Delhi Delhi-7 India. December 6, 2022.

International Conference on Green Technology: Issues and Challenges (ICGT 2022) Invited Talk Some potential applications of nanoscale materials. Department of Chemistry, C.C.S. University, Meerut. September 23, 2022.

Online faculty development program. (Resource Person). Nanomaterials: Small size-Better properties. Department of chemistry, GLA University, Mathura from 17th Oct. to 22 Oct. 2022.

### **Other Inter-Institutional Collaborations**

Harikrishnan S Nair, Department of Physics, University of Texas at El Paso, USA and Prof. S. Uma. Prof. Sasanka Deka-Dr. Manash R. Das, Principal Scientist & Associate Professor (AcSIR), CSIR-North East Institute of Science and Technology, Jorhat, Assam, Assam.

Prof. Sasanka Deka-Dr. Ankur Kanti Guha, Advanced Computational Chemistry Centre, Cotton University, Guwahati 781001, Assam.

Prof. Sasanka Deka-Dr. Chinnakonda S. Gopinath, Chief Scientist and Chairman, Catalysis and Inorganic Chemistry Division, CSIR-National Chemical Laboratory, Pune 411 008, India.

Prof. Sandeep Kaur - Prof. Dr. Matthias Stein, Group Leader Molecular Simulations and Design, Max-Planck-Institute for Dynamics of Complex Technical Systems, Sandtorstr. 1, 39106 Magdeburg, Germany.

Faculty Strength: 38

Number of Ph.D. Degrees Awarded: 75

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## **Environmental Studies**

### **Brief History**

The history of the Department of Environmental Studies (DES) goes back to 1972 when its earlier avatar – the Department of Environmental Biology (DEB) was established but became operational only in 1990 imparting education at post-graduate level in the area of environmental biology. Later, the School of Environmental Studies (SES) was founded in the year 2000 which functioned till 2009 with an interdisciplinary focus offering M.A., M.Sc., and Ph.D. degrees. In a major academic restructuring exercise, the University of Delhi, while maintaining the interdisciplinary nature of the School and its academic programmes, merged DEB and SES into the present Department of Environmental Studies in 2010.

The restructuring effort in 2009-10 aimed at achieving a critical mass in terms of faculty strength which was dispersed in various teaching and research units of the university engaged in environmental studies. The University decided to relocate the faculty members of different units, namely the Centre for Environmental Management of Degraded Ecosystems (CEMDE), Centre for Interdisciplinary Studies of Mountain & Hill Environment (CISMHE), DEB, and SES to the newly established DES. The formulation reflected the synthetic nature of the ‘Environment’ drawing strengths from these multiple units in terms of the programme and the faculty.

Today, the Department of Environmental Studies draws one of the highest numbers of applicants to its post-graduate programme and has the highest rejection rate of applicants as per available seats and the second highest in the University after Plant Molecular Biology. The Department has several research publications in top-quality journals such as Nature, Science, PNAS etc.

### **Major Activities and Achievements**

The Department is engaged in teaching and research through its two post-graduate courses in Environmental Studies (M.A. in Environmental Studies and M.Sc. in Environmental Studies) and Ph.D. program. Each year, we admit 68 students (M.Sc. 39 and M.A. 29) from varied academic backgrounds across various disciplines through an all-India entrance test conducted by the National Testing Agency. The department has Fifteen regular faculty members involved in teaching and research in fundamental and applied aspects of ecology and environment. The department is actively involved in socially relevant research connected to national development and environmental health, thereby mitigating issues arising from environmental degradation. The faculty has successfully secured extramural research projects over the years, which has helped develop state-of-the-art laboratory facilities and train research scholars leading to publications in top-tier journals such as Nature, Science, and other high-impact journals. The faculty

members are recognized globally, collaborating widely with international experts, and delivering keynote and plenary lectures on their research findings at National and International Institutions/conferences.

### **Honours/Distinctions**

Prof. Inderjit has been awarded the Humboldt Research Award by the Humboldt Foundation, Germany for 2022-23.

Prof. Inderjit has been awarded the Excellence Award conferred by the University of Delhi to recognize outstanding service and contributions to the research and academic activities of Inderjit at the University, 2023.

Prof. S.D. Biju has been elected Fellow of the Indian National Science Academy (FNA, INSA), New Delhi India, effective from 01 January 2023.

Prof. S.D. Biju has been awarded Harvard University's prestigious Radcliffe fellowship 2023-24.

### **Publications**

#### **Research Articles**

Luo, Y., Amanda, T., Weigelt, P., Guenard, B., Economo, E., Nowak, A., Inderjit, & Kreft, H. (2023). Climate and ant diversity explain the global distribution of ant-plant mutualisms. *Ecography*, 2023(11), e06841.

Majumdar, S., Kaur, H., Rinella, M.J., Kundu, A., Vadassery, J., Erbilgin, N., Callaway, R.M., Cadotte, M., & Inderjit. (2023). Synergistic effects of canopy chemistry and autogenic soil biota on a global invader. *Journal of Ecology*, 111(7), 1497-1513.

Cai, L., Kreft, H., Taylor, A., Denelle, P., Schrader, J., Essl, F., Van Kleunen M., Pergl, J., Pyšek, P., Stein, A., Winter, M., Barcelona, J., Fuentes, N., Inderjit, Karger, D., Kartesz, J., Kuprijanov, A., & Nishino, M. (2023). Global models and predictions of plant diversity based on advanced machine learning techniques. *New Phytologist*, 237(4), 1432-1445.

Luedtke, J, A., Hobin, L., Biju, S. D., Langhammer, P. & Stuart, S.N. (2023). Ongoing declines for the world's amphibians in the face of emerging threats. *Nature*, 622, 308-314.

Gopika, C., Garg, S., Sivaperuman, C., Gokulakrishnan, G. & Biju, S. D. (2023). Larval morphology and natural history in two *Minervarya* species from Andaman Islands, with comments on a new phytotelmonous larval morphotype for the genus. *Zootaxa*, 5353(6), 567-581.

Sharma, S., Malhotra, L., Mukherjee, P., Kaur, N., Krishanlata, T., Srikanth, C.V., Mishra, V., Banerjee, B.D., Ethayathulla, A.S., & Sharma, R.S. (2023). Putative interactions between transthyretin and endosulfan II and its relevance in breast cancer, *International Journal of Biological Macromolecules*, 235, 123670.

Garg, S., Mishra, V., Vega, L.F., Sharma, R.S., & Dumée, L.F. (2023). Hydrogen Biosensing: Prospects, Parallels, and Challenges. *Industrial & Engineering Chemistry Research*, 62(11), 4676–4693.



Sharma, U., Rawat, D., Mukherjee, P., Farooqi, F., Mishra, V., & Sharma, R.S. (2023). Ecological life strategies of microbes in response to antibiotics as a driving factor in soils. *Science of the Total Environment*, 854, 158791.

Mishra, V., Mudgal, N., Rawat, D., Poria, P., Mukherjee, P., Sharma, U., Kumria, P., Pani, B., Singh, M., Yadav, A., Farooqi, F., & Sharma, R. S. (2023). Integrating microalgae into textile wastewater treatment processes: Advancements and opportunities. *Journal of Water Process Engineering*, 55(3), 104128.

Rawat, D., Sharma, U., Yadav, A., Poria, P., Farooqi, F., Pani, B., Mukherjee, P., Singh, M., Sharma, R.S., & Mishra, V. (2023). A bottom-up approach to select microbes from textile wastewater for detoxification of aromatic amine and azo dye in a single stage. *Journal of Water Process Engineering*, 53, 103668.

Kumari, R., Suman, K., Karmakar, S., Mishra, V. Lakra, S.G., Saurav, G.K., & Mahto, B.K. (2023). Regulation and safety measures for nanotechnology-based agri-products. *Frontiers in Genome Editing*, 5, 1-12.

Goyal, N., Tripathy, M., Singh, V., & Sharma, G.P. (2023). Transformative potential of higher education institutions in fostering sustainable development in India, *Anthropocene Science*, 2(2), 112-122.

Sunny, A., Singh, P., Diwakar, S., & Sharma, G.P. (2023). Delineating the calling pattern of *Oecanthus indicus* from native and non-native plant species, *PeerJ*, 11, e16153.

Singh, S., Saroj, P., Ghosh, C., & Sinha, P. (2023). Calibration of Indian Dobson Spectrophotometer Nos. D112 and D036 during WMO Dobson Intercomparison campaigns. *Mausam*, 74(1), 73-82.

Barhadiya, G. & Ghosh, C. (2023). Urban biodiversity conservation a basic concept of sustainable urbanism: a systematic review. *Sustainability, Agriculture, Food and Environmental Research*, 11(X), 1-20.

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### **Books/Chapter in Books**

Mishra, V. (Ed.). (2022). *Recent Trends in Wastewater Treatment*. Switzerland: Springer Nature.

Urfi, A. J. (2023). Artistic and Literary Contexts. *Ornithology and Natural History Studies in India-The Mughal and early British periods In: Women, Environment, and Networks of Empire*. Canada: McGill-Queen's University Press, 159-178.

Singh, A. and Rastogi, N. (2022). Assessment of Crop Yield Loss Due to Surface Ozone Pollution Over Delhi NCR And Indo Gangetic Plain Region Using Different Ozone Exposure Matrices. Singapore: Springer, 47-73.

Gandu, B. (2022). *A Brief Review of Waste Generation in India and Biofuel Applications*. Singapore: Springer, 119.

Ray, A.K. (2022). *Inbreeding and genetic load genetic restoration*. USA: Apple Academic Press, 15.

### **Journal(s) Published by the Department**

#### **Research Projects**

Institute of Eminence, University of Delhi (PI: Radhey Shyam Sharma), 2022/ 1 year, Faculty Research Programme, 5.0

Institute of Eminence, University of Delhi (PI: Vandana Mishra), 2022/ 1 year, Faculty Research Programme, 5.0

Department of Science & Technology (GOI) (PI: Chirashree Ghosh), 2021-23/ 2 years, Raising Awareness on Urban Air Quality, Climate Change, Health and e-resilience (50894) under "Science, Technology, Engineering, Mathematics, Medicine (STEMM) –India Initiative" (Bharat Vigyan Darshan)", 29.23

Institution of Eminence, University of Delhi (PI: Chirashree Ghosh), 2022-23/ 1 year, Remediating waste using waste: Green nanotechnology for the removal of potentially toxic elements, 5.0

ICMR (Co-PI: Chirashree Ghosh), 2023-25/ 2 years, A multi-omics approach to understanding the impact of climate change on heart failure using.....as an animal model, 39.68

SERB (PI: Swati Diwakar), 2020-23/ 3 years, Impacts of invasive species on native arthropod abundance, and diversity across environmental and geographic gradients in India, 16.0

Institute of Eminence, University of Delhi, Delhi (PI: Atinderpal Singh), 2022-25/ 3 years, Enhancement in the black carbon absorption due to lensing effect, 25.4

Institute of Eminence, University of Delhi, Delhi (PI: Bharath G), 2022-23/ 1 year, Biomethane enhancement using nanoparticles in anaerobic digestion through direct interspecies electron transfer mechanism, 5.0

Institute of Eminence, University of Delhi, Delhi (PI: Ashwini Kumar Ray), 2022-23/ 1 year, Faculty Research Programme, 5.0

DHR-ICMR (PI: Ashwini Kumar Ray), 2023-25/ 2 years, A multi-omics approach to understanding the impact of climate change on heart failure using.....as an animal model, 39.68

Institute of Eminence, University of Delhi, Delhi (PI: Shailender Kumar Verma), 2022-23/ 1 year, Development of novel approaches to investigate plant metallome using bioinformatics, histological and biochemical techniques., 5.0

SERB, Government of India (PI: Shailender Kumar Verma), 2023-26/ 3 years, Development and characterisation of climate-resilient biofortified crops: An approach towards climate-smart agriculture, 36.88

SERB, Government of India (PI: Alok Kumar), 2023-26/ 3 years, Biogeochemical transformation and fate of reactive nitrogen species in the aquatic ecosystems of semi-arid region of Rajasthan, 44.56 Patents Filed/Granted

### **Seminars/Conferences organized by the Department**

Eminent speakers across the environmental studies and science domain from India and abroad., Professors, Scientists, Directors etc., UGC & CPDHE, DU, Refresher Course on Environmental Studies and Disaster Management (IDC), 03-12-2022

Prof. James Hanken, Harvard University, Professor, Biodiversity Parks, Delhi, An International Seminar on Evolution of Lung Loss in Terrestrial Vertebrates, 06-07-2022

Prof. Chirashree Ghosh, Professor, Department of Science and Technology, National Workshop under the theme “Raising Awareness on Urban Air Quality, Climate Change, Health, and e-resilience”, 18-04-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Prof. Inderjit: Delivered a talk, “Allelopathy” at the Department of Biochemistry, Max Planck Institute for Chemical Ecology, Jenna, Germany, on 7 February 2023.

Delivered lecture (online), “Drivers of invasion impacts” at the 5th International Conference on “Biological Invasion and Global Change” Shenyang Agricultural University, Shenyang, Liaoning Province, China, on 17 December 2022

Delivered seminar (online), “Litter chemicals engender mechanisms underlying vegetation changes” at the webinars in polyphenol research, USA, ‘Polyphenols in natural soil systems, 28 April 2022.

Prof. Vandana Mishra: Vandana Mishra (2023) Ecotoxic Potential of Microplastics and Solutions to Minimize their Adverse Impacts, in An International Seminar on Microplastics and its Remediation. 14 June 2023 at University of Delhi, New Delhi.

Vandana Mishra (2023) Indian Mistletree from the Himalayas and Western Ghats: Potential for Anticancer Drug Development, in Two-Day National Conference on Medicinal Plants: Frontier Areas of Research and Development. 16–17 March 2023 at University of Delhi, New Delhi

Vandana Mishra (2023) Fast Fashion: Environmental Justice and Ways for Industrial Sustainability in National Seminar on Pollution & Human Health: Current Understanding & Future Directions. 24 January 2023 at Zakir Hussain Delhi College, New Delhi.

Prof. Chirashree Ghosh: Anita Dubey, Shailender Kumar, Reena Jain and Chirashree Ghosh, Nanoparticles synthesis from leaf litter extract for dye degradation, Abstract Presented in Two Days International e-Conference on Environment, Water, Agriculture, Sustainability and Health (EWASH-2022), on 12-13 January 2023, jointly organized by CSIR-NEERI, Royal Society of Chemistry-North India section, Hindu College, University of Delhi & Save the environment A society for Research Awareness and Social Development.

Ankita Shelly, Rekha Kumari and Chirashree Ghosh, “Isolation and characterization of a thermophile from Jakrem, Meghalaya, India” Poster presented in 7th International Conference of Indian Network for Soil Contamination Research (INSCR) 08-11th November, 2022.

Dr. Kalyan Yakkala: 1. Invited talk in Green Skill Development Programme (GSDP) conducted by ENVIS center, School of Environmental Science, Jawaharlal Nehru University (JNU), New Delhi on 01-04-2022.

Dr. Ashwini Kumar Ray: Presented paper titled “To decipher the inherent linkage of Indian culture and Environmental sustainability” at a National Conference on Environmental Sustainability: solution through Technology and Indigenous Knowledge System organised by Kota Technical University, 9-10 October 2023

Presented paper titled “A comprehensive study to understand atmospheric health” at the Sumangalam Panchmahabhoot International Conference series on ‘Vayu: The Vital Life Force’ held at Siksha ‘O’ Anusandhan University at Bhubaneswar during 02-04 December 2022

### **National/International MoUs Signed**

Collaborative Project coordinator of System of Air Quality Forecasting and Research (Safar) programme of IITM, Pune; sponsored by Ministry of Earth Sciences, Govt. of India, 2010-till now.

Collaborative research- “N1: Bioskynet, the global network of bioaerosols research” funded by NERC GPSF, in collaboration with University of Essex, UK. 2020- till now.

## **Research Collaboration with University College of Medical Sciences**

### **Other Inter-Institutional Collaborations**

PhD Scholar Ms. Guncha Sharma working on her PhD thesis in institutional collaboration with the Indian Agricultural Research Institute (IARI), PUSA, New Delhi.

PhD Scholar Ms. Pooja Saroj is working in institutional collaboration with Indian Meteorological Department (IMD), Govt. of India.

### **Placement Details (Number and percentage of students placed)**

Ten students from M.A. and M.Sc. 2021-23 batch got placed in MNCs like Schneider Electric, S&P Global, and Uniqus consultech etc.

### **Extension and Outreach Activities**

Prof. Vandana Mishra: Organized Quiz, Nukkar Natak, Songs, Poetries, and Awareness March under the Mission Life Programme of India, Jointly with Faculty Members and Masters Students of Environmental Studies

Dr. Ashwini Kumar Ray: Organised national student Paryavaran competition in the Department of Environmental Studies and coordinated in the colleges of Delhi University supported by the Ministry of Environment and UGC, 2023

### **Faculty Strength: 15**

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## **Geology**

### **Brief History**

The department was the brainchild of Prof. A. G. Jhingran. He established the department in the year 1966 after his retirement as Director General of the Geological Survey of India. In his visionary leadership, the department was established to expand and disseminate geoscience through teaching, research, and collaboration to produce highly skilled professionals and academics in the field of geology in particular and science in overall. Now our department is functioning from three small buildings adjacent to CSL with offices, class rooms, laboratories, thin-section workshops, and a museum. The faculties of this have received various prestigious national and international awards viz. Shanti Swarup Bhatnagar Award (2), Third World Academy of Sciences (3), Fellow of National Academy of Science (5), Fellow of National Academy of Sciences, Bangalore (5), Fellow of Academy of Sciences (5) and National Mineral Award (9). The department itself has been awarded Ford Foundation award, UGC-Special Assistance Program, COSSIST, DST-FIST, Centre of Advance Studies I, II, and III, and DST PURSE Grant.

## Major Activities and Achievements

Prof. Pankaj Srivastava: Finalization of the NEP syllabus for BSc. Hons Geology for Sem I to VI. Teaching for B.Sc. and MSc. and research activities on major issues of geoscience. Research Highlights (PS): Paleopedogenesis in overbank sediments of the Lower and Middle Siwalik Sub-Groups, Kangra sub-basin, NW Himalaya: A response to climatic changes and tectonics during Mid-Late Miocene.

Prof. Anupam Chattopadhyay: (i) Mesoscopic and Microscopic scale structural analysis and metamorphic studies of pelitic and granitic gneisses collected from the basement complex (BGC-I) of the Sarwar-Junia Fault Zone in Rajasthan; (ii) GIS-based digital mapping of Pur-Banera metallotect in Rajasthan and its application to deformed ore deposits; and (iii) Kinematic analysis of Ranakpur shear zone and other transpression-related structures of South Delhi Fold Belt alongwith its' metamorphic characterization.

Prof. Ashutosh K Singh and Professor Devesh K Sinha Oceanic Biostratigraphy of the Deep-Sea sections from the Indo-Pacific to provide a Time Framework for scaling the Paleooceanographic events. Understanding Variability in Ocean Circulation in Indo-Pacific for Late Neogene-Quaternary Understanding Teleconnectivity amongst ENSO, Western Pacific Warm Pool. Indonesian Throughflow, Leeuwin Current strength and global connections of ITF and variability of Indian Monsoon

Dr. Saqib Abdullah received a grant of 30 lacs through the Science & Engineering Research Board (SERB) under a startup grant.

Prof. Partha Pratim Chakraborty: In the proposed time period the undersigned was engaged in research work in Proterozoic basins spanning in age between Paleoproterozoic to Neoproterozoic.

## Publications

### Research Articles

Agrawal, N., Govil, H., Mishra, G., Gupta, M., & Srivastava, P. K., (2023), Evaluating the Performance of PRISMA Shortwave Infrared Imaging Sensor for Mapping Hydrothermally Altered and Weathered Minerals Using the Machine Learning Paradigm, *Remote Sensing*, 15 (12), 3133

Ali, S., Shekhar, S., Kumar, R., Brindha, K., & Li, P. (2023), Genesis and Mobilization of Fluoride in Groundwater of India: Statistical Evaluation, Health Impacts, and Potential Remedies, *Journal of Hazardous Materials Advances*, 11, 100352

Chakrabarty, A., Karmakar, S., Mukherjee S., Roy Choudhury, S., Maiti, P., Sanyal, S., & Sengupta, P., (2022), Neoproterozoic reworking of a Mesoproterozoic magmatic arc from the north-eastern part of the Central Indian Tectonic Zone: Implication for the growth and disintegration of the Indian shield in the Proterozoic supercontinental cycles, *Precambrian Research*, 378, 106758

Chakrabarty, A., Mukherjee, S., Karmakar, S., Sanyal, S., & Sengupta, P., (2023), Petrogenesis and in situ U-Pb zircon dates of a suite of granitoid in the northern part of the Central Indian Tectonic Zone: Implications for prolonged arc magmatism during the formation of the Columbia supercontinent, *Precambrian Research*, 387, 106990

Chakraborty B., P.P., Bailwal, R., Paul, P.P. & Sharma, A., (2022), Alluvial Sedimentary Records in Indian Precambrian Basins: Implications Toward Unique Precambrian Sedimentary Environment?, *Frontiers in Earth Science*, 10, 892717

- Chatterjee, S., Karmakar, S., Mukherjee, S., Sanyal, S., & Sengupta, S., (2022), Origin of clinopyroxene-ilmenite symplectites in mafic granulites from eastern parts of the Chotanagpur granite gneissic complex, East Indian shield, *American Mineralogist*, 108(12), 2308–2322
- Devrani R., Singh, V., Saini, H.S., & Mujtaba, A.I., (2023), Controls on sediment storage in wide mountain valleys - a case study from Srinagar (Garhwal) valley, NW Himalaya, *Geosciences Journal*, 27, 23-43
- Dhiman, H., Verma, V. & Prasad, G. V. R., (2022), First ovum-in-ovo pathological titanosaurid egg throws light on the reproductive biology of sauropod dinosaurs, *Scientific Reports (Nature Group)*, 12, 9362
- Dhiman, H., Verma, V., Lourembam, R.S., Miglani, V., Jha, D.K., Sanyal, P., Tandon, S.K. & Prasad, G.V.R., (2023), New Late Cretaceous titanosaur sauropod dinosaur egg clutches from lower Narmada valley, India: Palaeobiology and taphonomy, *PLoS ONE*, 18(1), e0278242
- Ghosh, T, Chattopadhyay, A., Verma, G., Srivastava, S., Sarkar, A., & Bhattacharjee, D., (2023), Digital mapping and GIS-based spatial analyses of the Pur-Banera Group in Rajasthan, India, with special reference to the structural control on base-metal mineralization, *Journal of Structural Geology*, 166, 104762
- Gupta, A., Gupta, M., Srivastava, P. K., Petropoulos, G. P., & Singh, R.K., (2023), Potassium Simulation Using HYDRUS-1D with Satellite-Derived Meteorological Data under Boro Rice Cultivation, *Sustainability*, 15(3), 2147
- Jain, V., Karnatak, N., Raj, A., Shekhar, Shashank., Bajracharya, P., & Jain, S. (2022), Hydrogeomorphic Advancements in River Science for Water Security in India, *Water Security*, 16, 100118
- Kotlia, B. S., Kukreti, M., Bisht, H., Singh, A. K., Sharma, A., Kothiyari, G. C., Porinchu, David F., Chand, P., Kashyap, R., & Sharma, G.K. (2023), Palaeoenvironmental Reconstruction Through Granulometric Analysis of a Palaeolake Deposit at Bhikiyasain, Kumaun Lesser Himalaya, *Himalaya Journal of Climate Change*, 9(1), 25-37
- Kumar R., Ahmad T. and Saikia A. (2022), P-T estimates for the fractionated and primary melt of tholeiitic dykes from Multai area of Deccan Flood Basalt, Madhya Pradesh (India), *Journal of Earth System Science*, 131(2), 104
- Kumar, P., Kshetrimayum, L.D.A., Chakraborty, P.P., & Rajkumar, H.S. (2022), Depositional architecture of sub-aqueous part of a tide-dominated delta and its palaeogeographic implications: Laisong Formation (Barail Group), Indo-Myanmar Ranges, western Manipur, *Journal of Earth System Science*, 131, 103
- Lourembam, R.S., Dhiman, H. & Prasad, G. V. R. (2022), Preservation of Membrana Testacea in titanosaurid dinosaur eggshells from the Upper Cretaceous Deccan volcano-sedimentary strata of Central India, *Geological Magazine*, 160(2), 361-371
- Mukherjee, S., Dey, A., Choudhury, S. R., & Mayne, M. J. (2022), Effect of source heterogeneity, melt extraction and crystal separation on the composition of a suite of ferroan (A-type) granites from parts of the Chotanagpur Granite Gneissic Complex (CGGC), India, *Lithos*, 430-431, 106875



Negi, P., Saikia, A., Ahmad, M., Upadhyaya, D., & Akhtar, S. (2022), Nature and origin of anorthosite enclaves within Proterozoic granite of Chotanagpur Granite Gneiss Complex of Eastern India, *Frontiers in Earth Science*, 10, 952554

Kshetrimayum, D. S., Parmar, V., Lourembam, R. S. & Prasad, G. V. R. (2022), Taxonomy, biostratigraphy and palaeoecological aspects of non-marine ostracod fauna of the Maastrichtian intertrappean beds of the Lower Narmada Basin, Malwa Plateau, India, *Palaeoworld*, 006

Prasad, G. V. R. & Parmar, V. (2022), Cretaceous insular India – Consequences for biological evolution and faunal interchanges, *Journal of the Palaeontological Society of India*, 67(1):656-671

Choudhury, S. R., Dey, A., Mukherjee, S., Sanyal, S., Karmakar, S. and Sengupta, P., (2023), On the factors controlling the incorporation of aluminium within titanites: a case study from medium pressure calc-silicate granulites in parts of the East Indian shield, *Mineralogy and Petrology*, <https://doi.org/10.1007/s00710-023-00826-1>

Choudhury, S. R., Dey, A., Mukherjee, S., Sengupta, S., Sanyal, S., Karmakar, S., Sengupta, P. (2023), Formation of aluminous clinopyroxene-ilmenite-spinel symplectic assemblage in a regionally metamorphosed calc-silicate granulite from the Chotanagpur Granite Gneiss Complex, East Indian shield, *Lithos.*, 442, 107058

Sarkar, A., & Singh, V. (2022), Characterisation and Assessment of a Flash Flood in the Himalaya: Understanding the Significance of High Magnitude Events in Sediment Mobilisation, *Journal Geological Society of India*, 98, 678-686

Sarwary, M., Alamy, C., Rahimi, M. & Kumar, P. (2022), Interpretation of Depositional Environment of Fusulinid Bearing Middle Permian Succession of Bolula and Khaja Ghar Formation, Bamian Zone, Central Afghanistan, *International Journal of Geosciences*, 13, 499-530

Sharma, J. J., Pant, N. C., Singh, P., & Saikia, A., (2022), Crystallographic controls on staurolite to fibrolite transformation: Petrographic evidence from the Pangong Metamorphic Complex in eastern Karakoram, Ladakh, India, *Journal of Geological Society of India*, 98, 749-752

Sharma, A., Das, K., Chakraborty, P. P., Shiraishi, F., & Kayama, M. (2022), U–Pb zircon geochronology of a pyroclastic rock from the Parsoi Formation, Mahakoshal Group: Implications towards age and tectonics of the Basin in Central Indian Tectonic Zone, *Geological Journal*, 57, 4122-4138

Singh, A. K., & Sinha, D. K. (2022), Plio-Pleistocene planktic foraminiferal biochronology of ODP site 762B, Exmouth Plateau, Southeast Indian Ocean, *Journal of Foraminiferal Research, USA*, 52(4), 248–263

Singh, V. P., Shrivastava J. P., & Kumar P. (2022), Mineral chemistry of giant plagioclase basalt: Petrogenetic inferences, *Journal of Earth System Science*, 131, 172

Srivastava, P. (2022), Origin and Dispersal of Agriculture Activities in the Indo-Gangetic Plains (IGP) in Response to Climate Change and Neotectonics During Holocene, *Clay Research*, 41(1), 60-68

Srivastava, P. (2022), Present is the Key to The Past: Soils to Paleosols and Their Implications for Landscape Stability (Tectonism) and Climate Change Based on Micromorphology and Clay Mineralogy, *Clay Research*, 41 (1), 1-17

Thomas, J., Gupta, M., Srivastava, P. K., Pandey, D. K., & Bindlish, R. (2023), Development of High-Resolution Soil Hydraulic Parameters with Use of Earth Observations for Enhancing Root Zone Soil Moisture Product, *Remote Sensing*, 15(3), 706

Thomas, J., Gupta, M., Srivastava, P. K. (2023), Petropoulos GP. Assessment of a Dynamic Physically Based Slope Stability Model to Evaluate Timing and Distribution of Rainfall-Induced Shallow Landslides, *ISPRS International Journal of Geo-Information*, 12(3), 105

Thomas, J., Gupta, M., & Prusty, G. (2023), Assessing global parameters of slope stability model using Earth data observations for forecasting rainfall-induced shallow landslides, *Journal of Applied Geophysics*, 212, 104994

Umamaheswaran, R., Dutta, S., Prasad, G. V. R., Khan, M. A., Kumar, S., Bera, S. & Patnaik, R. (2022), The diagenetic fate of collagen as revealed by analytical pyrolysis of fossil fish scales from deep time, *Geobiology*, 21(3), 378-389

Yadav, A. K., Yadav, H. K., Naz, A., Koul, M., Chowdhury, A., & Shekhar, S. (2022), Arsenic removal technologies for middle-and low-income countries to achieve the SDG-3 and SDG-6 targets: A review. *Environmental Advances*, 9, 100262

### **Books/Chapter in Books**

Ali, S., Shekhar, S. & Chandrasekhar, T. (2022), Non-carcinogenic health risk assessment of fluoride in groundwater of the River Yamuna flood plain, Delhi, India. In *Computers in Earth and Environmental Sciences, India*, Elsevier. Paperback, ISBN: 9780323886154, 455-466

Singh, A. K., Sinha D. K., Shrivastava, A., Singh V. P., Mallick K., & Kaushik, T. (2022), Antarctic Climate history and its relation with global climate changes: Evidence from ice core records: In: *Climate Change and Geodynamics in Polar Regions*, Taylor and Francis CRC Press, USA, DOI: 10.1201/9781003284413-3, 45-88

Singh, A. K., Sinha, D. K., Mallick, K., Singh, V. P., Shrivastava, A., & Kaushik, T. (2022), Cenozoic Evolution of Antarctic Ice Sheet, Circum Antarctic Circulation and Antarctic Climate: Evidence from Marine Sedimentary Records: In *Assessing the Antarctic Environment from a Climate Change Perspective: An Integrated Approach*, SPRINGER NATURE, 47-71

### **Research Projects**

Science and Engineering Research Board (SERB), DST Govt of India, 2019-2023, DST - RFBR Joint research on Quaternary paleosols of Himalaya and Russian Plains, 20.00 Lakhs

Ministry of Earth Sciences ( MoES), 2019-2023, Paleopedological, sedimentological and thermochronological records of Climate change and tectonics during the evolution of Siwalik succession, Panjab re-entrant, 34.00 Lakhs

Ministry of Earth Sciences ( MoES), New Delhi Government of India, Feb 2020-March 2024, Late Neogene-Quaternary Multi-Proxy Records of El Niño variability: Implications on Tropical Indian Ocean Paleoclimate and Paleoceanography, 38.00 Lakhs

Reliance Industries Ltd, Navi Mumbai., 2022, Structural and petrographic study of granitic rocks from parts of the CITZ for assessing their geothermal potential’, Rs. 12.15 Lakhs (excluding GST).

WAPCOS Limited (A Government of India Undertaking - Ministry of Jal Shakti)., 2022-23, Augmentation of potable water supply by extraction of ground water at Nangloi WTP and adjoining areas, 5.00 Lakhs

Ministry of Earth Science (MOES), Govt. of India., 2018-2022, Development of a predictive geomorphic model as a tool for sustainable river management, Rs. 25.36 Lakhs

Ministry of Earth Science (MOES), Govt. of India, 2021-24, Pranmati Basin, Himalaya Critical Zone Observatory, 2.42 Crores

DST- Science and Engineering Research Board (SERB), 2023-Ongoing, Microwave satellite data assimilation in Weather Research & Forecasting model through deep learning for improved forecasting of surface and sub-surface soil moisture conditions, 25.41 Lakhs

DST- Science and Engineering Research Board (SERB), 2021-2023, Constraining the pressure-temperature-fluid composition and timing of deep crustal metasomatism, preserved in the Southern Granulite Terrane, India, 25.50 Lakhs

DST-INSPIRE, 2020-2025, Zircon and monazite as proxies for the crustal evolution: applications to parts of the Proterozoic mobile belts of India, 35.00 Lakhs

Science and Engineering Research Board (SERB) Startup Research Grant, 2022-2024, The petrological, geochemical, and textural characteristics of Nagaland Manipur ophiolite North-East India: Implication for the Neo-Tethyan tectonics and evolution of Indo-Myanmar Range, 30.25 Lakhs

DST- Science and Engineering Research Board (SERB), 2023-2026, Characterizing the geomorphic expression of active faults along the frontal thrust, Northeast Himalaya, 47.99 Lakhs

Institute of Eminence, University of Delhi, 2022-2023, Petrogenesis and geochronology of Mikir Hills granite of Assam northeast India: Implications for magmatic evolution, 5.00 Lakhs

### **Seminars/Conferences organized by the Department**

Dr. Pramod Kumar, Associate professor, Funding Support from: ONGC, OIL, CSIR, Centenary Grant from DU, National Conference: “Current Understanding from the Indian Sedimentary Basins and Road Ahead” in association with: Indian Association of Sedimentologists, 11-12-2022.

Prof G.K. Sharma, Professor, NIDM, New Delhi and Hans Raj College, National Seminar: “Sensitization Programme On Disaster And Climate Change, 16-07-2023.

Prof. G. K. Sharma, Professor, NIDM, Hyderabad and Hans Raj College, Engaging Youth & Adolescents in Disaster Risk Management (DRM) & Climate Change Adaptation, 28-07-2023.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Akhtar S., Saikia A. 2022. Tectono-magmatic significance of gabbroic rocks from the Kodia ghat section of South Andaman Ophiolites. in Abstract Volume of 36th International Geological Congress.

Bailwal B., R. Chakraborty, P.P., and Larissa, N.M., 2022. Depositional architecture of a high-energy gravelly braided fluvial system: Paleoproterozoic Damdama Formation, Bayana Basin, India. National conference on resource potential of the sedimentary basins & 37th convention of Indian association of sedimentologists (IAS- 2022).

Gupta, M. Contributed as a resource person for the 5-day training on GIS at ISARC, Varanasi from 23-27 August 2022.

Gupta, M. 2022. Invited Lecture and training on R in DST-funded two-week workshop on “Eco-Friendly Management of Natural Resources using Geospatial Technology” held at College of Horticulture and Forestry, RLBCAU.

Gupta, M. 2022. Invited Lecture and training on R in SERB sponsored High End Workshop on Techniques and Applications of Hyperspectral Data Analytics held at Centre for Quantitative Economics and Data Science, BIT Mesra.

Gupta, M., Srivastava, P. K., Arsenault, K. R., & Sahai, A. K. 2022. Modelling the irrigation water demand through integration of irrigation scheme with NASA-Land Information System Framework (LISF) in India. In EGU General Assembly Conference.

Kshetrimayum, L. D., Kumar, P., Rajkumar, H. S. 2022. Demarcation of the Disang-Barail Boundary through process-based facies and ichnofacies analysis, Indo-Myanmar Ranges, NE India. 38th Convention of Indian Association of Sedimentologists. University of Delhi, Delhi.

Kumar V., Shekhar S. and Arora N.K. 2022. Insight into arsenic contamination of groundwater in the Burhi Gandak basin, Bihar, India using hydro-geochemical characteristics and multivariate statistical analysis. 9th International Groundwater Conference (IGWC-2022)- Effective Management of (Sub)-Surface Water Resources in Arid and Semi-arid Regions, Roorkee, Uttarakhand, India.

Kumar, P., Kshetrimayum, L.D., 2022. Depositional motif of a tide-dominated delta and its palaeogeographic implications: Laisong Formation (Barail Group), Indo-Myanmar Ranges, western Manipur. 37th Convention of Indian Association of Sedimentologists. Jammu University, Jammu.

Maurya, V., Gupta, M., Pant, N.C., and Sahai, A.K. 2022. Assimilation of EO based data into LSM to compute the contribution of snowmelt to discharge in the High Mountainous Region. In EGU General Assembly Conference.

Mehra, A., Kotlia, and Sharma, G.K., 2022. “Hydrochemical study – Uttarakhand” in 38 th IAS Conference, Deptt of Geology, Delhi University

Negi P., Ahmad M. and Saikia A., 2022. “Petrochemistry of anorthosite-gabbro-noritesuite of the Barabar hill, Chotanagpur granite gneiss complex (CGGC), Eastern India” in 38 conventions of Indian association of sedimentologists (IAS-2022) at Department of Geology, Delhi.

Negi P., Saikia A., Ahmad M., 2022. “Geochemical characterization of gabbro- anorthosite suits in Barabar Hill of Chotanagapur granite gneisses complex (CGGC) of Eastern India’ in 36th International Geological Congress.

Sarma, D., Gupta, M., Thomas, J., & Srivastava, P., 2022. “Comparison of soil hydraulic properties determined from multiple Earth observation datasets” In EGU General Assembly Conference.

Sharma A., A. and Chakraborty, P.P., 2022. “Architecture of a Paleoproterozoic carbonate platform in an asymmetrical rift setting: Sleemanabad Formation, Mahakoshal basin” in National conference on resource potential of the sedimentary basins & 37th convention of Indian association of sedimentologists (IAS-2022).

Sharma J. J., Singh P., Pant N. C., Saikia A. 2022. “Corroborating tectono-metamorphic history of Eastern Karakoram Complex, Karakoram Range, Ladakh”, in 36th International Geological Congress (2022).

Singh AK., 2022. Keynote Address at Indian Colloquium on Micropaleontology and Stratigraphy, Pune.

Singh AK., 2022. Presentation at the FRGC Conference, PRL Ahmedabad.

Singh P., Saikia A., Chalapathi Rao NV, 2022. Abstract entitled, “Petrographic significance of kyanite bearing eclogite xenoliths from kimberlites of Wajrakarur field, Eastern Dharwar Craton, southern India” in 36th International Geological Congress (2022).

Sinha D. K. 2022. Keynote Address at Indian Colloquium on Micropaleontology and Stratigraphy, Pune.

Thomas, J., and Gupta, M., 2022. “Prediction of rainfall-induced shallow landslides through integration of hydrological model with a slope stability model” in EGU General Assembly Conference.

Yadav A. K., Shekhar S. and Arora N.K., 2022. “Presence of high level of arsenic in groundwater, its impact on human health and associated risk assessment in urban and semi-urban area of NCR Delhi, India” in 9th International Groundwater Conference (IGWC-2022)- Effective Management of (Sub)-Surface Water Resources in Arid and Semi-arid Regions, Roorkee, Uttarakhand, India.

### **Other Inter-Institutional Collaborations**

Prof. Pankaj Srivastava has collaboration with Prof. Isabel Montanez, UC Davis, Collaborative proposal on paleo-CO<sub>2</sub> reconstruction and next generation Phanerozoic record.

Prof. D K Sinha has collaboration with the National Institute of Oceanography on the Nd Isotope study of Deep Ocean Cores.

Prof. Partha Pratim Chakraborty has collaboration with Jadavpur University (Kolkata), Indian Institute of Technology, Kharagpur and Hiroshima University (Japan).

Dr. Ashutosh Kumar Singh has collaboration with the National Institute of Oceanography on the Nd Isotope study of Deep Ocean Cores.

Dr. Ashima Saikia has collaboration with Geological Survey of India, Jharkhand Unit and Cotton University, Guwahati, Assam.

### **No. of Students under Exchange Programme**

Two senior research scholars guided by Prof. Pankaj Srivastava selected for six weeks Collaborative proposal on paleo-CO<sub>2</sub> reconstruction and next-generation Phanerozoic record in US with full funding.

### **Extension and Outreach Activities**

Dr. Pramod kumar, organized geological fieldwork for the participants of IAS National conference to the Bayana Proterozoic basin on 12-13 December 2022.

**Faculty Strength: 20**

Professors: 9, Associate Professor: 3 Assistant Professors: 8

**Number of Ph.D. Degrees Awarded: 07, M.Phil. Degrees Awarded: 02**

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**Physics and Astrophysics**

**Brief History**

The Physics Department of the University of Delhi (later renamed Department of Physics and Astrophysics) was set up in 1922. In its early years the Department was influenced by M.N. Saha and when the University moved to its present campus, the Physics Department was allocated in the former Viceroy's complex, along with the Chemistry Department, in a building which continues to function as the shared Old Block. Faculty members in the early days of the Department included Profs. D.S. Kothari, R.C. Majumdar, F.C. Auluck, N.K. Saha and P.K. Kichlu. The Masters programme started in 1942. Subsequently some experimental groups were set up in Optics, Nuclear Physics and High Energy Physics, while a Helium Plant and a telescope tower for a solar observatory were set up. The faculty members of the Department have won numerous honors and awards over the years.

**Major Activities and Achievements**

The Department of Physics and Astrophysics has maintained its position as the topmost QS ranked university physics department in India. It is also one of the largest physics departments in the country, with nearly 730 MSc students and over 180 PhD students, in addition to the presently available 37 regular faculty members. It has sustained its high quality in research, which is evident from nearly 300 research publications (including books/chapters and conference proceedings) by only its regular faculty members, apart from those by its students, in international refereed journals during the year. Its faculty received several national and international grants and participated in several collaborative projects across the globe. It had also hosted various eminent researchers who gave inspiring lectures to motivate young students. The department's Master's curriculum provides a wide choice of electives, including inter-disciplinary subjects, to its students. Moreover, the various sorts of methodology applied over time to time to enhance learning experiences have been much more strategized when the department went from the offline to the online/blended mode of teaching in recent times. Such strategies include:

Online resources, e.g. lecture notes, links to video lectures or experimental demonstrations, and other study materials being provided to the students in online classes, either in the Google classrooms platform or in the Microsoft Teams platform.

Interactive classroom sessions, with instant quizzes, group discussions, as well as time-bound assignments, with the provision of students' self-assessment being emphasized.

The department, under a vibrant Ph.D. program, has offered a plethora of cutting-edge research topics as well, in recent times, making the above strategies much relevant for the Ph.D. course-work. Furthermore, an exclusive departmental portal <http://physics.du.ac.in>, displaying regular updates on its academic and other activities, has successfully run online during the year.

### **Honours/Distinctions**

Prof. Brajesh Chandra Choudhary: (a) Spokesperson, Indian Institutions: Fermilab Collaboration in Neutrino Physics -- continuing in 2022-23, till 2026, (b) Co-Chair, CMS Diversity Office -- continued till 2022.

Prof. Debajyoti Choudhury: (a) Member, PAC of Department of Science and Technology (DST), Govt. of India, for High Energy Physics, Nuclear Physics, Astrophysics, Plasma Physics and Nonlinear Dynamics - - continuing in 2022-23, (b) Member, Expert Committee of Department of Science and Technology (DST), Govt. of India, for SERC School in THEP -- continuing in 2022-23, (c) Member, Selection Committee for INSPIRE Faculty Awards -- continuing in 2022-23.

Prof. Patrick Das Gupta: (a) President, Indian association of General Relativity and Gravitation (IAGRG) -- continuing from 2020, (b) Member, Departmental Research Committee, of the Department of Physics, Indira Gandhi National Tribal University, Amarkantak, Chhattishgarh -- continuing from 2020.

Prof. Annapoorni Subramaniam: Member, Academic council, Jawaharlal Nehru University, Pondicherry University and Amity Institute of Nanotechnology -- continuing in 2022-23.

Prof. Amita Chandra: (a) Member, Board of Studies, School of Vocational Studies and Applied Sciences, Gautam Buddha University -- continuing in 2022-23, (b) Research Ambassador, DAAD -- continuing in 2022-23.

Prof. Nivedita Deo: Member, Complex Systems Society (CCS), Inc -- continuing in 2022-23.

Prof. Awadhesh Prasad: Member, PAC of Department of Science and Technology (DST), Govt. of India, for High Energy Physics, Nuclear Physics, Astrophysics, Plasma Physics and Nonlinear Dynamics -- continuing in 2022-23.

Prof. Shyama Rath: (a) Coordinator, Internal Quality Assurance Cell (IQAC), University of Delhi -- continuing in 2022-23, (b) Member, PAC of Department of Science and Technology (DST), Govt. of India, for High Energy Physics, Nuclear Physics, Astrophysics, Plasma Physics and Nonlinear Dynamics -- continuing in 2022-23.

Prof. Samit Kr Mandal: (a) Member, Special committee, Special Centre for Nanoscience (SCNS), Jawaharlal Nehru University -- continuing in 2022-23, (b) Member, Selection committees for JRF/Research Associate/Scientist, Inter-University Accelerator Center -- continuing in 2022-23, (c) Member, Evaluation Committee for JRF to SRF, Inter-University Accelerator Center -- continuing in 2022-23. .

Dr. Sourav Sur: (a) Visiting Associate, Inter-University Centre for Astronomy and Astrophysics (IUCAA) -- continuing in 2022-23, till 2025, (b) Member, Indian association of General Relativity and Gravitation (IAGRG) -- continuing in 2022-23.

## Publications

### Research Articles

Kumar, P., Kumar, A., Dhawan, T., & Vedeshwar, A.G. (2023). First principle calculation of structural, electronic, optical, elastic and thermodynamic properties of group IIA metal iodides: Structure-property correlation. *Journal of Physics and Chemistry of Solids*, 175, 111195.

Yadav, N., & Deo, N. (2023). Magnetotransport in Weyl semimetal with and without disorder and the effect of tilted magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, 148, 115601.

Kharangarh, P. R., Ravindra, N.M., Singh, G., & Umapathy, S. (2023). Synthesis of luminescent graphene quantum dots from biomass waste materials for energy-related applications—An overview. *Energy Storage*, 5(3), e390.

Acero, M.A., Adamson, P., Aliaga, L., ..., Choudhary, B.C., ... (2023). Measurement of the double-differential muon-neutrino charged-current inclusive cross section in the NOvA near detector. *Physical Review D*, 107(5), 052011.

Chaudhary, V., Awan, H.T.A., Khalid, M., (...), Tandon, R., & Khosla, A. (2023). Progress in engineering interlayer space modulated MXenes to architect next-generation airborne pollutant sensors. *Sensors and Actuators B: Chemical*, 379, 133225.

Tumasyan, A., Adam, W., Andrejkovic, J.W., ... Bhardwaj, A., Choudhary, B.C., ...Kumar, A., Naimuddin M., ...Ranjan K., ... (2023). Publisher Correction: Observation of triple  $J/\psi$  meson production in proton-proton collisions (Nature Physics, 2023, 19(3), 338-350, 10.1038/s41567-022-01838-y). *Nature Physics*, 19(3), 461.

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Biswas, R., Nath, S., Gehlot, J., (...), Sherpa, P., & Sekizawa, K. (2023). Determination of 1p- and 2p-stripping excitation functions for  $^{16}\text{O}+^{142}\text{Ce}$  using a recoil mass spectrometer. *European Physical Journal A*, 59(3), 60.

Prashant, A., Luthra, M., Goswami, K., Bharadvaja, A., & Baluja, K.L. (2023). Positron scattering from pyrimidine. *Atoms*, 11(3), 55.

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Gupta, R. K., Kar, S., Nitish, R., & Verma, M. (2023). Exact geometries from boundary gravity. *International Journal of Theoretical Physics*, 62(3), 61.

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Pandey, V., Adiba, A., Nehla, P., Munjal, S., & Ahmad, T. (2023). Bipolar resistive switching with multiple intermediate resistance states in Mn<sub>3</sub>O<sub>4</sub> thin film. *Materials Today Communications*, 34, 105484.

Asir, M.P., Thamilmaran, K., Prasad, A., (...), Kuznetsov, N.V., & Shrimali, M. D. (2023). Hidden strange nonchaotic dynamics in a non-autonomous model. *Chaos, Solitons and Fractals*, 168, 113101.

Rao, A.K., Kumar, A., Jain, K., & Kaur, A. (2023). Design and development of an unprecedented phosphorescent bidentate iridium (III) complex exhibiting green electroluminescence. *Materials Today Communications*, 34, 104973

Kumar, A., Mukherjee, S., Sharma, H., (...), Kumar, R., & Choubey, R.K. (2023). Fabrication of low-cost and fast-response visible photodetector based on ZnS:Mn/p-Si heterojunction. *Materials Science in Semiconductor Processing*, 155, 107226.

Lamichhane, S., Sharma, S., Tomar, M., & Chowdhuri, A. (2023). Studies on energy storage properties of BFO/WO<sub>3</sub> bilayer thin film capacitor. *Energy Storage*, 5(2), e342.

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Sehrawat, P., Parveen, S., & Hashmi, S.A. (2023). High-performance sodium ion conducting gel polymer electrolyte based on a biodegradable polymer polycaprolactone. *Energy Storage*, 5(2), e375.

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Mohit, & Hashmi, S.A. (2023). Biodegradable poly-ε-caprolactone based porous polymer electrolytes for high performance supercapacitors with carbon electrodes. *Journal of Power Sources*, 557, 232548.

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Sadiq, M., Raza, M.M.H., Zulfequar, M., Ali, M., & Ali, J. (2022). Investigation of magnesium ion and cellulose acetate-based conducting biopolymers: electrical and ion transport properties. In: Krupanidhi, S.B., Gupta, V., Sharma Kaushik, A., Singh, A.K. (eds) Advanced Functional Materials and Devices. Springer Proceedings in Materials, 14, 17-26, Springer, Singapore.

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Rao, A.K., Sharma, H., Srivastava, R., & Kaur, A. (2022). Highly Phosphorescent Iridium Metal Complex for Energy-Efficient OLED Applications. 1st International Conference on Technologies for Smart Green Connected Society 2021, The Electrochemical Society Transactions, 107(1), 7965.

### **Research Projects**

SERB – DST [Prof. B. C. Choudhary], 2022 (to 2027), Collaborative Research Project entitled “Indian Participation in the CMS Experiment at CERN: Maintenance, Operation and Upgradation”, 346.00 Lakh

SERB – DST [Prof. Kirti Ranjan, Prof. M. Naimuddin], 2022 (to 2027), Collaborative Research Project entitled “Indian Participation in the CMS Experiment at CERN: Maintenance, Operation and Upgradation”, 1505.00 Lakh

DST [Prof. B.C. Choudhary, Prof. Debajyoti Choudhury, and Prof. Samit K. Mandal], 2019 (to 2024), Research Project grant on "Indian Institutions – Fermilab Collaboration in neutrino physics", 280.00 Lakh

DST & Russian Foundation of Basic Research [Prof. D. N. Gupta], 2019 (to 2022), Research Project entitled "Compact 'Table-top' powerful terahertz source by laser-matter interactions and some applications", 26.00 Lakh

DST [Prof. D. N. Gupta], 2022 (to 2025), WOSA Project Mentorship entitled “Fabrication of anti-microbial textile clothing with cold plasma PVD technology”, 36.00 Lakh

SERB-DST (CRG) [Prof. D. N. Gupta], 2023 (to 2026), Research Project entitled "Exploring quantum electrodynamics plasma at the new laser intensity frontier”, 30.00 Lakh

IoE, University of Delhi [Prof. D. N. Gupta], 2022 (to 2023), Faculty Research Project entitled "Compact electromagnetic radiation source from laser-plasma interactions”, 5.00 Lakh

IoE, University of Delhi [Prof. Amita Chandra], 2022 (to 2023), Faculty Research Project entitled "Polymer composites for EMI shielding and energy devices”, 5.00 Lakh

SERB – DST [Prof. S. Annapoorni], 2023 (to 2028), Research Project entitled "The role of spacer layer in exchange-coupled bi-phased magnetic multilayers and nano-composites", 20.81 Lakh

Indo-Japan DST-JSPS [Prof. Shyama Rath], 2021 (to 2023), Research Project entitled “Fingerprinting of point defects in silicon carbide created by energetic particles for their relevance in quantum technologies”, 6.86 Lakh

SERB – DST [Prof. Shyama Rath], 2021 (to 2024), Research Project entitled "Generation and Assessment of Optically Addressable Point Defects in Silicon Carbide for new quantum technologies”, 42.46 Lakh

IoE, University of Delhi [Prof. Shyama Rath], 2022 (to 2023), Research Project entitled “Surface-enhanced Raman scattering for trace-level biological and chemical sensing”, 5.00 Lakh

SERB – DST [Prof. Samit K Mandal], 2019 (to 2022), Research Project entitled "Multi-nucleon transfer reaction dynamics and its effect on fusion near the Coulomb barrier for medium mass nuclei”, 41.75 Lakh

SERB – DST [Prof. Debajyoti Choudhury], 2019 (to 2022), Research Project entitled "Probing New Physics Interactions", 75.00 Lakh

UGC-DAE CSR [Prof. Sevi Murugavel], 2022 (to 2025), Research Project entitled "Singular Structural and Charge Transport Properties of Highly Defective Polyanionic Solids", 1.35 Lakhs

IoE, University of Delhi [Dr. Sourav Sur], 2022 (to 2023), Faculty Research Project entitled "Unified Cosmic Dark sector from the perspective of Scalar coupled Metric-Torsion Gravity", 3.20 Lakh

SERB – DST (CRG) [Dr. Debabrata Mishra], 2019 (to 2022), Research Project entitled "To Design and Develop a novel spin controlled chiral quantum dot DNA bio-sensor", 17.71 Lakh

MHRD-DST (IMPRINT 2) [Dr. Debabrata Mishra], 2019 (to 2022), Research Project entitled "Development of spin dependent smart electrode for DNA bio-sensor", 32.45 Lakh

SERB – DST [Dr Sumalay Roy], 2019 (to 2022), Research Project entitled "Growth of periodic multi-bi-layer structures of high Z metals on the surface of three dimensional topological insulators", 29.15 Lakh

UGC-DAE CSR and RRCAT, Indore, India [Dr Sumalay Roy], 2022 (to 2025), Research Project entitled "Magneto-topological insulator interface: Synthesis and structure-property correlation studies", 1.35 Lakh

IoE, University of Delhi [Prof. S. A. Hashmi], 2022 (to 2025), Research Project entitled "Development of eco-friendly sodium-ion storage devices with sustainable carbon electrodes and bio-degradable polymer-based electrolytes", 27.00 Lakh

### **Seminars/Conferences organized by the Department**

Ajit K. Mahpatro, Professor, Department of Physics and Astrophysics, DST, International Conference on Electron Microscopy & XLI Annual Meeting of the Electron Microscope Society of India (EMSI - 2023), 10-02-2023

### **Seminar/Conference Presentations (National/International) by Faculty Members**

"Boundary Quantum Gravity", on June 10, 2023, invited talk at Saha Institute of Nuclear Physics, Kolkata, by Supriya Kar.

"Cosmological Pair(s) in Higher Form Theories", on December 29, 2022, invited talk at National Institute of Science, Education and Research (NISER), Bhubaneswar, by Supriya Kar.

"Boundary Quantum Gravity", on January 5, 2023, invited talk at the Institute of Physics, Bhubaneswar, by Supriya Kar.

"Perspectives of Quantum Gravity", on January 6, 2023, invited talk at Siksha O Anusandhan University, Bhubaneswar, by Supriya Kar.

"Nobel Prize 2020 in Physics: Large and Small Black Holes", on February 28, 2023, (online), invited talk at SBR Govt. Autonomous Women's College, Berhampur, by Supriya Kar.

"Recent Advances in Biosensing Approaches for Screening and Diagnostic Applications" in Continuous Education Programme (CEP), on December 7, 2022, at DIPAS, DRDO, Delhi, by Debabrata Mishra.

"Development of spin-based biosensor using CISS effect", on January 12, 2023, at the seminar on "Sensors for Society, Electrochemical society, India chapter, JNU, Delhi, by Debabrata Mishra.

"Recent Advances in spin-based bio sensing", on February 8, 2023, invited talk at University of Delhi, Delhi, by Debabrata Mishra.

"Prebiotic autocatalytic sets: Possible structure and mechanism of evolution", on July 7, 2022, at Santa Fe Institute; Working Group on Feasible but Undiscovered Metabolisms, Santa Fe Institute, Santa Fe, New Mexico, USA, by Sanjay Jain.

"Microstructural investigations and light-emitting behavior of two-dimensional MoSe<sub>2</sub> and MoS<sub>2</sub> (Invited)", on February 8, 2023, at International Conference on Electron Microscopy, by Shyama Rath.

"Optical spectroscopic characterization of two-dimensional transitional metal dichalcogenides", on December 12, 2022, invited talk at Chungnam National University, South Korea, by Shyama Rath.

"Exploring Shape Coexistence in Mass  $A < 190$  Nuclei with Lifetime Measurements", at the International Nuclear Physics Conference (INPC 2022), Cape Town, South Africa, on September 11, 2022, by Sanjay Kumar Chamoli.

"RDM Lifetime Measurements @ IUAC, Delhi, India" invited talk at the Heavy Ion Laboratory (HIL), University of Warsaw, Poland, on July 15, 2022, by Sanjay Kumar Chamoli.

"Random Matrix and Network Analysis of Protein Families", on February 2, 2023, invited talk at Ramanujan Lecture Hall, ICTS Bengaluru, by Nivedita Deo.

"Tailoring magnetisation switching in magnetic alloy films: Microscopic Investigations", on February 08, 2023, at International Conference On Electron Microscopy & XLI ANNUAL Meeting Of Electron Microscope Society Of India (EMSI-2023), by S. Annapoorni

"Modelling magnetic switching behaviour induced by thermal annealing and transient electronic excitations of ion beams in magnetic multilayers", on March 2, 2023, at "Radiation Awareness and Detection in Natural Environment" (RADNET-IV), Dolphin, (PG) Institute of Biomedical and Natural Sciences, Dehradun, India, by S. Annapoorni

"Modern Astronomy - Opportunities in the Era of Big Data", on March 16, 2023, invited talk at DIT University, Dehradun, by H. P. Singh.

"Free energy evolution under loop corrections", on January 16, 2023, at DAE-BRNS workshop on Hadron Physics 2023, NIT, Jalandhar, Punjab, India, by S. Somorendro Singh

"Unified Cosmic Dark sector from a Mimetic-Metric-Torsion perspective", on December 22, 2022, at the conference on "Beyond Standard Models in Particle Physics and Gravity", IACS, Kolkata, India, by Sourav Sur

"Mimetic-Metric-Torsion Gravity: Plausible Extensions and Cosmological Implication", on December 27, 2022, invited talk at IACS, Kolkata, India, by Sourav Sur

### **Other Inter-Institutional Collaborations**

#### **Collaborating Faculty Members:**

Prof. B. C. Choudhary -- (a) India-CMS Collaboration at CERN, Geneva, Switzerland, (b) NOvA Collaboration, Fermilab, USA.

Prof. Kirti Ranjan -- (a) Indo-Italy Collaboration on Detectors, (b) India-CMS Collaboration at CERN, Geneva, Switzerland.

Prof. Nivedita Deo -- Institute of Fundamental Studies, Naresuan University, Thailand.

Prof. Shyama Rath -- (a) Indian Council for Cultural Relations (ICCR), India, (b) Departamento de Física Atómica, Molecular, Nuclear, Facultad de Física, University of Sevilla, Spain, (c) Physics Department, University of Torino and INFN, Torino, Italy, (d) Department of Physics, University of Surrey, Guildford, Surrey, United Kingdom, (e) Center for Accelerator Science, ANSTO, Australia, (f) Sandia National Laboratories, Radiation-Solid Interactions, Albuquerque, NM, USA, (g) Intl. Atomic Energy Agency, Vienna, Austria, (h) Solid State Physics Lab, DRDO, New Delhi, India, (i) NPL, New Delhi, India, (j) Inter-University Accelerator Centre (IUAC), New Delhi, India, (k) National Chemical Laboratory, Pune, India, (l) Institute of Physics, Bhubaneswar, India.

Prof. H. P. Singh -- Indo-US Collaboration with Nodal Institute: Delhi Univ., India.

Prof. Samit Kumar Mandal -- (a) FAIR Collaboration, GSI, Germany, (b) Nuclear Physics Research AGATA Collaboration, (c) PRESPEC Collaboration, GSI, Germany, (d) INO Collaboration, India, (e) INGA Collaboration, India.

Prof. D. N. Gupta -- Strathclyde University, Glasgow.

Prof. Jyoti Rajput -- (a) Inter-University Accelerator Centre (IUAC), New Delhi, India.

Prof. Ajit Kumar Mahapatro -- (a) Prof. Y-R Ma and Prof. Y-K Cuo, Department of Physics, National Dong Hwa University, Hualien, Taiwan, (b) Dr. S. P. Singh, NPL, New Delhi, India, (c) Prof. S. Ghosh, JNU, New Delhi, India, (d) Prof. T. Basu, AMITY, Noida, India, (e) Dr. P. Poddar, NCL, Pune, India.

Prof. Ashutosh Bhardwaj -- CMS Experiment RD50 Collaboration.

Dr. Ashok Kumar -- CMS Collaboration.

Prof. M. Naimuddin -- CMS Collaboration.

Dr. Sourav Sur -- Prof. Saurya Das, Department of Physics and Astronomy, University of Lethbridge, Alberta, Canada.

Dr. Sumalay Roy -- UGC-DAE CSR, Indore, India.

Dr. Sanjeev Kumar Verma -- INO Collaboration, India

### **Extension and Outreach Activities**

VISITOR'S PROGRAM on 13th March 2023 - 9AM to 6PM. For other extension activities, such as the INDIAN SCIENCE CONGRESS ASSOCIATION on the National Science Day, please visit <https://physics.du.ac.in/outreach-extension.php>.

**Faculty Strength:** 37 + 2 (UGC-FRP) + 2 (INSPIRE FACULTY) [in 2022-23]

**Number of Ph.D. Degrees Awarded: 27**

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## **Zoology**

### **Brief History**

The Department of Zoology is a constituent entity of the Faculty of Science, University of Delhi. Since its inception in 1947, it has been the foremost centre for learning in all aspects of Animal Sciences in India. Initial teaching efforts in the department were tailored to train students leading them to a B.Sc. degree and subsequently Masters and Ph.D programme were rolled out in 1951. The present premises of the department was built in 1959 resulting in an expansion of research (representing a wide spectrum of disciplines in Animal Sciences) activities, coinciding with the attraction of eminent faculties to work in the Department. Though being one of the youngest departments, it was selected as the maiden Centre for Advanced Study in Zoology by the UGC in recognition to its outstanding research profile in 1963 and it continues to hold this honour till date.

### **Major Activities and Achievements**

Department of Zoology is one of the premier research-intensive Departments in the country. Research is conducted in diverse areas ranging from microbes to human. Faculty members in the last one year have published 20 research papers in peer reviewed journals of high impact. They have also presented their findings in various National and International conferences. Many of them have received substantial funding from various funding agencies both from National and International. The Department of Zoology has been recognized for DST-FIST, UGC-SAP/CAS schemes. Department imparts M.Sc. teaching and training in advanced areas of Zoology. M Sc in Zoology was awarded to 129 candidates. The department also trains students in research through the Ph D programme. 52 Ph.D. degrees has been awarded to the students in the last one year, and 32 candidates have been admitted to Ph.D. program.

### **Publications**

#### **Research Articles**

Kumar, N., Sharma, J., Mittal, P., & Chakrabarti, R. (2023), Effect of leaves and seeds of *Achyranthes aspera* as feed supplements on the immunological and stress parameters and related gene expressions of Asian catfish (*Clarias batrachus*), *Vet. Res. Commun.*, 47, 99-109

Yadav, K., Rana, V. S., Anjali, Saurav, G. K., Rawat, N., Kumar, A., Sunil, S., Singh, O. P., and Rajagopal, R. (2023), Mucin Protein of *Aedes aegypti* Interacts with Dengue Virus 2 and Influences Viral Infection, *Microbiol. spectrum*. 11, 1-14

Jain, S., Chuphal, B., & Shakarad, M. N. (2023), Effect of financial independence of Indian women on their marriage decisions, *Social Evol Hist.*, 22, 12-144

Gupta, N., Sharma, R. K., Maitra, A., and Shrivastava, A. (2023), In-vitro and in-vivo efficacy of hollow gold nanoparticles encapsulating horseradish peroxidase: Oxidative stress-mediated tumor cell killing, *J. Drug Deliv. Sci. Technol.*, 79, 103979



- Rawat, K., Syeda, S., & Shrivastava, A. (2023), A novel role of *Tinospora cordifolia* in amelioration of cancer-induced systemic deterioration by taming neutrophil infiltration and hyperactivation, *Phytomed. Int. J Phytother. Phytopharmacol*, 108, 154488
- Singh, T., Aggarwal, N., Thakur, K., Chhokar, A., Yadav, J., Tripathi, T., Jadli, M., Bhat, A., Kumar, A., Narula, R. H., Gupta, P., Khurana, A., & Bharti, A. C., (2023), Evaluation of Therapeutic Potential of Selected Plant-Derived Homeopathic Medicines for their Action against Cervical Cancer, *Homeopathy*, 112(4), 262-274
- Rawat, N., Anjali, Shreyata, Sabu, B., Jamwal, R., Devi, P. P., Yadav, K., Raina, H. S., & Rajagopal, R., (2023), Understanding the role of insects in the acquisition and transmission of antibiotic resistance, *Science of The Total Environment*, 858(1), 159805
- Venkateswaran, K., Shrivastava, A., Agrawala, P. K., Prasad, A. K., Manda, K., Parmar, V. S., & Dwarakanath, B. S., (2022), Immune-modulation by 7, 8-diacetoxy-4-methylthiocoumarin in total body-irradiated mice: Implications for the mitigation of radiation-induced hematopoietic injury, *Life Sci.*, 311(A), 121140
- Syeda, S., Rawat, K., & Shrivastava, A. (2022), Pharmacological Inhibition of Exosome Machinery: An Emerging Prospect in Cancer Therapeutics, *Curr. Cancer Drug Targets.*, 22(7), 560-576
- Rani, N., Rawat, K., Saini, M., Yadav, S., Shrivastava, A., Saini, K., & Maity D, (2022), Azadirachta indica leaf extract mediated biosynthesized rod-shaped zinc oxide nanoparticles for in vitro lung cancer treatment, *Materials Sc. Eng. B*, 284, 115881
- Rani, N., Rawat, K., Saini, M., Shrivastava, A., Kandasamy, G., Saini, K., & Maity, D. (2022), Rod-shaped ZnO nanoparticles: synthesis, comparison and in vitro evaluation of their apoptotic activity in lung cancer cells, *Chem. Pap.*, 76, 1225-1238
- Kumar, A., Krishna, Sharma, A., Dhankhar, J., Syeda, S., Shrivastava, A., & Sharma, S. K. (2022), Self-assembly and transport behaviour of non-ionic fluorinated and alkylated amphiphiles for drug delivery, *Chemistry Select*, 7(35), e202203274
- Shrivastava, N. K., Chauhan, N., and Shakarad, M. N. (2022), Heightened immune surveillance in *Drosophila melanogaster* populations selected for faster development and extended longevity, *Heliyon*, 8(12), e12090
- Shrivastava, N. K., Farand, A. K. and Shakarad, M. N. (2022), Long-term selection for faster development and early reproduction leads to up-regulation of genes involved in redox homeostasis, *Advances in Redox Research*, 6, 100045
- Nagar, S., Talwar, C., Motelica-Heino, M., Richnow, H-H., Shakarad, M., Lal, R., & Negi, R. K. (2022), Microbial Ecology of Sulfur Biogeochemical Cycling at a Mesothermal Hot Spring Atop Northern Himalayas, India, *Front. Microbiol.*, 13, 848010
- Bharti, M., Khurana, H., Sharma, M., Choksket, S., Nagar, S., Yadav, S. Modeel, S. Korpole, S., Negi, R. K. (2022), Taxonomic and genomic characterization of *Sporosarcina cyprini* sp. nov., moderately tolerant

of Cr<sup>+6</sup> and Cd<sup>+2</sup> isolated from the gut of invasive fish *Cyprinus carpio* var. *communis* (Linn., 1758), *Antonie van Leeuwenhoek*, 116(3), 193-206

Thakur, K., Janjua, D., Shishodia, G., Chhokar, A., Aggarwal, N., Yadav, J., Tripathi, T., Chaudhary, A., Senrunga, A., & Bharti, A. C. (2022), Investigation of Molecular Mechanisms Underlying JAK/STAT Signaling Pathway in HPV-induced Cervical Carcinogenesis using 'Omics' Approach, *Medical Oncology*, 39(12), 255

Kashyap, A., Tripathi, G., Tripathi, A., Rao, R., Kashyap, M., Bhat, A., Kumar, D., Rajhans, Kumar, P., Chandrashekar, D. S., Mahmood, R., Husain, A., Zayed, H., Bharti A. C., Kashyap, M. K. (2022), RNA Splicing: A Dual-edged Sword for Hepatocellular Carcinoma, *Medical Oncology*, 39(11), 173

Bharti, M., Nagar, S., Khurana, H., & Negi, R. K. (2022), Metagenomic insights to understand the role of polluted river Yamuna in shaping the gut microbial communities of two invasive fish species, *Archives of Microbiology*, 204(8), 509

Dhankhar, J., Agrawal, N., & Shrivastava, A., (2022), Pan-neuronal expression of human mutant huntingtin protein in *Drosophila* impairs immune response of hemocytes, *Journal of Neuroimmunology*, 363, 577801

Aditi, K., Singh, A., Shakarad, M. N., & Agrawal, N. (2022), Management of altered metabolic activity in *Drosophila* model of Huntington's disease by curcumin, *Experimental Biology and Medicine*, 247(2), 152-164

Desai, A. S., Singh, A., Edis, Z., Bloukh, S. H., Shah, P., Pandey, B., Agrawal, N., & Bhagat, N. (2022), An In Vitro and In Vivo Study of the Efficacy and Toxicity of Plant-Extract-Derived Silver Nanoparticles, *Journal of Functional Biomaterials*, 13(2), 54

### **Books/Chapter in Books**

Sharma, M., Bharti, M., Modeel, S., Khurana, H., Negi, T., & Negi, R. K. (2023), Challenges of Multidrug-Resistant Microbes on Public Health, EBook, CRC Press, 9781003220404, 363-376

Sharma, M., Sharma, S., Mazumdar, S. & Negi, R. K. (2022), Application Omics approaches in bioremediation. In: Bioremediation challenges and advancements, EBook, Bentham Science publisher, 9789815036039, 191-223

### **Research Projects**

Institution of Eminence, University of Delhi, Delhi, 2022-23, Does constitutive upregulation of immune function in *Drosophila* provide selective advantage under infection?, 5.00 Lakhs

CCRH, 2021-2024, 2. Effectiveness of add-on Homeopathy in treatment of Type-2 Diabetes with or without complications: A multicentric pragmatic double-blind randomized controlled trial, 18.00 Lakhs

ICMR-ICRC, 2022-2025, 1. STAT3 - HPV Flow-FISH: Development of innovative single molecule RNA (smRNA) detection, flowcytometry-based quantitative and diagnostic assay for detection of transcriptionally active high risk-HPV infections, 220.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Molecular characterization and assessment of gastrointestinal tract microbial diversity in farmed and wild-caught cyprinidae fish, 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Development of immunodiagnostic method for detection of geminivirus infection in insect and plants, 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Assessment of genotoxic potential of heavy metal contaminated Yamuna water and agricultural products of peri-Yamuna soil in Delhi, 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Investigate molecular mechanisms of immune response resulting from temporal interactions between reproduction and immunity using *Drosophila*, 5.00 Lakhs

Institution of Eminence, University of Delhi, 2022-2023, To study the expression pattern of *Olfml3* and its interacting proteins in neuroinflammation, 5.00Lakhs

Institution of Eminence, University of Delhi, 2022-2023, Title of the project- Spectrin based regulation of wound healing in *Caenorhabditis elegans*, 5.00 Lakhs

Science and Engineering Research Board (SERB), 2023-2026, Role of extracellular vesicles in wound response and repair of *Caenorhabditis elegans*, 44.38 Lakhs

#### **Seminars/Conferences organized by the Department**

Prof. Alok Chandra Bharati, Professor, Department of Zoology, University of Delhi, 19. 5th International Conference on Nutraceuticals and Chronic Diseases (INCD-2022) on “Pharmaceuticals and Nutraceuticals for Cancer and Other Chronic Diseases” Department of Zoology, University of Delhi,, 09-10-2022

Prof. Alok Chandra Bharati, Professor, Department of Zoology, University of Delhi, 19. 5th International Conference on Nutraceuticals and Chronic Diseases (INCD-2022) on “Pharmaceuticals and Nutraceuticals for Cancer and Other Chronic Diseases” Department of Zoology, University of Delhi,, 09-10-2022

#### **Seminar/Conference Presentations (National/International) by Faculty Members**

Chakrabarti, R. 2023. “Sustainable Freshwater Aquaculture: Feed Formulation and Water Quality Management” in the Inaugural Lecture of Synapse at Miranda House College, University of Delhi.

Chakrabarti, R. 2023. “The Role of Non-conventional Plant Ingredients in the Production of Nutritious Fish for Human Consumption” in the National Conference on Scientific Innovation for Human Wellbeing organized by Department of Chemistry, University of Delhi and The Indian Science Congress Association (ISCA), Delhi Chapter at University of Delhi, Delhi, India.

Singh, R. 2022. “Recombinant DNA technology- therapeutic proteins” in the Biotechnology- Principles and Practice at Sri Sankara Arts and science College (University of Madras), Enathur, Kanchi Resource Speaker, Science Academies’ Virtual.

Singh, R. “Molecular recognition in signal transduction with the example of Glycoprotein Hormone, Follicle Stimulating hormone (FSH)-cognate Receptor interaction in Proteins-Structure, Function and evolution at Telangana University, Dichpally-Nizamabad.

Bharati, A.C. 2022. “Applications of Animal Culture Techniques in Cancer Research” in National Workshop on Animal Cell Culture: Techniques and Applications at Guru Ghasidas University, Bilaspur.

Bharati, A.C. 2022. “Transcriptional Regulation in Virally-Induced Malignancies: Opportunities and Challenges- Cancer of the Uterine Cervix, and Head & Neck malignancy associated with infection of Human Papillomavirus” in UGC-Sponsored Online Refresher Course in Bio-Sciences (Interdisciplinary) at Bharathidasan University, Tiruchirappalli, Tamil Nadu.

Bharati, A.C. 2022. “Molecular Biology of Carcinogenesis: Opportunities and Challenges- Cancer of the Uterine Cervix, and Head & Neck malignancy associated with infection of Human Papillomavirus” in Refresher Course in Zoology organised by Department of Zoology and UGC-HRDC, NEHU, Shillong.

Bharati, A.C. 2022. “Recent Trends in Cancer Prevention and Interception- Bench to Bedside” at Jawaharlal Nehru University, New Delhi.

Bharati, A.C. 2022. “Combating Cancer: Biology to Therapy to Drug Resistance” at International Symposium on Stem Cell and Cancer at AIMMSCR, Amity University, Noida, UP.

Bharati, A.C. 2022. “Recent Trends in Animal Sciences (RTAS)” in International Virtual Conference at the Department of Zoology, Banaras Hindu University, Varanasi, UP.

Bharati, A.C. 2022. Recent Trends in Cancer Research and its Management at C.M. science college, LNMU, Darbhanga, Bihar.

Bharati, A.C. 2022. “Translational Chemoprevention and Brainstorming” in 16th International Cancer Symposium at Jawaharlal Nehru University (JNU), New Delhi.

**Faculty Strength: Professors: 12, Assistant Professors: 10**

**Total Faculty Strength: 22**

**Number of Ph.D. Degrees Awarded: 59**

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## FACULTY OF SOCIAL SCIENCES

### Adult, Continuing Education and Extension

#### Brief History

The Department of Adult, Continuing Education, and Extension (DACEE), a full-fledged department under the Faculty of Social Sciences, University of Delhi, has had its beginnings as the centre, cell, and full-fledged department since 1984. The Department offers an M.A. in Lifelong Learning and Extension Counselling and Guidance and Ph.D. in Adult and Continuing Education. The Department also offers two-year multidisciplinary internship-based employment-oriented courses with the scope of international visits and employability in the professional field, voluntary organisations, volunteer management, English language proficiency courses, and in the university system.

#### Major Activities and Achievements

The Department established the Transgender Resource Centre (TRC) in March 2018 and has been instrumental in mainstreaming the third gender in higher education and society. An interactive session with Padma Shri awardee Matha B Manjamma Jogathi promoted discussions on livelihood opportunities for transgender individuals in partnership with Nukkad Cafe in February 2022. The department signed a Memorandum of Association with the University of Wurzburg, Germany, in 2015, leading to fruitful student and faculty exchange programs. In 2022, an Erasmus+ inter-institutional agreement was signed with the University of Wurzburg, enabling two students to participate in a six-month European exchange programme from October 2022 to March 2023.

DACEE organised a three-day international seminar in January 2023, focusing on the professionalisation of adult education and lifelong learning in Indian universities. This event drew international participation and held significance during the university's centenary year. DACEE also organised an Entrepreneurship Orientation Programme in 2022 with the Institute of Industrial Development (IID) to discuss employability in adult and lifelong learning.

#### Research Articles

Goswami, D., & Narayan, P. (2023). Education, skill development and lifelong learning in india: An over view. *Indian Journal of Lifelong Learning and educational Guidance*, 4(1), 47-54.

Pandey, A., & Dixit, V. K. (2023). Empowering dreams: An analysis of pmmy's impact on micro-entrepreneurship and financial inclusion. *International journal of Novel Research and Development*, 8(7), 721-726.

Yadav, R. (2023). Panchayati raj in india: Empowerment and, development and challenge. *International Journal of Multidisciplinary*, 9(4), 162-165.

#### Journal

Indian Journal of Lifelong Learning and Educational Guidance

#### Research Projects

Delhi State AIDS Control Society, 2022-23, Barriers in service uptake by Network Based Sex workers in Delhi, INR 2,40,000

Delhi State Aids Control Society, Delhi Government, June 2023-November 2023, "Relationship of Female Sex Workers and their SPA Managers and its implications for HIV/STI prevention. ", INR 2,40,000

#### **Seminars/Conferences organized by the Department**

Shah, Y.S. & Kumar, V. Mohan & Chadha, N. K., University- Community Interface (online) Plan India Prof. rajesh, Department of Adult Educaiton and Mr. Satyajit Ghosh., 12-08-0022

Shah, Y.S. & Kumar, V. Mohan & Chadha, N. K., University of Delhi, Three Day International Seminar on Professionalization of Adult Education, Lifelong Learning in Indian Universities under New India Literacy Program, 06-01-2023.

National/International MoUs Signed

Centenary Year MOU under Wurzburg University Germany Under G20 Indies presidency (2022-2025)

**No. of Students under Exchange Programme: 5**

**Placement Details: 13**

#### **Extension and Outreach Activities**

The Department adopted Jagpur and Mukundpur Community along with social work under UNNAT Bharat Abhiyaan.

**Faculty Strength: 9**

**Number of Ph.D. Degrees Awarded: 7**

**Number of M.Phil. Degrees Awarded: 10**

#### **Other Significant Information**

In this Academic year, 3 Associate Professors are selected from Multidisciplinary Department

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### **African Studies**

#### **Brief History**

The Department of African Studies, established in December 1954, is a distinguished part of the Faculty of Social Sciences at the University of Delhi. It was inaugurated formally on August 6, 1955, by Pt. Jawaharlal Nehru to enhance awareness about Africa's rich heritage and contemporary developments. This initiative represents interdisciplinary teaching and research, offering M.A., M.Phil. (Till 2022) and Ph.D. degrees, as well as Certificate and Diploma courses in the Swahili language. Founded with the noble vision of nurturing shared understanding, friendship, and cooperation between India and Africa, the department serves as a channel for strengthening diplomatic and cultural ties. It surpasses its foundational educational and research roles to be a catalyst for India-Africa relations, promoting dialogue and collaboration that benefits both regions.

## Major Activities and Achievements

The Department of African Studies at Delhi University is orchestrating a series of significant academic and diplomatic activities. A crucial moment was the organization of a one-day international conference on "India-Africa Relations: Shifting Global Dynamics and Road Ahead" on 14th March 2023, nurturing dialogue on emerging geopolitical landscapes. Celebrating International Yoga Day on 21st June 2022, integrating wellness and learning. The Special Centenary Issue of the Indian Journal of African Studies stands testament to the department's scholarly contributions. A pact with NCHHD was inked, fortifying research collaboration between India and Africa. The international lecture celebrating Azadi ka Amrit Mahotsav offered profound insights into South Sudan's evolution.

## Research Articles

Dash, S. (2022). India-nigeria oil partnership. *Indian Journal of African Studies*, 24, 84-101.

Dash, S. (2022). Ideational imperatives of political development in africa: Lessons for India and other post-colonial societies. *International Journal of African Studies*, 2, 27-33.

Karmwar, M. (2022). Siddis of pattharkuan (Ahmedabad): A diasporic connect from Africa. *Indian Journal of African Studies*, 24, 136-148.

Singh, G.S. (2022). The impact of military strategies during the *maji maji* war on non combatants: women and children in *songea* district. *Indian Journal of African Studies*, 25 (1&2), 1-21.

Yaruingam, A. S., & Sharma, S. (2022). Geostrategic churn in the indian ocean : Positioning india and the vanilla islands. *Journal of Advance Research in Social Science & Humanities*, 8(12), 1-10.

Yaruingam, A. S., & Gupta, J. (2023), Human development index of Nigeria and India : An overview observation, *Journal of Advance Research in Social Science & Humanities*, 9, 21-32 .

## Books/Chapter in Books

Dash, S. (2023). Liberal-idealist contemplation in the non-western world: A study of ubuntu in Africa. Pentagon Press.

## Journal(s) Published by the Department

Indian Journal of African studies

## Research Projects

ICSSR, 10 March 2023, "Kashmir and Abyei in Comparative Perspective: A Postcolonial Understanding of Territorial Contestation".

## Seminars/Conferences organized by the Department

Department of African Studies,, Department of African Studies, Department of African Studies,University of Delhi, India-Africa Relations: Shifting Global Dynamics and Road Ahead, 14 March, 2023

## Seminar/Conference Presentations (National/International) by Faculty Members

Dash, Sandipani. (2023, March 30-31 ). Paper presented titled “Right to Self Determination in Kashmir: A Geo-Strategic Perspective”, National Conference on The Role of Jammu and Kashmir in the Freedom Movement of India, Maharaja Agrasen College, University of Delhi.

Dash, Sandipani. (2023, March 14 ). Paper presented titled “Afro-Bharatiya Idea of Decoloniality” in International Conference on "India-Africa Relations: Shifting Global Dynamics and Road Ahead," Department of African Studies, University of Delhi.

Dash, Sandipani. (2022, July 20). Paper presented in India-Africa Maritime Border and Geo-Cultural Connect in National Workshop on "Understanding India's Borders," The Indian Futures, New Delhi, (Online)

Kapoor, Rashmi (2022, April 6-7 ). “India’s Foreign Policy and Health Diplomacy in Africa”, Paper presented in Two day (online) National Seminar on India’s Foreign Policy at 75: Issues and Challenges organized by the Department of Political Sciences, Janki Devi Memorial College, University of Delhi.

Kapoor, Rashmi. (2022, July 14). “The impact of financial development on fertility rate: A case of Uganda”. Paper presented at the two day ‘International E-Conference on Scientific Research in Multidisciplinary Approach (ICSRMA-2022)’ held on 13-14 July 2022 organized by SRM Arts and Science College, (Affiliated to the University of Madras), Kattankulathur, Chengalpattu.

Karmwar, Manish. (2023, March 25). Paper presented titled “Swami Vivekananda: A True Travelogue” at the National Conference on “Swami Vivekananda,” sponsored by ICHR & ICSSR, held at KMC, University of Delhi.

Kumar, Suresh. (2022, May 19-20). Paper presented titled “Past and Future of Democracy”, in International Conference on Revisiting the Ideas of India from Swaraj to New India.

Singh, Gajendra. (2022, August). “Association of South East Asian Nations (ASEAN) Impact on ASIAN States”, VI-International European Conference on Interdisciplinary Scientific Research,,National Institute for Economic Research” Costin C. kirtescu” Burcharest, Romania. (online).

Singh, Gajendra. (2022, Oct ). Lecture on “Anti-Caste Movement in India”, 2nd International Conference on Scientific Research, Kirsehir Ahi Evran University, Kirsehir, Türkiye.

Yaruingam A.S. & Bharti,Prem K. (2022, Oct 12-13). "India-Africa Relation in the Post-colonial Period: A Study of Nehruvian Perspective"Asian Association of World Historians (AAWH) Fifth International Conference IIC Delhi.

### **Placement Details: 6**

### **Extension and Outreach Activities**

Over the past year, the Department of African Studies, drawing from its historic roots and commitment to India-Africa relations, has successfully strengthened its outreach through diverse activities. We proudly hosted the annual African Cultural Festival, initiated a public lecture series featuring eminent scholars, organized workshops on African issues, and encouraged our research ties with African institutions.

### **Faculty Strength: 6**

**Number of Ph.D. Degrees Awarded: 14**

**Number of M.Phil. Degrees Awarded: 16**

### **Other Significant Information**



The Department of African Studies has launched a monthly International Lecture Series, inviting experts to shed light on diverse aspects of African studies. This initiative raises a continuous intellectual exchange, connecting academic communities and encouraging in-depth discussions on Africa's significance.

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## **East Asian Studies**

### **Brief History**

The Department of East Asian Studies began as the Centre for Chinese Studies in 1964. Japanese Studies was introduced in 1969 and the department was renamed as the Department of Chinese and Japanese Studies. After the introduction of the Korean Studies in 2001, the department was rechristened as the Department of East Asian Studies. The department is part of the Faculty of Social Sciences, University of Delhi.

### **Major Activities and Achievements**

The Department offers post graduate courses in M.A. in East Asian Studies, M.A. in Japanese and Ph.D. in East Asian Studies. The Post-graduate courses in the Department focus on an inter-disciplinary approach to the study of the region. Language is a compulsory component of this program and students learn one of the three East Asian languages viz. Chinese, Japanese or Korean. This program enables students to have comprehensive and integrated knowledge of the subject and the language concerned. It aims to create experts on East Asia who could work in Think tanks, NGOs, government agencies, International Organizations, Newspaper Agencies etc. Further, the Department offers two years of Post Graduate Diploma and Advance Diploma Courses in Chinese, Japanese and Korean languages. Students who complete these courses get absorbed in companies in and outside India. The highlight of this year has been signing of MoUs. Prof. Ikeda Isamu and Ms. GengYanxia, Visiting Faculty from Taiwan was sent to the department under the MoU signed. Renowned speakers were invited for Monday seminars and conferences. Many faculty members presented research papers in National and International Conferences. Meritorious students got scholarships to go to China, Taiwan and Japan for higher studies. A large number of students got placement through the Placement Cell of the Department.

### **Honours/Distinctions**

- OMOROI Award Essay Contest, Japanese Learner of the World First prize in OMOROI Award Essay Contest, Japanese Learner of the World OMOROI, Japan 2022
- "All India North Zone Speech Contest in Japanese (Junior Category)"  
"Third prize in All India North Zone Speech Contest in Japanese (Junior Category)"  
"MOSAI, INDIA 2022"

### **Publications**

### **Research Articles**

1. Dr. Prachi Aggarwal, (2022 ), "Evaluating The 15th BRICS Taiwan's Energy (In)security: Challenges to Growth and Development, *Jadavpur Journal of International Relations*, 01, 26, 110-126, 02

### **Books/Chapter in Books**

1. Ravni Thakur, (2023 ), *China in the 21st Century : Key Issues and Challenges*, Delhi, Kalpaz Publications, Gyan Books,, "ISBN 978-93-958-8(PB). ", 1-200
2. Ranjana Mukhopadhyaya, (2022 ), Rita Banerjee (ed.) *Indian and the Traveller: Aspects of Travelling Identity*, New Delhi, Bloomsbury Publishing, ISBN: 9789354355158, 127-145
3. Rajiv Ranjan, (2023), *China Studies after the End of the Cultural Revolution*, Delhi, World Scientific, ISBN 9789811260896, 1-19
4. Aveivey D., (2022), *Covid-19 Complexities and Consequences*, New Delhi, TRACI, New Delhi, ISBN 978-93-94507-18-0., 97-111
5. Prachi Aggarwal, (2022), *China's Energy Security: The Journey from Self-Sufficiency to Global Investor*, Singapore, Palgrave Macmillan Singapore, ISBN 978-981-19-2191-9 ISBN 978-981-19-2192-6 (eBook), XIV -217

### **Seminars/Conferences organized by the Department**

1. Prof. Ranjana Mukhopadhyaya, Professor, NA, Research Methods Lab-A practical Session on STATA, 15-06-2023
2. Prof. Ranjana Mukhopadhyaya, Professor, NA, Refresher Course on Japanese Language in Collaboration among CPDHE, MEA & Japan Foundation., 04-03-2023
3. Prof. Ranjana Mukhopadhyaya, Professor, NA, Research Methods Lab-Archival Research: Making Sense of Past, 26-06-2023
4. Prof. Ranjana Mukhopadhyaya, Professor, NA, Two Days Japanese Literature Workshop Prof. Yasuhiko Komatsu of Aoyama Gakuin Daigaku in collaboration with Japan Foundation., 22-08-2023
5. Prof. Ranjana Mukhopadhyaya, Professor, NA, 7 days Internship program involving Japanese language students and visiting students of Saitama Kogyo Daigaku, 31-08-2023
6. Dr. Dharitri Narzary, DOCTOR, NA, Influences of East Asian Historical Tradition on the Buranji tradition of Assam, 19-06-2023
8. Mr. Peter Chan, NA, NA, Opportunity In Taiwan, 26-06-2023
9. Jia - Feng Xiao, NA, NA, Learning Mandarin at IIT Ropar, 26-06-2023

### **National/International MoUs Signed**

- a. 1) MoU signed with Korea Foundation
- 2) MoU signed with Tokyo University

### **Other Inter-Institutional Collaborations**

1) Refresher Course on Japanese Language in Collaboration among CPDHE, MEA & Japan Foundation. CPDHE, DU. Ministry of External Affairs, Government of India. & Japan Foundation, Green Park. February 20- March 4, 2023 Two weeks Japanese Language Teacher Training  
<https://drive.google.com/drive/folders/1XxFKyhfxiGqlA7TKbBPgEL3KoxvcZPWF>

2) 7 days Internship program involving Japanese language students and visiting students of Saitama Kogyo Daigaku Saitama Kogyo University 23 Aug-31 Aug Seven Days Internship program involving Japanese language students and visiting students

<https://drive.google.com/drive/folders/1XxFKyhfxiGqlA7TKbBPgEL3KoxvcZPWF>

3) K-Dream under the G20 University Connect The International Relation office University of Delhi, 500 People May-23 One Day Lecture by H.E. Mr.Lee Cheol Woo, Governor of Gyeongsangbuk-do Province

4) Cultural Event at Miranda House Miranda House, DU 500 People 24 Feb 2023 One Day Ambassdor, Republic of Korea

**No. of Students under Exchange Programme:** 10 (Ten)

**Placement Details (Number and percentage of students placed):** Number- 18

**Faculty Strength:** 15

**Number of Ph.D. Degrees Awarded:** 04

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## **Economics**

### **Brief History**

The Delhi School of Economics is one of India's premier institutes of higher learning. The school was launched in 1949 by V.K.R.V. Rao, with the support of Prime Minister Jawaharlal Nehru. It grew out of a vision that a newly independent nation, which aspired to social and economic progress, needed a vibrant centre for advanced studies in the social sciences. The department of economics, along with its sister departments of geography and sociology, has produced many of the country's leading academics, educators, administrators, policy makers, corporate leaders and journalists. Nobel Laureate Amartya Sen, Prime Minister Manmohan Singh, and the late Sukhamoy Chakravarty, one of the architects of India's Five Year Plans, have all taught here.

### **Major Activities and Achievements**

During the period April 2022 to March 2023, members of the department continued to contribute to the field of economics in significant ways. The department continues to be a UGC Centre of Advanced Study, a distinction it holds since 1965. For the tenth successive year, it has also been ranked the highest amongst university economics departments in India by Repec, a global electronic archive of working papers and publications in Economics (<http://ideas.repec.org/top/top.india.html>). The Department publishes the journal, founded by Professor V. K. R. V. Rao, Indian Economic Review since 1952.

### **Research Articles**

Bansal, S., Viswanathan, B., & Meenakshi, J. V. (2023). Does research performance explain the "leaky pipeline" in Indian academia? A study of agricultural and applied economics. *Agricultural Economics*, 54(2), 274-288.

Bhattacharjea, A. (2022). Abuse of dominance under the competition act: The need for a competitive effects test. *Indian Competition Law Review*, 7 (2), 36-43.

- Bhattacharjea, A. (2022). Industrial policy in India since independence. *Indian Economic Review*, 57(2), 565–598. doi.org/10.1007/s41775-022-00154-9
- Das, V. K., & Kumar, A.G. (2022). Commercialization, diversification and structural determinants of farmers' income in India. *India Environment Portal*, 112-133.
- Datta, S., & Kingdon, G. G. (2022). Class size and learning: Has india spent too much on reducing class size? *The World Bank Economic Review*, 37(1), 24-48.
- Dua, P., & Tuteja, D. (2023). Synchronization in Cycles of china and india during recent crises: A markov switching analysis. *Journal of Quantitative Economics*, 21 (2), 317-337.
- Dua, P., Goel, D., & Kumar, N. (2023). Decoding the union budgets' financial inclusion agenda: A review of india's progress, *Economic and Political Weekly*, 58 (13), 1-22.
- Dua, P., & Kumar, S. (2023). Nature of corporate environmentalism in large-listed Indian firms: Empirical evidence from Indian companies. *Journal of Environmental Studies and Sciences*, 13, 602-613.
- Fredriksson, P. G., & Gupta, S. K. (2022). Land productivity and colonization. *Economic Modelling*, 113, 105890. doi.org/10.1016/j.econmod.2022.105890
- Fredriksson, P. G., Gupta, S. K., Zhao, W., & Wollscheid, J. R. (2023). Legal heritage and urban slums. *Journal of Regional Science*, 63(1), 236–252. doi.org/10.1111/jors.12622
- Ghosh, P., & Ray, D. (2023). The social equilibrium of relational arrangements. *Journal of Institutional and Theoretical Economics*, 1-34.
- Kumar, A., & Kumar, M. (2022). Political aspects of 'freebies. *Economic and Political Weekly*, 57 (52).
- Kumar, M. (2022). Power Asymmetry and unequal exchange in the agricultural value systems: Case study of paddy. *Agrarian South: Journal of Political Economy: A Triannual Journal of Agrarian South Network and CARES*, 11(3), 308–332. doi.org/10.1177/22779760221133968
- Kumar, S., & Khanna, M. (2023). Distributional heterogeneity in climate change impacts and adaptation: Evidence from Indian agriculture. *Agricultural Economics*, 54(2), 147-160.
- Kumar, S. (2023). Does financial inclusion enhance tax revenue: Indian experience. *Centre for Development Economics*, 335, 1-240.
- Krishna, K. L., & Meenakshi, J. V. (2022). Agricultural productivity growth and structural transformation in rural India: Some recent evidence. *Journal of Quantitative Economics*, 20, 270-302.
- Krishna, K. L., & Meenakshi, J. V. (2022). Agricultural productivity growth and structural transformation in rural India: Some recent evidence. *Journal of Quantitative Economics*, 20, 270-302.
- Maiti, D., & Singh, P. (2023). Foreign Capital Inflow, Exportability and the Indian Economy. *The Indian Economic Journal*, 71(3), 581–597. doi.org/10.1177/00194662221137838
- Maiti, D., & Khari, B. (2013). Digitalisation, Governance and The Informal Sector. *Research*.
- Ringler, C., Agbonlahor, M., Barron, J., Baye, K., Meenakshi, J. V., Mekonnen, D. K., & Uhlenbrook, S. (2022). The role of water in transforming food systems. *Global Food Security*, 33, 100639. doi.org/10.1016/j.gfs.2022.100639.

Sarkar, S., & Gupta, D. (2023). Bargaining for assembly. *Theory and decision*, 95(2), 229–254. doi.org/10.1007/s11238-022-09917-5

Parisi, F., & Singh, R. (2022). Will Competition Reduce Attention Costs in Social Media? *SSRN Electronic Journal*. doi.org/10.2139/ssrn.4069468

Schäfer, H.-B., & Singh, R. (2023). Property of the social media data. In *Law and Economic Development* (pp. 13–46). Springer International Publishing. doi.org/10.1007/978-3-031-24938-9\_2

Singh, R. (2023). Is there a case for basic income support in India? Assessment based on verifiable criteria. In Nagar, R. & Thakkar, H. (Eds.), *The Indian Yearbook of Law and Interdisciplinary Studies*. Routledge India. doi.org/10.4324/9781003150565

Singh, R., & Ray, S. (2023). Under-reporting of income by wealthy Indians. *Economic and Political Weekly*, 58 (20).

Sen, N. and Sinha, U. B. (2022). When to merge with a lower quality producer? *Journal of Economics*, 138(2), 165-188.

Somanathan, R., Kumar H. & Vasishth, M. (2022). Language and learning in ethnically mixed communities. *Review of Development Economics*, 26(2), 835-846.

Somanathan, R., & Sethi, R. (2023). Meritocracy and representation. *Journal of Economic Literature*, 51(3), 941-957.

Varshney, D., & Meenakshi, J. V. (2022). Employment effects of an emergency assistance package for migrants displaced by covid-19 in India. *Applied Economic Perspectives and Policy*. doi.org/10.1038/s41598-022-21334-w

### **Books/Chapter in Books**

Dua, P. (Ed.). (2022). *Macroeconometric methods: Applications to the Indian economy*. Springer.

Ghosh, P., & Ojha, V. (2022). Integration without coordination: Revisiting globalisation in the light of the pandemic. In M. Dutta, Z. Husain & A. K. Sinha (Eds.), *The Impact of Covid-19 on India and the Global Order*. Singapore: Springer, 2022. https://doi.org/10.1007/978-981-16-8472-2\_14.

Kumar, M. (2022). *Agricultural markets: Constraints and opportunities*. In S. K. Bhaumik (Ed.), *Enhancing agricultural productivity and farmer incomes in Bihar*. Sage.

Murty, M.N., & Kumar, S. (2023). *Environmental valuation and accounting: The Indian perspective*, academic foundation. Elsevier.

Murty, M.N., and Kumar, S. (2023). *Three pillars of government, market and communities for environment management*, academic foundation. Elsevier.

### **Journal(s) Published by the Department**

*Indian Economic Review*, Springer.

### **Research Projects**

IoE-DU, 3 Year, Digitalisation, Informal Sector and Economic Growth of India and the Developing Countries: The Role of International Trade (File Number: IoE-DU/MRP/2022/056 Dated: 01.08.2022) Dibyendu Maiti (PI) and Uday Bhanu Sinha (Co-PI), 1514000

### **Seminars/Conferences organized by the Department**

Winter School 2022, jointly organized by the Department of Economics at the Delhi School of Economics (DSE), the Centre for Development Economics (CDE) and the Econometric Society, Winter School 2022/, 17-12-2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Bhattacharjea, Aditya (2022, Nov). “Effect of Antitrust Penalties on Share Prices of Indian Firms in Cartel Cases, 2011-21”,(with Oindrila De), 8th International Conference on Law and Economics, National Law University Delhi.

Das, Varun Kumar (2022, Nov.). “Is manufacturing becoming a Rural Phenomenon in India? Evidence from Indian Manufacturing Sector”, at Conference on Indian Economy, Centre for Development Studies, Thiruvananthapuram.

Das, Varun Kumar (2022, Sept). “Commercialization, Diversification and Structural Determinants of Farmers' Income in India”, Invited seminar at Department of Economics, Shaheed Bhagat Singh Evening College, University of Delhi, New Delhi.

Das, Varun Kumar (2022, Aug ).“Is manufacturing becoming a Rural Phenomenon in India? Evidence from Indian Manufacturing Sector”, at CDS-Ford Foundation Workshop on Employment, New Delhi.

Datta, Sandip (2022, Sept. 24). “National Seminar on Development Experiences of Uttarakhand: Achievement, Challenges and Way Ahead.” Organized by Doon University, Department of Economics, Dehradun, Uttarakhand, India, September 24, 2022.

Dua, Pami (2022, May ). “The Relationship Between Trade, Investment and Climate Change,” Panelist, ADB Event in T20/G20 Mid-Year Conference, Mumbai.

Dua, Pami (2022, Dec ). “Education, Employment and Skills,” Chair, Panel Discussion in Conference on Sustainable Development Goals Amidst Multiple Global Shocks, Indira Gandhi Institute of Development Research (IGIDR), Mumbai.

Dua, Pami (2022, Sept ). “Monetary Policy in India”, 11th NJ Yashaswy Memorial Lecture (in honour of Founder of ICAFI Group), ICAFI Business School, Gurgaon, December 2022, “Taming Inflation – Global Inflation Scenario: Lessons for India,” Panelist, ICRIER Conference.

Dua, Pami (2022, August ). “Harnessing Open Science and SDGs to Address Global Issues,” Panelist, Open Research and Scholarly Communication Forum 2022, Springer Nature, India, New Delhi.

Dua, Pami (2022, May ). Convocation Address (Chief Guest), Seventeenth Convocation of Indira Gandhi Institute of Development Research (IGIDR), Mumbai.

Dua, Pami (2022, April ). “Monetary Policy Framework in India,” Indian Institute of Foreign Trade, New Delhi.

Kumar, Manish (2023, Feb. 8). Invited for Lecture on ‘Political Aspects of Freebies: In the Context of Union Budget 2023-24’, hosted by Shyama Prasad Mukherjee College, University of Delhi.

Kumar, Manish (2023, Feb. 25) 'The Context of Union Budget 2023-24' hosted by Department of Economics, Doon University, Dehradun, Uttarakhand.

Kumar S. (2023, Feb. 10). 'Climate Change and Public Policy', 1st Annual Professor P.C. Jain Memorial Lecture, Department of Economics, Kurukshetra University, Kurukshetra.

Kumar S. (2023, Jan. 10) . 'Climate Change and Green Financing' Special Lecture delivered on Hindi Diwas, Reserve Bank of India, New Delhi.

Kumar, S. (2023, Jan. 10). 'Climate Change and Green Financing' Special Lecture delivered on Hindi Diwas, Reserve Bank of India, New Delhi.

Kumar, S. (2022, Dec. 27-29). 'Economic Growth Prospects for India: A Sectoral Analysis' Keynote Address at the 105th Annual conference of the Indian Economic Association held at Bangalore .

Kumar, S. (2022, Nov. 5). 'Distributional heterogeneity in climate change impacts and adaptation: Evidence from Indian agriculture' Annual Economics Conference, IISER Bhopal.

Kumar, S. (2022, Nov. 4). 'Measuring Technical Change', Keynote in the Inaugural of the National Workshop on Productivity and Efficiency Analysis, Department of Economics, Jamia Millia Islamia, Delhi .

Kumar, S (2022, Oct. 15). 'Decolonization of Social Sciences: Prospects as per NEP 2020', Panel Discussant, Rashtriya Samaj Vigyan Parishad (RSVP) 5th Annual National Conference, Hansraj College, University of Delhi .

Maiti, Dibyendu (2023, Feb. 5-7). "Trade, Strategic Competition and Growth in A Generalised Oligopoly Equilibrium Model", in an international conference on Imperfect Resource Mobility and Economic Adjustments in a Changing World- Celebrating 50 years of the Specific Factor Model, Xavier's University, Kolkata.

Maiti, Dibyendu (2022, April 13). "ICT for Wellbeing and Social Connectivity", World Summit on the Information Society Forum 2022.

Maiti, Dibyendu (2022, April 9). "Contemporary Challenges to Labour Relations in India", Organised by University of Manchester (UK).

Maiti, Dibyendu (2022, Dec. 21-22). Carbon Tariff, Trade and Welfare: Some Issues', Heritage College, Kolkata.

Maiti, Dibyendu (2022, August 1-3). "ICT-exposure, Governance and the Informal Sector: A Cross Country Study" (with Bhavna Khari), presented at the Pacific Conference, Kyoto University, Japan.

Maiti, Dibyendu (2022, April 13). "ICT for Wellbeing and Social Connectivity", World Summit on the Information Society Forum 2022, 13th April

Maiti, Dibyendu (2022, Sept. 16-17). "Endogeneity Corrected Stochastic Frontier with Market Imperfections" (with Chiranjib Neogi, ISI, Kolkata), presented at the KLEM Indian Productivity Workshop Trade and Development Workshop, DSE.

Maiti, Dibyendu (2023, Feb 24-25). “Trade, Strategic Competition and Growth in A Generalised Oligopoly Equilibrium Model”, presented at Trade and Development Workshop, DSE.

Saini, Swati (2022, Dec. 15-16). Presented a paper titled “Towards Environmentally Sustainable and Fair-Trade Agreements: Arguing a Case for Developing Countries” at 8th Conference on "Empirical Issues in International Trade and Finance", IIFT, Delhi .

Singh, Ram (2023, Feb 16-17). Keynote Talk. ‘Special Think 20 programme on ‘Global Governance with LiFE‘ at G20 Meeting, Bhopal.

Singh, Ram (2023, March 21). Prof. S. K. Rangarajan Memorial Lecture. ‘Who Should Pay Income Tax and How Much? A political economy approach’, The Indian Institute of Sciences, Bangalore.

Singh, Ram (2023, Jan. 10). ‘Public Police and the Equal Security Paradox’, Asian Meeting of the Econometric Society, IIT Bombay.

Singh, Ram (2022, Dec. 27-29). Conference Lecture. ‘Vision India@2047’. The 105th Annual Conference of the Indian Economic Association, Bangalore.

Singh, Ram (2023, March 17) Keynote Talk. ‘Do Tax Laws Incentives Wealthy Groups to Underreport their Income? at International Conference at on Law, Economics, and Public Policy, at GNLU, Gandhinagar.

### **National/International MoUs Signed**

Signed a Memorandum of Understanding (“MoU”) for a programme of Public Policy Research and Training with: The National Council of Applied Economic Research, an economic policy research institute incorporated under the Society’s Registration Act, 1860, and having its registered offices at NCAER India Centre, 11, Indraprastha Estate, New Delhi -110002.

### **Placement Details**

Number and percentage of students placed : 223 (87.34%)

### **Extension and Outreach Activities**

Extension and Outreach Activities: To make a difference in the lives of others in need, the students of the Department of Economics formed a social organization Prayaas-DSE in 2005. Prayaas-DSE has developed itself into a self-dependent and progressive organization.

**Faculty Strength: 27**

**Number of Ph.D. Degrees Awarded: 3**

**Number of M.Phil. Degrees Awarded: 2**

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## Geography

### Brief History

The Department was established in October 1959 as the “Department of Human Geography” with three young faculty members – Dr. S.S. Bhatia, Dr. S.G. Burman, and Mrs. Rukmani Srinivas. The Department took off under the leadership of Prof. George Kurian (1959-62), followed by Prof. V. L. S. Prakasa Rao (1965-73). Under their dynamic leadership, the department earned academic fame and a distinct identity in India, and among the International community. The Department gradually grew after 1973, under the able guidance of Prof. R. Ramachandran; and with widening scope of teaching and research, it was renamed as “Department of Geography” in 1976.

### Major Activities and Achievements

As per QS World University Rankings, the Department of Geography, University of Delhi is placed in the ranking group 151-200 in 2019. The department was ranked 2nd in India in 2019.

### Research Articles

Chandel, P., Anand, S., Singh, D., (2022). An Overview of Scientific Research on Geoheritage in India, *Geoheritage*, 14 (4), 131. doi.org/10.1007/s12371-022-00762-0.

Gao, W., Huang, J., Qiu, Q., Shrestha, A., Yuan, C., Anand, S., Wang, G., Wang, G., (2023), Conservation and Management of Protected Areas in China and India: A Literature Review (1990–2021). *Climate*, 11 (1), 22. doi.org/10.3390/cli11010022.

Jamal, S., Ghosh, A., Hazarika, R., & Sen, A. (2022). Livelihood, conflict and tourism: An assessment of livelihood impact in Sundarbans, West Bengal. *International Journal of Geoheritage and Parks*, 10 (3), 383–399. doi.org/10.1016/j.ijgeop.2022.07.004

K.S. Sajinkumar, M. Santosh, Rani, V. R., Anand, S., A.P. Pradeep Kumar, Chavan, A., ... Ramachandran, P. V. (2022). The Tertiary sequence of Varkala coastal cliffs, southwestern India: An ideal site for Global Geopark. *International Journal of Geoheritage and Parks*, 10(2), 308–321. doi.org/10.1016/j.ijgeop.2022.05.003.

Md. Arif Husain, Kumar, P., & Barbaros Gönençgil. (2023). Assessment of Spatio-Temporal Land Use/Cover Change and Its Effect on Land Surface Temperature in Lahaul and Spiti, India. *Land*, 12(7), 1294–1294. doi.org/10.3390/land12071294

Mishra, H., Pandey, B. W., Mukwada, G., De Los Rios, P., Nigam, N., & Sahu, N. (2023). Trapped within nature: climatic variability and its impact on traditional livelihood of Gaddi transhumance of Indian Himalayas. *Local Environment*, 28(12), 1–17. doi.org/10.1080/13549839.2022.2162025.

Mishra, M. M., Sahu, N., Mallick, G., & Pani, B. (2023). Trend of malaria incidences and its association with rainfall in Kalahandi District of Odisha, India. *Indian Journal of Public Health*, 67(1), 166–169. doi.org/10.4103/ijph.ijph\_916\_22.

Mishra M.M., Sahu N, Pani B, Chakraborty A, Mallick G. (2023). Assessment of Human Health Vulnerability in Kalahandi-Balangir-Koraput Region of Odisha, India. *The Journal of Communicable Diseases*, 55(02), 1–8. doi.org/10.24321/0019.5138.202318.

Mondal, B., Roy, A., & Saha, A. K. (2022). Vulnerability assessment of mangrove areas in coastal West Bengal, India. *Remote Sensing Applications: Society and Environment*, 25, 100680. doi.org/10.1016/j.rsase.2021.100680

Pandey, B.W., Negi, V.S., Ranjan, O.J., Yadav, G., & Prakash, P. (2022). Climatic variations and livelihood adaptations in cryosphere district of Uttarkashi, Uttarakhand: A local public perception approach. *Transactions of the Institute of Indian Geographers*, 44 (1) 93-110.

Pandit, P., Saini, A., Sahu, N., & Mehra, R. (2023). Geochemical evaluation and environmental risk assessment of heavy metals: A case study from Ireland using Tellus stream sediment data (2011–2017). *Groundwater for Sustainable Development*, 23(23), 100974. doi.org/10.1016/j.gsd.2023.100974

Rahaman, S., Jahangir, S., Chen, R., & Kumar, P. (2022). Restricted Anthropogenic Activities and Improved Urban Air Quality in China: Evidence from Real-Time and Remotely Sensed Datasets Using Air Quality Zonal Modeling. *Atmosphere*, 13(6), 961–961. doi.org/10.3390/atmos13060961.

Razavi, N.S., Adeniyi-Ogunyankin, G., Basu, S., Datta, A., de Souza, K., Ting Ip, P.T., Koleth, E., Marcus, J., Miraftab, F., Mullings, B., Nmormah, S., Odunola, B. (2023). Everyday urbanisms in the pandemic city: a feminist comparative study of the gendered experiences of Covid-19 in Southern cities. *Social and Cultural Geography*, 24(3-4), 582–599. doi.org/[10.1080/14649365.2022.2104355](https://doi.org/10.1080/14649365.2022.2104355).

Sahu, N., Das, P., Saini, A., Ayush Varun, Suraj Kumar Mallick, Rajiv Nayan, ... Kumar, A. (2023). Analysis of Tea Plantation Suitability Using Geostatistical and Machine Learning Techniques: A Case of Darjeeling Himalaya, India. *Sustainability (Switzerland)*, 15(13), 10101–10101. doi.org/10.3390/su151310101

Saluja, V., Anand, S., Peng, J., & Kumar, H. (2022). The perceived impact of tourism development and sustainable strategies for residents of Varkala, South India. *International Journal of Geoheritage and Parks*, 10(2). doi.org/10.1016/j.ijgeop.2022.03.003.

Sen, A., & Rai, A. N. (2022). A Geographical Study of Temple Desecration: The Reign of Emperor Aurangzeb in India. *Indian Historical Review*, 49(2), 198-214. doi.org/10.1177/03769836221136277

Singh, B.V.R., Sen, A., Mishra, R., & Prasad, R (2023). Assessment of Anthropogenic Impact On Forest Ecosystem: A Case Study Of Kumbhalgarh Wildlife Sanctuary, India. *Geography, Environment, Sustainability*, 16 (1) 189–199. doi.org/10.24057/2071-9388-2022-047.

Yadav, G., Singh, R. B., Anand, S., Pandey, B. W., Mohanty, A., & Dash, S. S. (2021). Ecological model analysis of respiratory health risk factors by ambient air pollution in Lucknow, the capital City of Uttar Pradesh, India. *GeoJournal*, 87 (Suppl 4), 469–483. doi.org/10.1007/s10708-021-10490-7.

### Books/Chapter in Books

Bhairannavar, K. (2023). Queer in Karnataka: Exploring male same-sex sexualities in the non-metropolitan. In K. Chakraborty & A. S. Chakraborty (Eds.), *The Queer and the Vernacular Languages in India: Studies in Contemporary Texts and Cultures (1st ed.)*. Routledge India. <https://doi.org/10.4324/9781003440536>. India: Routledge. Retrieved from <https://www.taylorfrancis.com/books/edit/10.4324/9781003440536/queer-vernacular-languages-india-kaustav-chakraborty-anup-shekhar-chakraborty?refId=77c47e54-3451-401a-81e6-80c4aca612b6&context=ubx>

Jahangir, S., Bailey, A., & Datta, A. (2022). Interpreting the landscapes of care for older men in Delhi and Kolkata: perspectives from care receivers and caregivers. In *Care for Older Adults in India*. Bristol, UK: Policy Press. [doi.org/10.51952/9781447357414.ch008](https://doi.org/10.51952/9781447357414.ch008).

Kapur, A. (2022). The Geographical Indications Act. In K. Kannabiran (Ed.), *Routledge Readings on Law and Social Justice*. India: Routledge . [doi.org/10.4324/9781003299554](https://doi.org/10.4324/9781003299554).

**Faculty Strength: 10**

**Number of Ph.D. Degrees Awarded:10**

**Number of M.Phil. Degrees Awarded:15**

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## History

### Brief History

Established in 1922, the Department of History was one of the Founding Departments of the University of Delhi. It is the largest History Department in India with the richest spread of M.A. courses in South Asian and World History. Our M.Phil. and Ph.D. students are globally respected for their unique scholarship and have published widely. The Department has long been at the forefront of Global and National Academia, with its faculty having been involved in the nurturing and running of prominent journals and institutions such as the Indian History Congress, one of the largest community of Historians in the world.

### Major Activities and Achievements:

The Department has a Computer Centre, Department Library and Department Museum with a rare collection of miniatures, manuscripts and artefacts. Our MA and PhD programmes are one of the most rigorous in India and three-five students annually secure full fellowships to top ranked international Universities. In 2022-23, our faculty published with reputed journals and book publishers, gave prestigious keynote addresses in National and International fora; and presented papers in many national-international Seminars. Our teaching, supervision and research commitments have met all the deadlines.

### Research Articles

Balachandran, A. (2022). Documents, Digitisation and History. *South Asia: Journal of South Asian Studies*, 45(2), 339-349. <https://doi.org/10.1080/00856401.2022.2037301>

Choudhary, M. (2021). Badshah Begam: Awadh kesaahi mahal ke rajnaitik evam dharmic gatividhiya-ek aitihasik vishleshan. *Tihaas Drishti*, 82-101.

Choudhary, M. (2022). Khanabadoshi: A socio-economic History of Mobility in Rajasthan. *Studies in Humanities and Social Sciences*, (2), 75-106.

Choudhary, M. (2023). The Imperial Connections of the Thar Desert: Environment, Power and Political Alliances. *History and Sociology of South Asia*, 17(2), 170-189.

Dhar, P. P. (2022). Word, Image, Performance: The World of Artists in Early Medieval Western Deccan. *Arts Asiaticques*, 77(1), 21-42. [doi.org/10.3406/arasi.2022.2151](https://doi.org/10.3406/arasi.2022.2151)

- Gupta, C. (2022). Gendering and Vernacularizing Conversions in India: Christianity, Clothing, and Cartoons. *American Religion*, 3 (2), 32-50. [doi.org/10.2979/amerreli.3.2.03](https://doi.org/10.2979/amerreli.3.2.03)
- Jain, S. (2023). Inland Trade in the Mughal Empire. *Oxford Research Encyclopedia of Asian History*. [doi.org/10.1093/acrefore/9780190277727.013.601](https://doi.org/10.1093/acrefore/9780190277727.013.601)
- Rai, S. K. (2022). Colonial Knowledge Economy: Handloom Weavers in Early Twentieth-Century United Provinces, India. *International Review of Social History*, 67(3), 435-465. [doi.org/10.1017/s0020859022000086](https://doi.org/10.1017/s0020859022000086)
- Rai, S.K. (2022). Gandhi Aur Itihaas Lekhan. *Madhumati*, 62(10), 69-80.
- Rai, S. K. (2022). Handloom Cloth Production in Colonial United Provinces: The Response to Industrial Competition. *Studies in People's History*, 9(1), 46–58. [doi.org/10.1177/23484489221080908](https://doi.org/10.1177/23484489221080908)
- Shalini, S. (2023). Gendering Praise and Censure of Authority in Pre-modern Indic Tradition. *Social Scientist*, 51 (3-4).
- Singh, V. (2022). Massacre, Revolt and British Anxiety: Built Environment of Patna, 1763-1900. *Juni Khyat*, 12(1), 83-97.
- Singh, V. (2023). Using Data for Sustainability in 19th century. *Geospatial World*, 13 (1), 96-98.

### **Books/Chapter in Books**

- Arafath, Y., & G, A.(Eds). (2022). *The Hijab: Islam, Women and the Politics of Clothing*. New Delhi: Simon and Schuster.
- Aquil, R. (2023). *History in the Public Domain*. (1st ed., p. 260). New Delhi: Manohar Publishers and Distributors.
- Aquil, R. (2022). Friends of God: Sufi Traditions in History and the Present - Some Thoughts and Anecdotes from the Indian Subcontinent. In Rahaman, K.S. (Ed.). *Dimensions of Islamic Spirituality in South Asia and Beyond*. (p. 95-109). Kolkata: Calcutta University Press.
- Aquil, R. (2023). Genocidal massacres in medieval India. In Kiernan, B., Lemos, T. M., & Taylor, T. S. (Eds.). *The Cambridge World History of Genocide: Volume 1, Genocide in the ancient, medieval and premodern worlds* (pp. 547–571). Cambridge: Cambridge University press.
- Aquil, R. (2023). The Transformative Presence of Sufis in the Medieval Indian Environment: Anecdotes of Miraculous Conversion and Islamicisation in Chishti Literature from the Delhi Sultanate. In Mukherjee, T., & Dasgupta, N. (Eds.). *Religion, Landscape and Material Culture in Pre- modern South Asia* (pp.124-47). London: Routledge.
- Aquil, R. (2022). Hazrat-i-Dehli: Chishti Sufism and the Making of the Cosmopolitan Character of the City of Delh. In Chaudhuri, S.(Ed.). *Religion and the City in India* (pp. 48-61). London: Routledge.
- Deshpande, A. (2022). *Aitihasik Nausainik Vidroh Aur Bharatiya Jan Andolan, 1946*. (p. 168). Delhi: Aakar Books.
- Deshpande, A., & Deshpande, A. (Eds.). (2023). *Critical Social Science Perspectives on Indian Cinema*. New Delhi: Aakar Books.

- Dhar, P. P. (Ed.). (2023). *Connected Histories of India and Southeast Asia: Icons, Narratives, Monuments*. New Delhi: SAGE.
- Dhar, P. P., (2023). Epic Visions in Terracotta, Stone and Stucco: Ramayana in Indian Sculpture (beginnings to c. 8th century CE). In Dhar, P. P. (Ed.). *Connected Histories of India and Southeast Asia: Icons, Narratives, Monuments* (pp.131-158). New Delhi: Sage.
- Farooqui, A. (2022). *The Colonial Subjugation of India*. . (p. 95-109). New Delhi: Aleph Book Company.
- Govind, R. (2022). Method Object Praxis. In Chadha, G.& Thomas, T. (Eds.). *Mapping Scientific Method Disciplinary Narrations* (pp. 241-261). India: Routledge.
- Gupta, C. (2023). *Jati aur Ling: Dalit, Savarna aur Hindi Print Sanskriti (Caste and Gender: Dalits, Upper-Castes and Hindi Print Culture)*. New Delhi: Vani Prakashan. ISBN: 978-93-5518-467-2
- Gupta, C., Brueck, L., Harder, H., & Nijhawan, S. (Eds.). (2021). *Literary Sentiments in the Vernacular: Gender and Genre in Modern South Asia*. New York: Routledge.
- Gupta, C. (2022). Introduction. In Gupta,C., Brueck, L., Harder, H.,& Nijhawan, S.(Eds.). *Literary Sentiments in the Vernacular: Gender and Genre in Modern South Asia* (pp.1-14). New York: Routledge.
- Gupta, C. (2022). Masculine Vernacular Histories of Travel in Colonial India: The Writings of Satyadev 'Parivrajak'. In Gupta, C., Brueck,L., Harder,H.,& Nijhawan, S. (Eds.). *LiterarySentiments in the Vernacular: Gender and Genre in Modern South Asia*. (pp.33-54). New York: Routledge.
- Jain, S. (2021). Pleasant and Unpleasant Moments: The Life and Times of a Jain Merchant in Early Modern North India. In Bawa, S. (Ed.). *Locating Pleasure in Indian History: Prescribed and Proscribed Desires in Visual and Literary Cultures* (pp.129-149). New Delhi: Bloomsbury.
- Jain, S. (2022). Contestations and Negotiations: Early ModernIndividualism in Jain Heterodoxy, c. 1470-c. 1770. In Nath, M.P. (Ed.). *The Early Modern in South Asia: QueryingModernity, Periodization and History* (pp.83-99). Cambridge: Cambridge University Press.
- Kapur, A. (2022). The Geographical Indications Act. In K. Kannabiran (Ed.), *Routledge Readings on Law and Social Justice*. India: Routledge . doi.org/10.4324/9781003299554.
- Kumar, S., Singh, A., & Lata. (2022). Reason, Emotion and World from 14th century to 18th century: Coatescalli, Bhartiya and Eurocentric Perspective. In *Infrastructure, Information and Innovation in Building New Bharat*. New Delhi: University of Delhi.
- Shah, S. (2023). *Love, Eroticism and Female Sexuality in Classical Sanskrit Literature: seventh - thirteenth Centuries*. New Delhi: Manohar Books.
- Shah, S. (2023). *The Making of Womanhood: Gender Relations in the Mahabharata*. New Delhi: Manohar Books.
- Singh, V. L.(2022). *Kashi Banaras- Sacred & Profane*. Gurugram: HP Hamilton.
- Zou, D. V. (2022). Peopling the Yunnan-Bengal corridor: An ethnographic history of the Kuki-Chin-Mizo people. In Wouters, J.J.P.,& Heneise,M. T. (Ed.). *Routledge handbook of highland Asia* (pp. 261-273). London : Routledge.

## Research Projects

Gupta, Charu. 2022-25. Major Research Project for three years, funded by the IoE, University of Delhi. Topic: Public Health, Disease & Contagion: Snapshots of Inclusion/Exclusion from Colonial & Contemporary History.

Jaiswal, Ritesh Kumar. Research Project, 'Repercussions of the Great Depression and World War II in Asia' sponsored under the Swiss National Science Foundation. June - December 2022.

Mohapatra, Prabhu, 2022. "International Centre of Advance Studies: Metamorphoses of the political" sponsored by CeMIS, Gottingen, Germany. (3 months).

Rai, Santosh. 2022-23. Research Project, 'Traditional Crafts and Modern Apprenticeship in Twentieth Century Uttar Pradesh' sponsored under the Faculty Research Programme Grant – IoE (Institution of Eminence) University of Delhi: 2022-23, for Rs.3,00,000/-.

Singh, Vipul, PI, 2022-23. "Delhi University's Interface with the Revolutionary Movement with Special Reference at Shaheed Bhagat Singh", DU Centenary Celebration Project No. Acad.I/Centenary/2022/89 (2022-23).

## Conferences Organized by the Department

International Conference on Communities, Cultures and Environment, Organised by Department of History as part of Centenary Year Celebration, University of Delhi, 24-25 February 2023.

## Seminar/Conference Presentations (National/International) by Faculty Members

Ahmad, Saifuddin, (2023, March 13-15). Delivered lecture on the theme "Cultivating an Innovative style: Khan-i Arzu and the Development of Linguistics and Philology in the late Mughal period" in National Seminar on Mughal Empire: Art, Architecture and Historiography."

Aquil, Raziuddin. (2022, Dec 1 ). Delivered lecture on the theme "Understanding Sufi Literature", in National Seminar on Sufi Literature and India's Cultural Pluralism, Karim City College, Jamshedpur (Online).

Arafath, Yasser (2022, Nov 25 ). 'Fables from the Ocean: Locusts, Goliath, and Resilient Miracles in the Age of Long Disorder (C.1500-1900).' Organized by the Centre for Inter-Asian Research, Ahmedabad University and Centre for Indian Studies in Africa (University of the Witwatersrand, Johannesburg).

Balachandran, Aparna, (2022, Nov). Delivered lecture on the theme "Religion and the Everyday: The Protestant Soundscape of Early Colonial Madras, Seminar, Department of History, Shiv Nadar University.

Balachandran, Aparna, (2022, April). Delivered lecture on the theme "Religion and the Everyday: The Protestant Soundscape of Early Colonial Madras," Department of History Seminar Series.

Choudhary, Manisha. (2022, July 25-26). Delivered lecture Title: 'Can Animals Speak? Empires, Militaries and Animals,' Invite Lecture in a Two-Day National seminar titled 'Role of Military in Shaping History', organized by P. G. Mahila Mahavidyalaya, Jodhpur.

Dhar, Parul Pandya, (2022, Nov 19). "A Temple for Rahman: Interpreting Composite Structures and Building Practices in Medieval Western India," National Seminar on Religious Structures and Religious Traditions in India: New Directions in Architectural, Social and Cultural History, CSSSC, Kolkata.

Dhar, Parul Pandya (2023, Jan 30 ). “Towards a Connected History of Art: Transoceanic Exchanges across the Eastern Indian Ocean,” Refresher Course in History organized by the HRDC, Maulana Azad National Urdu University, Hyderabad in collaboration with the Department of History, MANUU, Hyderabad (online).

Dhar, Parul Pandya, (2023, Jan 5 ). “Art and History Writing,” Invited Talk for the graduate students and research scholars of the Department of History, University of Hyderabad.

Dhar, Parul Pandya. (2023, March 10 ). “Sultanate Ahmadabad and its Monuments by Riyaz Latif and Pushkar Sohoni: An Appraisal,” at the virtual book launch organized by Primus Books, New Delhi.

Dhar, Parul Pandya. (2023, Feb 23-March 1 ). “Art History and the Interpretation of India’s Past,” History Workshop, online: "Studying History: Perspectives and Sources," Department of History, Jadavpur University, Kolkata.

Dhar, Parul Pandya. (2023, March 24 ). “A Gateway to Phanigiri: Reading Architecture, Constructing Narrative,” at the India International Centre, New Delhi, in collaboration with MARG Publications, Mumbai.

Dhar, Parul Pandya. (2023, March 28 ). “Cities, Palaces, Huts and Shrines: Ananda Coomaraswamy and the Study of Ancient Indian Architecture,” at Delhi College of Art and Commerce (DCAC), University of Delhi, for Dharohar: The History Department Festival.

Gupta, Vikas. (2023, March 25-26 ). Delivered lecture on the theme “Need for Establishing Synergy Between Specifically Targeted Measures and General Direction of Education in the Country”, two day national symposium, Chintan Shivir,

Gupta, Vikas. (2023, Jan 27-31 ), Delivered lecture on the theme "Elementary Education of Children with Disabilities in India since Independence", Bharathidasan University.

Gupta, Vikas. (2022, Dec 5-7 ). Delivered lecture on the theme “Understanding The Nuances of Sponsored Research projects”, Mahatma Hans raj Faculty Development Centre under Pandit Madan Mohan Malviya Mission on Teachers and Teaching Hans raj College, Department of History, University of Delhi.

Gupta, Charu (2022. Oct 19). Anatomy of a Political Sanyasi: Freedom, Fitness and Finance in Satyadev Parivrajak’s Writings. Invited Paper Presentation in a Symposium on ‘Hindu Economicus’, 50<sup>th</sup> Annual Conference on South Asia, University of Wisconsin-Madison, USA.

Gupta, Charu (2022, Oct 19-20 ). Chair and Discussant of a Panel on ‘Religion and Left Politics in South Asia’, 50<sup>th</sup> Annual Conference on South Asia,, University of Wisconsin-Madison, USA.

Gupta, Charu (2022, April 14-15 ). Critical Caste Studies: Snapshots from Teaching and Research. Keynote Lecture (hybrid) at the International Conference on ‘Dalit Studies and the Study of Caste: The State of the Field’, organised by Neubauer Collegium for Culture and Society, University of Chicago, USA.

Gupta, Charu. (2022, Nov 7 ). Registers of Caste: Reflections from Teaching and Research. Public Lecture, organised by The Program in South Asian Studies, Rutgers University, School of Arts and Sciences, USA.

Gupta, Charu. (2022, Oct 11 ). Researching Caste: The Uncharted World of Santram BA. A Workshop with Charu Gupta, Neubauer Collegium for Culture and Society, University of Chicago, USA.

Gupta, Charu. (2022, August 29 ). Teaching Gender-Caste in India: Perils and Pleasures. Presentation in a Panel on 'Teaching Caste in India and the USA', 2022 H-Net International Zoom Conference on 'Uncharted Territories: Teaching History, Humanities and Social Sciences in Innovative Ways'.

Gupta, Charu. (2022, May 27). Travelling Trails of a Hindu Political Sanyasi: Hindi Writings of Satyadev Parivrajak. Keynote Lecture at the International Workshop on 'Migration, Journey, Travelling and Nostalgia: Travel Narratives in Hindi Literature', organised by Department of South Asian, Tibetan and Buddhist Studies, University of Vienna.

Gupta, Charu. (2022, May 19-21 ). Delivered lecture on the theme 'University Spaces, Sexual Harassment and Protests', at a Workshop on 'Gender Sensitization at Workplace', organised by ICC Cell, Maulana Azad National Institute of Technology (MANIT), Bhopal.

Jain, Shalin. (2022, Nov 9 ). Delivered lecture on the theme "Forms of Resistance and the Mughal State", at Satyawati College (Evening), University of Delhi, Delhi.

Jain, Shalin. (2023, Jan 3-4 ). Delivered lecture on the theme "The Life of a Medieval Sage: Hiravijay Suri and the Jain Community, AD 1527- 1595" at an International Conference *The Role and Contribution of Saints and Sages in the History of India*, organized by ICHR and BAPS, Ahmedabad.

Jain, Shalin. (2022, August 6 ). Delivered lecture on the theme 'Gender in Indian History' in the Refresher Course in Gender at the UGC-Human Resource Development Centre (HRDC) University of Rajasthan, Jaipur, 01-08- 2022 to 13-08-2022.

Jain, Shalin. (2023, Jan 9 ). Delivered lecture on the theme "Religious Identities in Modern Punjab", One-Week National Online Faculty Development Programme/Certificate Program (Multi-Disciplinary) on *Understanding Sikh History for Higher Education*, organised by Sri Guru Tegh Bahadur Khalsa College, University of Delhi, Delhi.5-11 January, 2023.

Jain, Shalin. (2022, July 14 ). Delivered lecture on the theme "The Mughal State and the Jain Community: A Historiographical Survey" in 39<sup>th</sup> Refresher Course in History through online mode organized by UGC-Human Resource Development Centre (HRDC)-Jawaharlal Nehru University, New Delhi. 11-07-2022 to 23-07-2022.

Jain, Shalin. (2023, Feb 9-10 ) Delivered lecture on the theme "In the Service of the Mughals: Sheth Shantidas Jhaveri of Ahmedabad" in the International conference *Serving the Sultan: Religious Diversity in Gujarat under Islamic Rule*" organized by the Faculty of Arts and Philosophy, University of Ghent, Belgium

Jain, Shalin. (2022, July 20-21 ) Delivered lecture on the theme, "Jainism, Mahatma Gandhi and Ethics of Indian Education".in the "International Conference on Gandhi's Concept of Education and National Education Policy NEP 2020: Idea, Opportunity and Implementation" organized by Shree Guru Gobind Singh Tricentenary University, Gurugram, Sanrachna Foundation and Shiksha Sanskriti Utthan Nyas, NMML, New Delhi.

Jain, Shalin. (2022, Jun 27-July 1). Delivered lecture on the theme "Community, Individual and 'Freedom' in an Autobiography: *Ardhakathanak* of Banarsidas (17<sup>th</sup> c.)" in the panel 'Tensions of Freedom in the Jain Tradition', EASR 2022: 19<sup>th</sup> Annual Conference of the European Association for the Study of Religions. At The Study of Religions Department, University College Cork, Ireland (Online).



Kumar, Surendra, (2022, August 3 ). Delivered lecture on the theme “Understanding impact of Amendment dated 17/4/2018, New Guidelines for Scholarship and Challenges to Diversity in Institutions” organised by Dialogue for Academic Justice at Ambedkar Study Centre in University of Rajasthan.

Kumar, Surendra, (2022, Nov 10-12 ). Delivered lecture on the theme “Atmanirbhar Bharat: Role of Research and Innovation” in International Conference “Infrastructure, Information and Innovation in Building New Bharat” organised by University of Delhi.

Kumar, Surendra, (2022, April 18 ). Delivered lecture on the theme “Ambedkar- Education and Empowerment” on Birth anniversary of Dr Ambedkar, organised by Panchayat Sahawa, District- Churu, Rajasthan.

Kumar, Surendra, (2023, Jan 1 ). Delivered lecture on the theme “Swami Vivekananda- Best Advocate” organised by Rajasthan Adhivakta Parishad w.r.t Rashtriya Yuva Diwas, MJRP University, Jaipur, Rajasthan.

Kumar, Surendra, (2022, August 1 ). Delivered lecture on the theme “Data Analysis Method” by UGC-HRDC Dr Hari Singh Gaur University.

Kumar, Surendra, (2022, Nov 26 ). Delivered lecture on the theme “Society and Constitution”,organised by SC/ST Teachers Association, Dr. Hari Singh Gaur University, Sagar, Madhya Pradesh

Mohapatra, Prabhu, P. (2023, March 14 ). Delivered lecture on the theme "Work and Human Lifecycle in Global History" at the Humboldt-Universitat zu Berlin.

Mohapatra, Prabhu, P. (2022, Dec 20 ). Delivered lecture on the theme “GLOBAL LABOR: Evolving Responses to the Challenge of International Frontiers- Spatial Reconfigurations and Social Transformations” at CRDS in Saint-Louis, Senegal. 20 December 2022

Rai, Santosh Kumar. (2022, April 6 ). Delivered lecture on the theme ‘Formalisation and Informalisation: Julaha Handloom Weavers in Colonial North India’, *Mobilities of Craft Knowledge*, Online Craft History Workshop, Queen’s University, Ontario, Canada.

Rai, Santosh Kumar. (2022, July 20-21 ). Delivered lecture on the theme “Mahatma Gandhi: A Cosmopolitan Learner of Modernity”. 20 July 2022. in the “International Conference on Gandhi’s Concept of Education and National Education Policy NEP 2020: Idea, Opportunity and Implementation” organized by Shree Guru Gobind Singh Tricentenary University, Gurugram, Sanrachna Foundation and Shiksha Sanskriti Utthan Nyas, NMML, New Delhi.

Rai, Santosh Kumar. (2023, Feb 3 ). Delivered lecture on the theme “Mahatma Gandhi and Historiography and Studying Gandhi and his Times” in Online Refresher Course in History organized by the Faculty Development Centre, Iswar Saran PG College, University of Allahabad, Prayagraj, 27.01.2023 to 09.02.2023.

Rai, Santosh Kumar. (2023, Jan 10 ). Resource Person for Online Lecture on “Jallianwala Bagh Massacre: Historical Documentation and Literary Imagination”, in the one – week National Online Faculty Development Program / Certificate Program (Multi - Disciplinary) on *Understanding Sikh History for Higher Education*, organised by Sri Guru Tegh Bahadur Khalsa College, University of Delhi, Delhi, 5-11 January, 2023.

Rai, Santosh Kumar. (2022, Oct 20 ). Delivered lecture on the theme ‘Indian Nationalism and Gandhi’ in the Foundation Course Training Programme for Officer Trainees of Indian Telecom Services (ITS) Group

– A and IRRS Group – ‘A’ Govt. of India, Haryana Institute of Public Administration (HIPA) Gurugram, Haryana, 01-08-2022 to 11-11-2022.

Rai, Santosh Kumar. (2022, July 21 ). Delivered lecture on the theme “Histories of Weaving and Weavers: A Historiographical Survey” in 39<sup>th</sup> Refresher Course in History through online mode organized by UGC-Human Resource Development Centre (HRDC)-Jawaharlal Nehru University, New Delhi. 11-07-2022 to 23-07-2022.

Shah, Shalini, (2022, Dec 28 ). Presented paper titled “The Evolution of Social Hierarchies in India: Ancient Antecedents” Symposia paper at 81st Session of Indian History Congress, Chennai,.

Shah, Shalini, (2022, April 30 ). Delivered lecture on the theme ‘Teaching and Researching Feminist History: A Comparative Study’ at a Conference of Association of Ancient Historians (AAH) at University of California San Diego.

Singh, Vipul, (2022, Nov 3 ). Delivered lecture on the theme “The Road to Indian Ocean Empire: Survey, Science and Meteorology”, Workshop organised by Deutsches Schiffahrts Museum, Leibniz Institute for Maritime History, Bremerhaven, Germany, on Research Expeditions to India and the Indian Ocean in Early Modern and Modern Times.

Singh, Vipul, (2023, Feb 24-25 ). Delivered lecture on the theme “Tropical Cyclones, Weather Forecasting and Coastal Communities of Eastern India”, International Conference on Communities, Cultures and Environment, Organised by Department of History as part of Centenary Year Celebration, University of Delhi.

Singh, V.L, (2023, Feb 27-March 1 ). Presented paper titled “Banaras: Reconceptualization of the sacred city, 'International Seminar on Reappraisal of Mark Twain’s Encounter with the Religion-Cultural and Art Heritage of Varanasi' (ISRMTAHV-2023),

Singh, Vipul, (2023, Jan 25 ). Delivered lecture on the theme “Climate Change and Global Crisis”, Seminar organised by Aurobindo College (Evening), University of Delhi, 25 January 2023.

**Faculty Strength: 27**

**Number of Ph.D. Degrees Awarded: 26**

**Number of M.Phil. Degrees Awarded:28**

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## **Political Science**

### **Brief History**

The Department of Political Science has successfully completed more than 70 years and has grown as one of the leading Universities in India attracting students from all across the country and world. With around 40 postgraduate students at its inception in 1952, the Department now has roughly 1000 students enrolled overall.

## Major Activities and Achievements

The Department is dedicated to integrating Indian perspectives into the dominant Political Science discourse and emphasizing how Indian conceptualizations of different theories may both broaden the perspective on any Political Science theme and also reinforce the fundamental principles of democracy, integration and emancipation. Three-day International Seminar organized by the Department on “Revisiting the Idea of India: From ‘Swaraj’ to ‘New India’” in May 2022, has set a precedent to unravel the identity, existence and journey of Swaraj to New India from its own indigenous and authentic lens rather than through Eurocentric vision. Hon. Sh. Amit Shah ji was the chief guest of the event.

## Research Articles

Bagai, M. (2022). Valour behind the burqa: The case study of afghan women, *Asian Journal of Comparative Politics*, 7(3), 482-494.

Choudhary, A. (2022). The purpose of India’s security strategy: Defence, deterrence and global involvement, *Pacific Affairs*, 95 (4), 866-888.

Chowdhory, N., & Mohanty, B. (2023). Dispossession, border and exception in south Asia: An introduction. *Journal of Borderlands Studies*, 38(4), 537–547. doi.org/10.1080/08865655.2023.2226404

Chowdhory, N., & Poyil, S. T. (2023). Dispossession and Displacement: Notes from South Asia. *Journal of Borderlands Studies*, 38(4), 549–562. doi.org/10.1080/08865655.2022.2151032

Chowdhory, N., Sabur Ali M., Kaur, R., Kajla, M., Kumari, N., Tiwari, B., & Ishaq, S. (2022). Gendering Migration: Evaluating Empowerment of Single Migrant Women. *Social Change*, 52(1), 24–39. doi.org/10.1177/00490857211068569

Chowdhory, N., & Poyil, S. T. (2021). Speaking the language of the ‘other’: negotiating cultural boundaries through language in chitmahals in Indo-Bangladesh borders. *Citizenship Studies*, 25(6), 791–807. <https://doi.org/10.1080/13621025.2021.1968716>

Chowdhory, N. (2023). (Re)Interrogating camp and refugees in forced migration studies. *Refugee Watch - A South Asia Journal on Forced Migration*, 61-62, 4-13.

Giri, S. (2022). Politics Today: ‘Only a Suffering God’ can help us". *Crisis and Critique*, 9(2), 103-125.

Kumar, S., & Raghuvanshi, V. (2023). Cinema as a Discourse on Critical Geopolitics: The Imagery of India–Pakistan Borders in the Narratives of Bollywood Movies. *Journal of Borderlands Studies*, 38(4), 623–636. <https://doi.org/10.1080/08865655.2022.2129425>

Kumar H. M., S. (2023). Colonial governmentality and the native intellectual response: Cultural plurality, imperial education and the foundations of democratic governance in modern south Asia. *Indian Journal of Public Administration*, 69(2), 289–302. doi.org/10.1177/00195561221136257

Kumar H. M., S. (2022). Territorial nationalism, confessional islam and the conundrum of state-making in early postcolonial Pakistan. *Social Change*, 52(4), 520–540. doi.org/10.1177/00490857221110524

Kumar H. M., S. (2023). Communalizing the eclectic spatialities of india’s public culture: Deconstructing the essentialized imageries of islam in bollywood cinema. *Quarterly Review of Film and Video*, 40(7), 874–896. doi.org/10.1080/10509208.2022.2054917

- Roy, A., & Singh, U. K. (2023). The disqualification debate: Law and Politics. *Economic and Political Weekly*, 58 (20).
- Saxena, R. (2023). Delhi's conundrum and the need for collaborative federalism. *Economic and Political Weekly*, 58 (30).
- Saxena, R. (2023). Centrally-sponsored schemes and cooperative federalism in India: A case study of integrated child development scheme. *Indian Journal of Public Administration*, 69(2), 261-274.
- Saxena, R. (2022). The all India services and cadre deputation. *Economic and Political Weekly*, 57(5).
- Shani, G., & Behera, N. C. (2022). Provincialising international relations through a reading of dharma. *Review of International Studies*, 48(5), 837–856. doi.org/10.1017/S026021052100053X
- Swenden, W., Saxena, R., & Sharma, C. K. (2022). Understanding multilevel dynamics in India: constituent power and multilevel governance. *Territory, Politics, Governance*, 10(1), 1–11. doi.org/10.1080/21622671.2021.1972830
- Trowsell, T., Behera, N. C., & Shani, G. (2022). Introduction to the special issue: Pluriversal relationality. *Review of International Studies*, 48(5), 787–800. doi.org/10.1017/S0260210522000389
- Tiwary, B. K., & Roy, A. (2022). 'In aid of Bangladesh': The Soft power push by bombay's civil society towards the liberation of east Pakistan. *India Quarterly: A Journal of International Affairs*, 78(3), 476–490. doi.org/10.1177/09749284221108318

### **Books/Chapter in Books**

- Acharya, A. (2022). COVID-19, the global south and the pandemic's development impact. Bristol University Press.
- Acharya, A. (2022). Constitutionalizing rights, negotiating difference: The Indian experiment. In A. Acharya (Ed.), *Citizenship in a Globalizing World* (2nd ed.). Pearson.
- Banerjee, P., Chowdhory, N. (2022). Gender, identity and migration: Concluding remarks. In P. Banerjee & N. Chowdhory (Eds.), *Gender, Identity and Migration in India*. Palgrave Macmillan. doi.org/10.1007/978-981-16-5598-2\_
- Behera, Navnita Chadha, (2022). Learning and unlearning IR. In G. Hellmann (Ed.) *Teaching IR Globally*, Rio de Janeiro: PUC-Rio.
- Canefe, N., Banerjee, P., Chowdhory, N. (2022). Gender, identity and displacement: Nexus requirements for a critical epistemology. In P. Banerjee & N. Chowdhory (Eds.), *Gender, Identity and Migration in India*. Palgrave Macmillan. doi.org/10.1007/978-981-16-5598-2\_1
- Chowdhory, N., & Poyil, S. T. (2022). The Practice of 'Sanctuary' and Refugee Protection in India. In *Postcoloniality and Forced Migration* (pp. 161–175). Policy Press. doi.org/10.1332/policypress/9781529218190.003.0010
- Chowdhory, N., & Sharma, T. P. (2022). The anxious integration of former enclave or "New" citizens in north Bengal, India. In T. Mayer & T. Tran (Eds.), *Displacement, Belonging, and Migrant Agency in the Face of Power* (1<sup>st</sup> ed.). Routledge. doi.org/10.4324/9781003170686

Chowdhory, N., & Sharma, T. P. (2022). At the margins: Sri Lankan tamil refugee women in camps in Tamil Nadu. In S. I. Rajan (Eds.), *The routledge handbook of refugees in India* (1st ed.). Routledge India. doi.org/10.4324/9781003246800

Chowdhory, N., & Poyil, S. T. (2022). Interrogating Camps in Forced Migration Studies: The Exceptionality of South Asia. In P. Banerjee & N. Chowdhory (Eds.), *Gender, Identity and Migration in India* (pp. 53–79). Springer. doi.org/10.1007/978-981-16-5598-2\_4

Chowdhory, N., & Poyil, S. T. (2021). Mobile population, ‘pandemic citizenship.’ In A. Hans, K. Kannabiran, M. Mohanty, & Pushpendra (Eds.), *Migration, workers, and fundamental freedoms* (pp. 24–37). Routledge India. doi.org/10.4324/9781003145509-3

Choudhary, A. (2023). Poverty and inequality in a globalising world. In N. Jindal & K. Kumar (Eds.), *Understanding globalisation: Challenges and prospects*. London: Routledge. doi.org/10.4324/9781003434504

Kumar H. M., S. (2022). *The India Pakistan sub-conventional war: democracy and peace in south Asia*. Sage.

Kumari, R. (2022). Dada Bhai Naoroji. Revisiting modern indian political thought: Themes and perspectives. In A. Tomar & S. K. Malik (Eds.), *India*: Routledge. doi.org/10.4324/9781003118770

Mitra, S. K., Saxena, R., & Mukherjee, P. (2022). *The 2019 Parliamentary Elections in India*. Routledge India. doi.org/10.4324/9781003261063

Ragi, S. K. (2022), *RSS & Gandhi: The Idea of India.*, India, Sage, 9789354792533

Ragi, S. K. (2023). *The puritan is political: Mapping islamic radicalism*. Vitasta Publishing Pvt. Ltd.

Roy, A., & Singh, U. K. (2022). Pathalgadi movement, self-governance, and the question of ‘weak statehood’. In Deu Newbert et. al. *Local Self Government and Varities of Statehood: Tensions and Co-operation*. New Zealand: Springer, 117-137. doi.org/10.1007/978-3-031-14996-2\_6

Singh, D. (2023). भारत- म्यांमार सीमापार आधारभूत संरचनाओं का विकास एवं उर्जा सहयोग: कलादान परियोजना का अध्ययन. ICWA/Hindi Book Centre.

Singh, Koiremba Singh, (2022). Illicit Drug Trafficking and Dumping of Chinese Goods in India via Myanmar: A Case Study of Manipur. In Anshuman Behera and Sitakanta Mishra (ed.) *Varying Dimensions of India's National Security Emerging Perspectives*. India: Springer, 121-135. doi.org/10.1007/978-981-16-7593-5\_9

Singh, N.K. (2022). Illicit Drug trafficking and dumping of Chinese goods in India via Myanmar: A case study of Manipur. In A. Behera & S. Mishra (Eds.), *Varying dimensions of india's national security: Emerging perspectives*. Springer India. doi.org/10.1007/978-981-16-7593-5\_9

Singh, S. P. (2022). Knowledge traditions in ancient India. In H. Roy (Ed.), *Social thought in Indic Civilization*. India: Sage.

Singh, S. P. (2022). Introduction. In S. K. Singh & S. P. Singh (Eds.), *Nontraditional security concerns in India: Issues and challenges*. Palgrave Macmillan. doi.org/10.1007/978-981-16-3735-3

Singh, S. P. (2022). Lok aastha mein "Swa" tatva. In Lok Paramparaon Mein Swa ka Bodh: Lok KeSwa Par Adharit Bharat KePunaruthan Ki Sankalpana, *India*, Kitabwale, 978-93-90702-76-3 .

Singh, U. K. (2022). Institutionalizing Democratic Uncertainties: 'Election Time' in the Life of Indian Democracy. In M. Goswami & Mr Sinha (Eds.), Political imaginaries in twentieth century India. New Delhi: Bloomsbury Publishing.

### **Research Projects**

ICSSR, 2023/2years, Major Research Project ICSSR, 1350000

### **Seminars/Conferences organized by the Department**

Department of Political Science, University of Delhi Organized International Seminar on the theme “Revisiting the Idea of India: From ‘Swaraj’ to ‘New India’” from 19-21 May 2022.

Department of Political Science, University of Delhi Organized special lecture of Trivedi, Sudhanshu Trivedi, Member Rajya Sabha on the theme, “*Revisiting the ideas of India: from Swaraj to New India*” on 5<sup>th</sup> March 2023.

Department of Political Science, University of Delhi Organized special lecture of Prof. T.V. Paul, James McGill Professor of International Relations Department of Political Science, McGill University on the theme, ‘*Why Nations Abandon Peaceful Grand Strategies: Ukraine War in Historical Context*’ on 04 May 2022.

Department of Political Science, University of Delhi Organized special lecture of Prof. Clifford Bob, Duquesne University, Pittsburgh, Pennsylvania on the theme, ‘*Fighting Lockdowns: Preliminary Observations on Mobilizations in Multiple Societies*’ 11th May 2022

Department of Political Science, University of Delhi Organized special lecture of Manoranjan Mohanty, Distinguished Professor at the Council for Social Development, New Delhi on the theme, ‘*Understanding China Today*’ on 06 July 2022

Department of Political Science, University of Delhi Organized special lecture of Prof. Ashis Nandy Senior Honorary Fellow at the Centre for the Study of Developing Societies, Department of Political Science University of Delhi on the theme, ‘*Finding Gandhi Today*’ on 20<sup>th</sup> July 2022

Department of Political Science, University of Delhi Organized special lecture of Professor Rahul Tripathi, D.D. Kosambi School of Social Sciences and Behavioural Studies, Goa University, on the theme, ‘*Mapping International Political Economy in India*’ on 16<sup>th</sup> Nov. 2022

Department of Political Science, University of Delhi Organized special lecture of Augusto Lopez-Claros, Executive Director and Chair, Global Governance Forum on the theme ‘*Global Governance and the Emergence of Global Institutions for the 21st Century*’ 24 Nov. 2022

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Behera, Navedita C. (2022, Nov 11). Delivered lecture titled “One World, Many Worlds: Globalization De-globalization and Knowledge Production” at University of Delhi, Department of Political Science University of Delhi, New Delhi.

Kumar, Sanjeev H.M. (2022, July 27 ). Delivered lecture titled “The India-Pakistan Sub conventional war: Democracy and Peace in South Asia” at Department of Political Science, University of Delhi, Department of Political Science University of Delhi, New Delhi

Sukumar N. (2022, Sep 14). Delivered lecture titled “Caste Discrimination and Exclusion in Indian Universities: A Critical Reflection” at Department of Political Science, University of Delhi, New Delhi.

**Faculty Strength; 27**

**Number of Ph.D. Degrees Awarded: 28**

**Number of M.Phil. Degrees Awarded: 4**

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## **Sociology**

### **Brief History**

The Department of Sociology, established in 1959 as a constituent of the Delhi School of Economics, is a premier institution ranked 91 in the QS World University rankings in 2023. Under the headship of some of the pioneers of Sociology in India such as Professors M.N. Srinivas, M.S.A. Rao, A.M. Shah, J.P.S. Uberoi, (Padma Bhushan) Andre Beteille, B.S. Baviskar, Anand Chakravarty and Veena Das, the Department was recognized as a Centre of Advanced Study in Sociology by the University Grants Commission (UGC) since 1968. Apart from its illustrious faculty whose publications are prescribed in syllabi across the world, students and alumni of the department have become recognized as stalwarts in research, teaching, media, arts, social and civil services.

### **Major Activities and Achievements**

A major achievement of the department in this year is recognition among the top 100 departments for Sociology in the QS World University rankings released in March 2023. A record 97 MA students graduated; Lakshay Talwar was awarded the Shrimati Kunda Datar Gold Medal; Amlan Sarkar and Anisha Maini shared the MSA Rao Gold Medal for excellence in research methods courses. The highest number of PhD theses (16) and MPhil dissertations (23) in the department’s history were submitted this year, all of which are awarded degrees now. The Friday Research Colloquium, one of the longest continuously running research colloquia in India, continued this year with more than 20 seminars held in the department. In addition, our research scholars presented their work in a research scholar’s seminar held on June 10, 2022. A three-day online workshop for an edited book on Family Studies was organised in-November-December 2022 by Prof. Anuja Agrawal.

### **Research Articles**

Abraham, J. (2023). ‘Sanskritisation’ as appropriation of what was denied: A view from the sree narayana guru movement in Kerala. *Sociological Bulletin*, 72(1), 18–37. doi.org/10.1177/00380229221139527

Singh, S. B. (2022). Solidarity and Schism: A Study on Bihar’s Backward Classes’ Movement. *Review of Development and Change*, 27(1), 83–101. doi.org/10.1177/09722661221099639

Sunil, B. C. T. (2022). The making of the Malayalee public sphere and the exclusion of Mappila women: Language and communal politics in Colonial Malabar. *Contributions to Indian Sociology*, 56(2), 133–155. doi.org/10.1177/00699667221132585

### **Books/Chapter in Books**

Kamei, A. (2022). Tribal identity and change: The case of Kabui/Rongmei. Ansh Book International.

Kumar, V. (2022). Religion & politics in the modern world. Global Vision Publishing House.

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Abraham, Janaki (2023, Jan 17). Lecture on *The Joys of Doing Sociology*, Indraprastha College for Women, University of Delhi.

Abraham, Janaki (2023, Jan 11). Lecture in *Qualitative Research Methodology* Workshop, Kamala Nehru College, University of Delhi.

Vasan, Sudha (2023, March 26). *Interdisciplinary Problems, Disciplinary Methods. Epistemological Challenges for a World in Transition*. Keynote Address at the First Graduate Research Meet 2023 titled "Emergent Trends for a World in Transition". School of Liberal Arts, IIT Jodhpur, Rajasthan.

Vasan, Sudha (2023, March 25 ). *Environmental Crimes and Environmental Justice*. Invited Lecture delivered at the International Workshop on Environmental Crime: Strategies for activists and law enforcement. Jindal Institute of Behavioural Sciences, O P Jindal Global University. Sonapat, Haryana.

Vasan, Sudha (2023, March 8). International Women's Day; The Radical Legacy. Invited Lecture (Online) organized by Indian Institute of Forest Management, Bhopal.

Vasan, Sudha (2023, Feb 24). *Working on Field Work Based Publications*. Resource Person on Capacity Development Program organized by Rural Agrarian India Network and ERPI South Asia Collective. Jawaharlal Nehru University, Delhi.

Vasan, Sudha. (2023, Feb 12 ). Modernization and Gender. Keynote Address at International Seminar of Revisiting the Impact of Modernization on Gender. Organized by SGGS College, Sector 26, Chandigarh.

Vasan, Sudha (2023, Feb 21). *Modernization and Gender*. Keynote Address at International Seminar of Revisiting the Impact of Modernization on Gender. Organized by SGGS College, Sc 26, Chandigarh on February 21, 2023

Vasan, Sudha (2022, April 22). *Green Courts and the Indigenous Slot in Himalayan Resource Struggles: The environment as a metanarrative*. Invited talk (online) Indigenous Asia Initiative, Department of Asian Studies, University of British Columbia, Canada.

**No. of Students under Exchange Programme: 2**

**Faculty Strength:14**

**Number of Ph.D. Degrees Awarded: 7**

**Number of M.Phil. Degrees Awarded: 15**

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## Social Work

### Brief History

The Department of Social Work is a pioneering institute in Social Work Education imparting professional training since 1946. The Department of Social Work, University of Delhi continued its role, in the current academic year as a prominent institution of Social Work education and practice in India. The Department offers education at three levels namely Ph.D. and M.A. in Social Work.

### Major Activities and Achievements

The Department has been a UGC Centre for Advanced Study, and the teaching, research and practice within the discipline of Social Work is carried out keeping the social realities of India. The department has a diverse set of faculty members, who enrich the academic and corporate life in numerous ways. The Department of Social Work was acknowledged as one of the departments showing best practice in the innovative social outreach programmes of the University, in the NAAC report of the University of Delhi, 2019-20. The department aims to strengthen the discipline and profession of Social Work in India, through its emphasis on eclecticism, innovation in best practices and inclusiveness.

### (a). Research Articles

Agnimitra, N., & Sharma, S. (2023). Professional Pledge in Social Work: Implications for Professional Identity and Value Integration. *International Journal of Social Work Values and Ethics*, 20(1), 98–128. doi.org/10.55521/10-020-110

Agnimitra, N., & Sharma, S. (2023). Social work in difficult times: emerging value frame in India. *Social Work Education*, 42(5), 710–727. doi.org/10.1080/02615479.2022.2088726

Anand, M. (2023). Combining Feminist Theory and Social Work: Towards Developing an Indigenous Model of Practice in India. *Practice*, 35(3), 201–217. doi.org/10.1080/09503153.2022.2029835

Anand, M. (2021). Mental health and human rights: An Indian inquiry. *Indian Journal of Social Psychiatry*, 37(2), 235. doi.org/10.4103/ijsp.ijsp\_187\_20

Anand, M. (2023). Feminist social work in India: Deriving an Indigenous model of practice *Bulletin of the Social Work History Network*, 9(1), 22-31.

Anand, M. (2023). Mental health diabolic of urban living: Challenges and strategies-The urban world. *The Urban World*, 16 (1), 14-22.

Anand, M. (2023). Gender and Mental Health: The socio-cultural juxtaposition. *Social Action*. 73 (1).

Anand, M. (2022). Supporting social work students facing mental health challenges: reflective experiences by faculty from University of Delhi. *Social Work Education*, 1–17. doi.org/10.1080/02615479.2022.2098943

Anand, M. (2022). Gendered impact of violence associated with covid-19 pandemic and its mental health consequences. *Delhi Psychiatry Journal*, 25 (1), 7-15.

Anand, M. (2022). Gendering covid-19: Impact and strategies towards gender inclusive recovery. *Journal of Development Policy Review*, 1(2), 50.62.

- Anand, M. (2022). Gender and mental health: Traversing treatise. *Indian Journal of Social Psychiatry*, 38(2), 108-113.
- Anand, M. (2022). Psychosocial impact of covid-19 on pregnant women: Challenges and Strategies. *Journal of Psychosocial Research*, 17, 179-187.
- Bhatt, S. (2022). Gangrade, Kesharichand Dashrathsa. In Encyclopedia of Social Work. NASW Press and Oxford University Press. doi.org/10.1093/acrefore/9780199975839.013.1560
- Bhatt, S. (2021). Strong and Vibrant Social Sector is sine qua non for Social Development. *Space and Culture, India*, 9(3), 1–5. doi.org/10.20896/saci.v9i3.1237
- Kaushik, A., & Govind (2022). Application, usage & effectiveness of testimony therapy on survivors of violence. *Social Work Chronicle*, 11(1), 27-46.
- Gupta, P., & Pandey, N. (2022). Quality schooling and social work engagement: National education policy (NEP) 2020 vision. *Jamia Journal of Education*, 8 (01 & 02).
- Farooqui, J. F., & Kaushik, A. (2022). Growing up as a Muslim youth in an age of Islamophobia: A systematic review of literature. *Contemporary Islam*, 16(1), 65–88. doi.org/10.1007/s11562-022-00482-w
- Kaushik, A., Sinha, A., Govind, & Sharma, A. (2022). Viewing forgiveness through the lens of spirituality, *Skylines of Anthropology*, 2(1), 59-77.
- Khan, A., & Baharul Islam, K M. (2022). Contemplating the witchcraft beliefs and witch-hunting practice among the rabha community in Assam. *International Journal of Multidisciplinary Educational Research*, 11(8), 60-67.
- Khan, A., Baharul Islam, K M., Akhter, S., & Shukla, P. (2022). Decrypting the correlates of school bullying and child behaviour problems. *Journal of Positive School Psychology*, 6(7), 2039-2047.
- Khan, A. (2022) Decrypting demonetization and its impact on the sustainable economic growth in India. *Revista Review Index Journal of Multidisciplinary*, 2(2), 1-8.
- Maske, S. (2023). Articulating Dalit Autobiographical Narratives in Social Work Education: Ideological Imperatives for Anti-Caste and Ubuntu Practice. *Contemporary Voice of Dalit*, 2455328X2311605. doi.org/10.1177/2455328X231160598
- Maske, S., & Bhat, I. (2022). Contextualizing women empowerment through anti-caste discourse. *Journal of Research and Development*, 13 (14).
- Mishra, V., Botcha, R., & Roy, S. (2022). Fieldwork in social work education during coronavirus disease 2019 pandemic in India: Disruptions and discoveries. *The International Journal of Community and Social Development*, 4(4), 442–463. doi.org/10.1177/25166026221123488
- Pandey, N., & Pandey, V. K. (2022). The degrading images of ‘W’ as colloquial and commercial in Bollywood item songs. *Punjab University Research Journal*, XLIX(1), 95-112.
- Phukan, D., & Kaushik, A. (2022). Integrating wisdom of yoga into casework practice: Evidence from the field. *Madhya Pradesh Journal of Social Sciences*, 27(1), 13-28.
- Phukan, D. & Kaushik, A. (2022) Virus, Fear and Prayer: An Exploration into the Lives of Older Adults during the COVID-19 Pandemic. *National Journal of Professional Social Work*, 23(1), 71-80. <https://doi.org/10.51333/njpsw.2022.v22.i1.468>

Roy, Sanjoy (2022). *Elderly Rights and Problems in India: Analysis Through SMART PRACTICE Perspective*. In M. K. Shankardas (Ed), Ageing issues in India: Practice, perspectives and policies. Springer. doi.org/10.1007/978-981-16-5827-3

Roy, S. (2022). Human Rights and Discourses: Is it definable finally? *PoliTeknik International*.

Singh, S., & Pandey, N. (2022). Economic impact of covid 19 on gender equality. *Journal of Exclusion Studies*, 12 (2).

Thomas, N.T. (2022). Concerning Manipur hill areas democratic aspirations, *NIU International Journal of Human Rights*, 9.

Thomas, N.T. (2022). Covid-19: The plight of Indian migrant workers. In S. Saha (Ed.), *Pathos of pandemic: Covid-19*. New Delhi Publisher.

Thomas, N.T. (2022). Contested indigenous law: A case study of poumai naga society, *Wesleyan Journal of Research*, 15(08).

Thomas, N.T. (2022). Concerning Manipur hill areas democratic aspirations, *NIU International Journal of Human Rights*, 9.

### **Books/Chapter in Books**

Harrikari, T., Adusumalli, M., McFadden, P., Mooney, J., & Leppiaho, T. (2023). *Social work during covid-19: Global perspectives and implications for the future of social work*. Routledge. doi.org/10.4324/9781003374374

Lyngdoh, J., & Adusumalli, M. (2023). Locating Aging in India: Indigenous Perspectives of the Khasis and Jad Bhotiyas. In *Social Aspects of Aging in Indigenous Communities* (pp. 76-C3P129). Oxford University Press New York. doi.org/10.1093/oso/9780197677216.003.0004

Kaushik, A. (2022). Freedom from labour bondage —A case of dalit empowerment from Varanasi, Uttar Pradesh, India. In R. K. Kale & S. S. Acharya (Eds.), *Mapping Identity-Induced Marginalisation in India* (pp. 249–260). Springer. doi.org/10.1007/978-981-19-3128-4\_14

Kaushik, A. (2022). Social welfare. In B. M. Dash (Ed.), *Introduction to social work*. Sage.

Kaushik, A. (2022). Tracing Challenges, coping and resilience among older persons amidst corona pandemic: A case of urban India. In C. K. Sharma & R. Banerjee (Eds.), *Coronasphere: narratives on covid-19 from India and its neighbours*. Routledge.

Kaushik, A. (2022). Family and child development: A specialization in social work education and practice (2022). In S. Roy (Ed), *Specialization in Indian social work: An academic and indigenized practice profession*. New Delhi: Atlantic Publications.

Rani, S. (2022). Occupational health and safety for industrial workers-A case of a public sector enterprise of India. Winshield Press.

Rani, S. (2022). Scope and fields of social work and emerging areas. In B.M. Dash (Ed), *Introduction to social work*. Sage.

### **Research Projects/ Consultancy Undertaken by Faculty**

Adusumalli, M., Baseline Survey and Need Assessment of Project affected villages of Khurja Super Thermal Power Corporation, (Block Arnia, Tehsil Khurja, Distt. Bulandshahr, Uttar Pradesh); Duration: 2021-22, Funding Agency/Sponsor: SEWA-THDC; Submitted Report in June 2022. Financial completion in process; Sanctioned Amount: 6,08,850 INR.

Roy, S., Impact Assessment study & working on future road map of J K Tyre, CSR activities; Duration: 4 months; Funding Agency/Sponsor: J K Tyre, CSR activities (Rs. 5,55,500.00(Five lakhs Fifty-Five Thousand Five Hundred Only); Completed in July 2022

Sharma, S., Strengthening the Value Base of Social Work Education in the University System: An Action Research Project; Duration: 12 months; Year 2022. Funding agency/ Sponsor: IOE, University of Delhi; Sanctioned Amount: 2,65,000 INR

Sharma, S., Impact evaluation of CSR projects of Power Grid Corporation of India Ltd.; Duration: 45 days; Year 2022 Funding agency/ Sponsor: Power Grid Corporation of India Ltd.; Ongoing; Sanctioned Amount: 398,250 INR

Sharma, S., Impact evaluation of CSR projects of Power Grid Corporation of India Ltd; Duration: 45 days; Year 2022. Funding agency/ Sponsor: Power Grid Corporation of India Ltd.; Ongoing ; Sanctioned Amount: 557,934 INR

Yumnam, Veda,Assessment of Intel® Digital Readiness Program in India -2020-21; Duration: 2 months; Funding Agency/Sponsor: Intel India; Completed; Sanctioned Amount: 5,29,100

Yumnam, Veda,Social Impact Assessment of Intel AI for Citizens in India 2021-22; Duration: 2 months; Funding Agency/Sponsor: Intel India; Ongoing; Sanctioned Amount: 5,29,100

Yumnam, Veda,Social Impact Assessment of Intel AI for Youth Program in India 2021-22; Duration: 2 months; Funding Agency/Sponsor: Intel India; Ongoing; Sanctioned Amount: 5,29,100

Yumnam, Veda,Evaluation Assessment of NACPs National Distance Learning Seminars (DLS) series; Duration 6 months; Year 2022. Funding Agency/Sponsor: University of Washington I-TECH INDIA; Ongoing; Sanctioned Amount: 2,40,000

### **Seminar/Conference Presentations (National/International) by Faculty Members**

Adusumalli, M. (2022, Nov 24-25). Presented a paper titled “Social Work Research with Communities in Pandemic Context: Crises, Complexities and Possibilities”, in a seminar on *Social Work during COVID-19: Glocal Perspectives*, Organized by, University of Lapland, Rovaniemi, Finland.

Agnimitra, N. ( 2022, August 20). Lecture on Green Social Work at the Webinar on Green Social Work, (as part of 3rd National Social Work Week 2022: Social Work Education and Profession @2030 organised by Department of Social Work, University of Lucknow.

Agnimitra, N. ( 2022, August 17). Lecture on “Social Work Education and Profession in India @2030: Imperatives” at the Inaugural Session of the National Seminar on “Social Work Profession in India@2030” in association with the National Association of Professional Social Workers in India (NAPSWI) under the 3rd National Social Work Week at B.R Ambedkar College, University of Delhi.

Agnimitra, N. ( 2022, July 6). Lecture on “Environment & Climate Change” at the 1st 2-Week Refresher Course in Social Sciences organized by the Human Resource Development Centre, Jamia Millia Islamia, New Delhi.

Agnimitra, N. ( 2022, Nov 12), Lecture on ‘Attributes and Dimensions of International Competence in Teachers’, Online Workshop on ‘Internationalisation of Curriculum-Internationally Open Teaching and Learning’ University of Delhi, organized in collaboration with Tuning RISHI (Co-funded by Erasmus + Programme of European Union).

Agnimitra, N. ( 2022, April 11). I Lecture on “Ethical Responsibility of Researcher” during One Week Faculty Development Programme-Cum-Workshop on “Research Methods in Social Work” at the Department of Social Work, Mahatma Gandhi Kashi Vidyapith, Varanasi.

Agnimitra, N. ( 2023, Feb 16). Lecture on “Nurturing Social Responsibility and Community Engagement “;NIEPA –Leadership Training Programme for the Principals of Government Degree Colleges from Andhra Pradesh, NIEPA, New Delhi.

Agnimitra, N. ( 2022, Nov 22). Valedictory Address as Guest of Honour at the Valedictory Function of the National Conference on Fieldwork: Planning, Assessment and Good Practices, College of Social Work- Nirmala Niketan, Mumbai.

Agnimitra, N. ( 2023, March 21). Lecture on “Social work and the advancement of eco-social world” on the occasion of World Social Work Day at the Department of Social Work, Jamia Millia Islamia, New Delhi-110025, 21st March 21, 2023.

Anand, M. (2023, Jan 5). Lecture on “Gender and Mental Health” in the Online Two Weeks Refresher Course on ‘Gender Studies’ (Interdisciplinary) held from 29th December 2022 to 11th January 2023. Organized by Human Resource Development Centre, Jamia Millia Islamia.

Anand, M. (2022, Nov 15), Lecture on “Emotional Intelligence” in the 11th Online Faculty Induction Programme held from 1st to 29th November 2022. Organized by Human Resource Development Centre, Jamia Millia Islamia.

Anand, M. (2022, Nov 4). Lecture on “Social Adjustment” in the ‘Third Update of Disorders of Sexual Differentiation, Organised by Maulana Azad Medical College and Society for Children with Disorders of Sexual Development

Anand, M. (2022, Oct 10). Lecture on “Practicing Self Care: Enriching Mental Health”, Organized by Joseph School of Business Studies and Commerce, Sam Higginbottom University of Agriculture, Technology and Sciences, Prayagraj, Allahabad.

Anand, M. (2022, Sept 20-21). Lecture on “Menstrual Hygiene Management in schools: Challenges and Opportunities” in the South Asian Conference on ‘Menstrual Health and Hygiene: Menstrual Waste Management’, Organized by VET Institute of Arts and Science Co-Education College, Erode, Tamil Nadu in collaboration with District Social Welfare Office, Erode District, Tamil Nadu.

Anand, M. (2022, Sept 16 ). Lecture on “Women and Disasters: Mental Health Perspective”, Training Workshop cum Capacity Building Programme on “Women as Agents of Change for Disaster Risk Reduction and Resilience Building” held from 14<sup>th</sup>- 16th September 2022. Organized by B.L.Amlani College of Commerce and Economics, Mumbai and National Institute Of Disaster Management Ministry of Home Affairs, Govt. of India (Online).

Anand, M. (2022, Sept 14). Lecture on “Emotional Intelligence”, in the 10th Online Faculty Induction Programme held from 1st to 28th September 2022. Organized by Human Resource Development Centre, Jamia Millia Islamia.

Anand, M. (2022, Sept 2). Delivered lecture on “Understanding Students’ Diversity” in the Online Short-Term Programme on ‘Gender Sensitisation’. Organized by HRDC, Rani Durgawati Vishwavidyalaya, Jabalpur, M.P.

Anand, M. (2022, Sept 8). Delivered lecture on “Gender and Mental Health” in the Online Short-Term Programme on ‘Gender Sensitisation’. Organized by HRDC, Rani Durgawati Vishwavidyalaya, Jabalpur, M.P.

Anand, M. (2022, June 30). Delivered lecture titled “Gender and Development” in the Refresher Course in Social Sciences held from 23rd June to 6th July 2022. Organized by Human Resource Development Centre, Jamia Millia Islamia.

Anand, M. (2022, June 27). Delivered lecture titled “Gender at Play in Society and at Workplace” in Gender Sensitization Training for the Officers of CBIC held from 27th to 28th June 2022. Organized by National Academy for Customs, Indirect Taxes and Narcotics, Department of Revenue, Ministry of Finance, Government of India.

Anand, M. (2022, June 22). Delivered lecture titled “Emotional Intelligence” in the 9th Online Faculty Induction Programme held from 8th June 2022 to 5th July 2022. Organized by Human Resource Development Centre, Jamia Millia Islamia.

Ashokan, A. and Adusumalli, M. ( 2023, Jan 11-13). Presented a paper titled ‘Analyzing health through government interventions: A study among Irulas in Attappady’, at the Developmental Yearning for a United and Transformed India (DYUTI) International Conference on Health Promotion: Global perspectives and perspectives, Rajagiri College of Social Sciences, KOCHI.

Bhatt, S. (2022, Dec. 15-17). Delivered lecture as a Chairperson, 10<sup>th</sup> Indian Social Work Congress, 2022, on “Green Social Work: Response to Climate Change and Environmental Issues”, jointly organised by BPHE’s CSRD Institute of Social Work and Research, Ahmednagar and National Association of Professional Social Workers in India (NAPSWI) in collaboration with INPSWA, MASWE, and ICSW (Asia Pacific)

Bhatt, S. (2022, August 12). Delivered lecture titled “Analysis of Contribution of Civil Society through Academic Lens” in Azadi ka Amrit Mahotsav-VANI Lecture Series-1; Organized by VANI .

Bhatt, S. (2023, March 10-11). Key Note Address, ‘Building Solidarities through Shared Vision for Social Work Education and Practice, organised by School of Social Work, TISS, Mumbai.

Bhatt, S. (2023, March 21). Lecture on FUTURE OF SOCIAL WORK to commemorate World Social Work Day 2023, organised by School of Social Work, Indira Gandhi National Open University (IGNOU), New Delhi. (Online)

Bhatt, S. (2023, Feb 24-25 ). Inaugural Address, National Conference on National Education Policy 2020: School Complexes and Role of Professionally Trained Social Workers, organised by Department of Social Work, University of Lucknow and Department of Higher Education, Government of Uttar Pradesh.

Jha, M. K. (2022, April 15). Lectures on “Rethinking Dr. B R Ambedkar: A New Framework for Global Justice” organised Gwyer Hall Family .

Jha, M. K. (2022, Jun 10). Address the Officer Trainees of the IAS on “Parliamentary Privileges-upholding the supremacy of Parliament and its members” organised by Parliamentary Research and Training Institute for Democracies (PRIDE) .

Jha, M. K. (2022, June 17). Lecture on Prof. M S Gore Centenary Celebration on Social Work Education and Practice: Responding to Changing Realities organised by TISS .

Jha, M. K. (2022, July 22). Presented a paper titled “Challenges before Indian Democracy”. In connection with 86th Birth Anniversary of Late Shri M P Veerendra Kumar organised by Mathrubhumi Group .

Jha, M. K. (2022, Oct. 1). Lecture in Seminar Centre for Policy Research dialogues 2022 on “Internal Migration and Evolving Policy Frameworks for Governance” organised by Centre for Policy Research .

Jha, M. K. (2022, Nov. 24). Delivered lecture on “Second Chamber in the Indian Parliament: Role and Status of the Rajya Sabha” organised by Parliamentary Research and Training Institute for Democracies (PRIDE) .

Jha, Pushpanjali (2022, August 11). Delivered lecture titled “Concept and approaches of Inclusive planning” at Department of Housing, School of Planning and Architecture, New Delhi.

Jha, Pushpanjali (2022, August 18). Delivered lecture titled “Inclusive Planning: Models and Case Studies” at Department of Housing, School of Planning and Architecture, New Delhi.

Jha, Pushpanjali (2022, Sept 8), Delivered lecture titled “Methods of Community Participation” at Department of Housing, School of Planning and Architecture, New Delhi.

Jha, Pushpanjali (2022, Sept 15). Delivered lecture titled “Concept and Approaches of People’s Participation and People’s Participation in Urban Planning” at Department of Housing, School of Planning and Architecture, New Delhi.

Jha, Pushpanjali (2022, Oct 6). Delivered lecture titled “Understanding Marginalization/s in the context of Spatial Planning of a City” at Department of Housing, School of Planning and Architecture, New Delhi.

Jha, Pushpanjali (2022, Oct 17). Delivered lecture titled “Understanding social and economic exclusion of the urban poor and addressing exclusion through urban planning”. at Department of Housing, School of Planning and Architecture, New Delhi.

Kaushik, A. (2022, Nov 15 ). Presented a paper on ‘Theoretical Models of Ageing Gracefully: Practical Insights’ in a webinar lecture series organized by the National Institute of Social Defence, Ministry of Social Justice and Empowerment, New Delhi.

Kaushik, A. (2022, Nov 24 ). Presented a paper on ‘Contribution of the Elderly in the Family, Community and Society’ in a webinar lecture series organized by the National Institute of Social Defence, Ministry of Social Justice and Empowerment, New Delhi.

Kaushik, A. (2022, Jun 10 ). Presented a paper on ‘Adding colours in the Canvas of Life in Silver Years’ in a webinar lecture series organized by the National Institute of Social Defence, Ministry of Social Justice and Empowerment, New Delhi.

Kaushik, A. (2022, Jun 11 ). Presented a paper on ‘Building peace through Human Rights’ in the Rotary Conclave on Human Rights-2022 at PHD Chamber of Commerce and Industries, New Delhi.

Kaushik, A. (2022, Dec 10 ). Presented a paper on ‘The role of Self in Fieldwork Practice’ in Fieldwork Seminar organized by the Nirmala Niketan College of Social Work, Mumbai (online mode).

Kaushik, A. (2022, July 12 ). Presented a paper on ‘Research Methodology and Ethics’ in one-day workshop organized by the Second Chance Fellowship, TYCIA [Turn Your Concern into Action] at YMCA, New Delhi.

Kaushik, A. (2022, Sept 14 ). Presented a paper titled “Population Ageing: A 21st Century Public Health Challenge” in the Orientation Programme of students of Advanced Diploma in Public Health, Department of Social Work, Jamia Millia Islamia, New Delhi.

Kaushik, A. (2022, July 27 ). Presented a paper titled “Understanding Domains of Old Age and Nuances of Geriatric Counselling’ in the Capacity Building and Reward and Recognition workshop at Elder-line, an initiative of Ministry of SJE and Helpage India, New Delhi.

Kaushik, A. (2023, Jan 18-19 ). Presented a paper titled “Strengthening the role of Human Service Professionals in Managing Burn Patients’ NABI MID TERM CME Theme “Policy and Innovation in Burn Care” organized by the Department of Plastic, Reconstructive and Burns Surgery, AIIMS, New Delhi

Kaushik, A. (2023, Jan 5-7 ). Presented a paper titled “Skill Building in Social Work Curriculum, National Curriculum Framework of Multiple Exit and Multiple Entry, 2022” organized by Indira Gandhi National Open University and Mahatma Gandhi National Council of Rural Education, IGNOU, New Delhi.

Maske, S. (2023, Feb 9-10). Chair the session and delivered a lecture at Lt. Prof. Chandrakant Puri Memorial Session in “*National Conference on Ecological Disruption and Pastoralism: Indigenous Knowledge in Ecological Restoration*” Organized by the Department of Social Work, Central University of Rajasthan.

Maske, S. (2023, March 17). Delivered lecture titled “Disability and Inclusion” organized by Department of Social Work, Central University of Rajasthan (CURAJ) and Rajasthan Mahila Kalyan Mandal (RMKM), Ajmer .

Maske, S. (2022, July 25-26). Delivered lecture as Resource Person for workshop on preparation of training modules for Social Audit Schemes implemented by the Department of Social Justice and Empowerment (DoSJE) organized by National Resource Cell for Social audits (NRCSA)-DoSJE & NIRD-PR, Hyderabad .

Maske, S. (2022, August 8-9). Delivered lecture as a Resource Person for Training of Trainers from civil society organizations and members social justice assembly of social audit of schemes. Conducted session on *Indian society and Social exclusion: Marginalisation and Rationale for Reservation and support* (8<sup>th</sup> Aug) and *Social Exclusion and atrocities: FormS and Nature* (9<sup>th</sup> Aug) Organized by National Resource Cell for Social audits ( NRCSA)-DoSJE, NIRD-PR, Hyderabad .

Maske, S. (2022, Oct 13), Delivered lecture as a Resource Person to take session on *Indian Society and Social Exclusion*” in 10 days training programme for Social Justice Cell members of Uttarkhand and Uttar Pradesh state at SIRD, Rudrapur. Uttrakhand organized by Resource Cell for Social audits ( NRCSA)-DoSJE & NIRD-PR, Hyderabad and SIRD, Uttarakhand .

Maske, S. (2022, Nov 18). Delivered lecture as a Resource Person to take session on *Indian Society and Social Exclusion*” in 10 days training programme for Social Justice Cell members of Punjab, Haryana, Himachal Pradesh and Rajasthan at Himachal Institute of Rural Development (HIRD) Nilokheri, District-Karnal, Haryana organized by Resource Cell for Social audits ( NRCSA)-DoSJE & NIRD-PR, Hyderabad and HIRD Nilokheri, District Karnal, Haryana .



Pandey, N. (2023, Feb 23). Delivered lecture titled “Social Determinants of Health Inequality & Health Inequity: Impact of Covid-19; Strategies for the Future”, in International Conference Jesus and Mary College, University of Delhi.

Pandey, N. (2023, Feb 20). Delivered lecture titled “The issue of Relevance of psycho-social factors and biases while dealing with children in distress, Psycho-social aspects in Juvenile Justice (Care & Protection of Children) Act 2015” organised by Sambhavana- CRACR & PD in Indian Law Institute, Delhi..

Pandey, N. (2022, August 19 ).Delivered lecture on the theme “Social Work Education and Profession in India @2030”, in symposium on “Reimagining Field Work Practicum in Social Work” organised by the Department of Social Work at MANUU in collaboration with the National Association of Professional Social Workers in India (NAPSWI) on occasion of the 3rd National Social Work Week 2022 .

Pandey, N. (2022, August 14).Delivered lecture as a Key Speaker on Women in India from Independence to contemporary times webinar conducted on the occasion of Azadi Ka Amrit Mahotsava programme organised by Social Work and Education Department in Aditi Mahavidyalaya.

Pandey, N. (2022, July 29), Delivered lecture titled “Ethics in Field Work Practice”, Centre for Social Work, Punjab University, Chandigarh.

Pandey, N. (2022, July 25). Delivered lecture titled “Relevance of community service for academic enhancement” in One-week Online Faculty Development Programme (from 20th July to 26th July 2022) on theme “Practice and Pedagogy of Academic Values” organized by UGC-Human Resource Development Centre, Panjab University, Chandigarh.

Pandey, N. (2022, May 13). Delivered lecture titled “Social work contribution in defining gender roles in the society” organised by national Webinar Series, Indira Gandhi National Open University .

Pandey, N. (2022, April 11). Delivered lecture “Ethics in Research” in one-week Faculty Development Programme (FDP) cum Workshop on “Research Methods in Social Work” organised by Mhatma Gandhi Kashi Vidyapeeth, Varanasi.

Pranoy A. and Adusumalli, M. (2023, Feb 23-24), Presented a paper titled ‘*Defending their rights: The Kurichya story of struggles against injustice, land reforms and displacement*’ National Seminar on Social Inclusion, Democracy and Human Rights, organized by Indian Social Institute and School of Social Work, St. Joseph’s University Bangalore.

Rani, Shashi ( 2022, July 14). Presented Paper titled “Health and Welfare Policies during Covid - 19: Critical aspects of Innovative Community based Interventions”, International Conference organised by School of Management Gautam Buddha University, Greater Noida, Gautam Buddha Nagar, U.P. (online).

Roy, S. (2023, March 20-22). Presented a paper in International Conference titled ‘*Social Work Education: Scope, Challenges and Future in India*’ At 14<sup>th</sup> Eurasia Forum of Social Workers organised by Vietnam Women Academy, Union of social workers and social pedagogues of Russia, Korea Association of social workers at Hanoi, Room 305, Vietnam Women & Academy, Dong Da.

Roy, S. (2022, Oct 13-15). Presented a paper titled “*I was not hurt but was angry*”: *Healthcare Experiences of Transwomen in India*, in the 24<sup>th</sup> National Social Work Symposium held at University of Karabuk, Turkey in partnership with Turkish Association of Social Workers on the theme ‘*Sustainable Development and Social Work*’ (Online).

Roy, S. (2023, March 13-14), Delivered lecture titled “Higher Education Institutions in India Under *Nav Bharat Saksharta Karyakram*” on the *Capacity Building Workshop* organised by Cell for National Centre for Literacy (CNCL), NCERT.

Sharma, S. (2022, August 23 ). Delivered lecture titled “Philosophical Paradigms of Qualitative Research” at Faculty Development Programme, Surendranath Law College, West Bengal (Virtual) .

Sharma, S. (2022, Dec 7 ), Delivered lecture titled “Role of Implementation agencies, due diligence, and stakeholder Engagement” for Bharat Electronics Limited (BEL), Ghaziabad.

Singla, P.( 2022, July 4). Delivered lecture titled ‘Online teaching pedagogies and challenges’ organised by Jamia Millia Islamia, HDRC Faculty Development Programme, (Online).

Singla, P.( 2022, June 14 ). Delivered lecture on Helpage report launch event to mark UN World Elder Abuse Awareness Day organised by Helpage India, IIC Main auditorium, New Delhi.

Singla, P.( 2022, August 1-5), Inaugural Address delivered at International virtual faculty development programme on ‘Critical, Radical Pedagogy and Practice: Perspectives in Social Work’, organised by PSG College of Arts and Science (Government Aided Autonomous Institution), Coimbatore.

Singla, P.( 2022, August 2). Invited speaker for delivering lecture on the theme, ‘Components of Field Work Practice’, organised by Center for Social Work, Punjab University, Chandigarh under lecture series in Skill Development/ Value Added Course, (online).

Singla, P.( 2022, Nov 12). Presented a paper titled “Introduction to RISHII and Rationale for Internationalisation of Curriculum” in the Online Workshop on ‘Internationalisation of Curriculum’ held on under the aegis of DU- RISHII (Resources for Internationalisation of Higher Education Institutions in India) Project, in collaboration with University of Deusto, Spain, co-funded by Erasmus and Programme of EU (Oline).

Thakur, A. (2023, Jan 30 ). Delivered lecture titled “Disability in the University Spaces for Empowerment” at the Enabling Unit of St. Stephen’s College, University of Delhi .

Thakur, A. (2022, Oct 18 ). Delivered lecture as a resource person on COVID-19 Pandemic and People with Disabilities in the workshop “Poverty Due to COVID-19 and Coping Strategies” organized by the Centre for Wage Employment and Livelihoods, National Institute of Rural Development & Panchayati Raj Hyderabad .

Thakur, A. (2022, Dec 30 ). Delivered lecture in workshop on Sustainable Livelihood Framework Approach to Promote Entrepreneurship for Persons with Disabilities in the Annual Event “AMRIT” of RMKM at VYK, New Delhi

Thomas, N.T. (2023, Feb 9-10). Presented a paper “A Study of India’s First Model Carbon Positive Eco-Village in Phayeng, Manipur: Implications for Pastoralists” during the National Conference on *Ecological Disruption and Pastoralism: Indigenous Knowledge in Ecological Restoration*, organised by Department of Social Work, Central University of Rajasthan.

### **Seminars/Conferences organized by the Department**

Third Platinum Jubilee Lecture: Eco-Social Work: Evolution or Revolution for Social Work: Professor Karen Healy, Head, School of Social Work, University of Queensland, Australia, on 21<sup>st</sup> April, 2022

The Department of Social Work, University of Delhi organized a seminar on the theme, ‘*Social Work Breaks Barrier*’ on 25<sup>th</sup> March 2023

### **National/International MOUs Signed**

Department of Social Work, University of Delhi is one of the partners in the project RISHII (Resources for Internationalization of Higher Education Institutions in India), which is co-funded by the Erasmus+ Programme of the European Union. RISHII focuses on management approaches that are necessary to plan and implement curriculum internationalization. Three Departments of the University of Delhi, viz. Department of Physics and Astrophysics, Department of Social Work and Faculty of Law are representing the University under RISHII.

**No. of Students under Exchange Programme: 7**

**Placement Details: 65**

### **Extension and Outreach Activities**

Department of Social Work, University of Delhi. The Department has established and continued with its two field action programmes, which have been established over the years to demonstrate the relevance of social work intervention in dealing with social issues and problems. The Child Guidance Centre, which was instituted in the year 1971 and which later came to be known as the Centre for Child and Adolescent Wellbeing. Over the many years of its functioning, the Centre has only grown from strength to strength. The Centre for Child and Adolescent Wellbeing (CCAW), organised children talent show in collaboration with CIE Experimental Basic School, Department of Education, University of Delhi and children from Indira Basti Timarpur, Delhi, India. The programme was successfully held at Department of Social Work on 24<sup>th</sup> February, 2023.

**Faculty Strength: 17 & 6 (Guest).**

**Number of Ph.D. Degrees Awarded: 14**

**Number of M.Phil. Degrees Awarded: 15**

### **Other Significant Information**

Ranked number three institution of Social Work in India, by India Today-Survey of Professional Colleges in India. 2022-2023

## ACADEMIC CENTRES

### Agricultural Economics Research Centre

#### Brief History

The Centre was established on 8 February, 1954 vide DO No.F.2-3/52-P.C.11 as a section of the Department of Economics, Delhi School of Economics, University of Delhi. AERC has been functioning as an independent Centre since 1960 and moved to its present building in 1961. The Centre was integrated with University of Delhi in 1987 vide ordinance XX-G of University of Delhi and has since functioned as a maintained institution of the University.

The list of eminent economists who headed the Centre includes Professor Amartya Sen, Professor B.N. Ganguli and Professor Raj Krishna among others. The Centre is fully funded by the Ministry of Agriculture and Farmers' Welfare, Government of India (MoA&FW). The Centre carries out research on agriculture and rural economy. More than two hundred research studies have been completed since inception which have significantly contributed to policy formulation.

#### Major Activities and Achievements

AERC, Delhi continued to perform the research and policy activities during the Financial Year 2022-23. There have been contributions in the form of research reports, journal publications and presentations in conferences and workshops. The Centre continues progressing under the able guidance of Prof. Ram Singh, Chairperson and Prof. Param Jit, Director (Acting) of the Centre. Prof. Param Jit has joined the Centre in February, 2022.

#### Publications

Bhatt, Y., Vinit, P., Jain, V., Yadav, U., Sain, R. and Jit, P., (2023), Estimating Transportation and Harvesting Cost of Sugarcane, *Agricultural Situation in India*, 10, LXXIX, 26-38, NA

Sekhar, C. S. C., Thapa, N. and Bhatt, Y., (2022), Identification of Nodal Markets for Monitoring of Prices of Perishables, *Agricultural Situation in India*, 7, LXXIX, 33-46, NA

Rao, C. S. N., Bhatt, Y and Beero, S. K., (2022), Is the Electronic Market the Way Forward to Overcome Market Failures in Agriculture?, *Economic and Political Weekly*, 41, LVII, 52-60, NA

Bhatt, Y., Yadav, U., Sain, R., Jain, V. and Vinit, P., (2022), Assessment of Livestock Feed and Fodder in the State of Haryana, *Agricultural Situation in India*, 5, LXXIX, 47-54, NA

#### Research Projects

Project entitled, "Estimating and Bridging the Yield Gaps in Oilseeds for Atma Nirbhar Bharat", sanctioned by the Ministry of Agriculture and Farmers Welfare, Government of India, 2022. PI: Dr. Yogesh Chandra Bhatt

Project entitled, "Impact Evaluation of Paddy Stubble Management Practices in Haryana", sanctioned by

the Ministry of Agriculture and Farmers Welfare, Government of India, 2022. PI: Dr. Yogesh Chandra Bhatt

Project entitled, “Impact Evaluation of Paddy Stubble Management Practices in Delhi”, sanctioned by the Ministry of Agriculture and Farmers Welfare, Government of India, 2022. PI: Dr. Yogesh Chandra Bhatt

Project entitled, “Cost of Milk Production and Gross Return to Milk Producers in Haryana”, sanctioned by the Ministry of Agriculture and Farmers Welfare, Government of India, 2022. PI: Dr. Yogesh Chandra Bhatt

Project entitled, “Farmers Suicide: Causes and Policy Prescription in Haryana”, sanctioned by the Ministry of Agriculture and Farmers Welfare, Government of India, 2022. PI: Dr. Yogesh Chandra Bhatt

### **Seminars Organized**

Seminar entitled, “Electronic questionnaire development for the data collection”, by Dr. Parmeet Kumar Vinit, Assistant Professor, Dept. of Statistics, Patna University, on 01 March 2023, held in collaboration with Ministry of Agriculture and Farmers Welfare, Government of India.

### **Seminar/Conference Presentations**

Dr. Yogesh Chandra Bhatt presented a paper titled, “Evolving pathways for sustainable agriculture and rural development” at National Conference on “India’s oilseed status and existing yield gaps” at Institute of Economics and Social Changes (ISEC), Bengaluru, on 12–13 January 2023.

Dr. Yogesh Chandra Bhatt presented findings of the study titled “Estimating and Bridging the Yield Gaps in Oilseeds for Atma Nirbhar Bharat”, to Senior ESA, ESA and Joint Director, Ministry of Agriculture and Farmer’s Welfare (MoA&FW) at Agricultural Economics Research Centre, Delhi on 5 September 2022.

**Faculty Strength: 1**

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## **Centre for Detector & Related Software Technology**

### **Brief History**

The Centre for Detector and Related Software Technology, from its inception on 27 January 1989, has been contributing significantly in the field of Experimental High Energy Physics. The Centre actively engages in cutting-edge research in High Energy Physics through various initiatives. This includes international collaborations on High Energy Physics Experiments, such as the Compact Muon Solenoid (CMS) experiment at the LHC, CERN, Switzerland, and D0 at Fermilab, USA. It facilitates research through Extra Mural Research Grants for faculty members involved in Mega Projects and International Bilateral Projects.

The Centre collaborates with Institutes of National Importance, including TIFR, BARC, SINP, IISc, IIT-Madras, Punjab University, on diverse high energy physics projects. It establishes and supports facilities for detector design, fabrication, characterization, and associated electronics. Additionally, the Centre actively participates in advanced detectors R&D for future Nuclear, Particle, Astrophysics, and medical fields. It focuses on developing human resources by providing facilities for PhD research scholars, MSc

and BSc dissertation students, internships, and hiring JRF/SRF/RA for research projects. The Centre also organizes conferences of national and international significance.

### Major Activities and Achievements

The Centre secured approval for funds totalling 15.05 crore from the DST for a project. The initial grant release, amounting to 26.74 Lakh, has also been completed.

### Publications

A.Tumasyan,K.Ranjan et al, (2022), Strategies and performance of the CMS silicon tracker alignment during LHC Run2, *Nuclear Instruments and Methods A*, 1037, 1037, 166795, 10

A.Tumasyan,K.Ranjan et al, (2022), Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at  $\sqrt{s} = 13$  TeV, *Journal of High Energy Physics*, 4, 2022, 36, 8

A.Tumasyan,K.Ranjan et al, (2022), Measurement of the production cross section for  $Z + b$  jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV, *Physical Review D*, 9, 105, 092014, 2

A.Tumasyan,K.Ranjan et al, (2022), Search for Resonances Decaying to Three W Bosons in Proton-Proton Collisions at  $\sqrt{s} = 13$  TeV, *Physical Review Letters*, 2, 129, 021802, 10

A.Tumasyan,K.Ranjan et al, (2022), Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV, *Journal of High Energy Physics*, 7, 2022, 56, 6

A.Tumasyan,K.Ranjan et al, (2022), Identification of hadronic tau lepton decays using a deep neural network, *Journal of Instrumentation*, 07, 17, P07023, 10

A.Tumasyan,K.Ranjan et al, (2022), Search for Higgs Boson Pair Production in the Four  $b$  Quark Final State in Proton-Proton Collisions at  $\sqrt{s} = 13$  TeV, *Physical Review Letters*, 8, 129, 081802, 3

A.Tumasyan,K.Ranjan et al, (2022), Evidence for WW/WZ vector boson scattering in the decay channel  $\ell\nu qq$  produced in association with two jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV, *Physics Letters B*, 834, 834, 137438, 5

A.Tumasyan,K.Ranjan et al, (2022), Measurements of the associated production of a W boson and a charm quark in proton-proton collisions at  $\sqrt{s} = 8$  TeV, *The European Physics Journal C*, 12, 82, 37, 4

A.Tumasyan,K.Ranjan et al, (2022), Nuclear modification of Y states in pPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV, *Physics Letters B*, 835, 835, 137397, 10

### Research Projects

The Director of the Centre secured approval for funds totalling 15.05 crore from the DST for the project titled "Indian Participation in the CMS Experiment at CERN: Maintenance, Operation, and Upgradation."

### **Other Inter-Institutional Collaborations**

Collaborated with CERN, Switzerland, and Indian Institutes like TIFR, SINP, NISER, IISER, PU.

### **Faculty Strength**

The facilities of the Centre are utilized by all 5 faculty members specializing in experimental high-energy physics, along with their respective Ph.D. students.

**Number of Ph.D. Degrees Awarded: 1**

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## **Centre for Entrepreneurship and Career Oriented Program**

### **Brief History**

In the year 2000, the University of Delhi established the Centre for Entrepreneurship and Career Oriented Programs as a result of extensive discussions within a high-powered committee appointed by the university. This committee, led by the late Mr. Abid Hussain, Chairperson of the Rajiv Gandhi Foundation, aimed to address the need for imparting skills to University of Delhi students and graduates, enabling them to secure employment in various industries or establish their own enterprises. Professor Neelamegham assumed the role of Honorary Chairperson for the centre.

Operating out of Shaheed Rajguru College of Applied Sciences for Women, the Centre conducted diverse skill development courses. As part of its initiatives, a delegation from the University of Delhi visited the Houston Community College Systems to explore and learn from their approach in designing courses that align with the needs of the community.

### **Major Activities and Achievements**

The Centre for Entrepreneurship and Career Oriented Programs at the University of Delhi has been actively involved in organising a diverse array of skill development courses spanning various fields. These courses include a two-week program on "Information Technology Application in Library and Information Centres," a three-month initiative focusing on "Empowering Women through Entrepreneurship," specifically in the realm of Food Technology. Other offerings encompass a three-week course on "Quality Assurance Systems in Food," as well as programs such as "Computer Hardware and Maintenance," "Prospective Accountants," "Spectroscopic and Chromatographic Techniques," and "Use of Mathematical Tools and Techniques in Industries."

Additionally, the Centre has conducted workshops on topics like the introduction to VLSI and VHDL, and provided valuable training to teachers and laboratory staff on instrument repair. Notably, a one-day workshop was organised for students from various colleges, facilitating interactions with entrepreneurs and fostering the generation of ideas for establishing their own enterprises.

### **Honours/Distinctions**

The Centre for Entrepreneurship and Career Oriented Programs has received an outstanding A+ grade accreditation from NAAC.

## **Publications**

Paliwal A, Sharma N, Singh R, (2022), Effects of Wet Processing on Physicochemical and Functional Characteristics of Millet Flour., *Curr Res Nutr Food Sci*, 3, 10, 680-699, NA

Sadhna et al, (2023), Effect of Sprouting Time on the alpha Amylase Inhibitory Activity of Fenugreek (*Trigonella foenum graecum* L.) Seeds", *International Journal of Innovation and Multidisciplinary Research*, 3, 2, 35-38, NA

## **Journals**

Prof Payal Mago, Prof Projes Roy & Dr Twinkle Sachchan, (2022), *International Journal of Innovation & Multidisciplinary Research*, online ISSN 2583-4452, 1,2,3, 3, 189

## **Books/Chapter in Books**

Mr Rituraj Anand, (2022), *Stritva: Stories of Indian Womanhood*, Delhi, My Book Publisher, 978-9394176089, 98

## **Research Projects**

SERB, DST, CISCO, DBT & ICSSR, 2014 -2021 for project entitled, “Modelling Simulation & development of AIGAN/GAN HEMT based lactic acid & Uric acid biosensors for clinical research”. Sanctioned Amount: Rs. 2860990.

## **Seminars Organised**

Organised National Seminar on “Vishwa Guru Bharat”, by Prof VK Malhotra, Member Secretary ICSSR and Shree M Dr shovana Narayan, Social Reformer & Educationist, Indian Kathak dancer, from 22- 23rd October 2023, held under the aegis of ICSSR.

**Number of Ph.D. Degrees Awarded: 3**

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## **Centre for Environmental Management of Degraded Ecosystems**

### **Major Activities and Achievements**

The Centre for Environmental Management of Degraded Ecosystems (CEMDE) is a premier Centre of the University and has been working on action research and capacity building in action research in the areas of ecology of invasive alien species and contemporary environmental problems.

The Centre has provided insight on different facets of invasion ecology and has been developing bioremediation technologies for treatment of sewage and also for decontamination of contaminated soils and surface and ground waters with spent wash from distilleries. The Centre has been developing and managing a network of 7 Biodiversity Parks of Delhi Development Authority and these are first of their kind and contributing to environmental sustainability of Delhi, besides rendering a wide range of ecosystem services.



## Honours/Distinctions

Prof Inderjit Singh, Director was awarded the Excellence Award conferred by the University of Delhi to recognize the outstanding service and contributions to research and academic activities of Inderjit at the University, 2023.

Prof Inderjit Singh won Humboldt Research Award by the Humboldt Foundation, Germany, April 2022 hosted by the institute, Max Planck Institute of Chemical ecology, Jena, Germany.

Prof Inderjit Singh was elected Fellow of Indian National Science Academy (FNA, INSA), Delhi, India, 2022.

## Publications

Goswami, V., Deepika, S., Chandra, R., Babu, C. R., & Kothamasi, D. (2023). Arbuscular mycorrhizas accelerate the degradation of colour containing organic pollutants present in distillery spent wash leachates. *Journal of Hazardous Materials*, 452, 131291.

Choudhary, V. K., Bhardwaj, P., Kar, P. K., Mazumdar-Leighton, S., & Babu, C. R. (2023). Development of novel tasar cultivation zones and conservation of vanya silkworms in ecologically-restored sites within degraded mined-out areas of Purnapani, Odisha. *Journal of Environmental Biology*, 44, 505-512.

Bhardwaj, P., Choudhary, V. K., Alam, M. S., Acharyya, S., Mazumdar-Leighton, S., & Babu, C. R. (2023). Temporal variability in foliar protein content and trypsin inhibitory levels in two host trees of tropical Tasar silkworm *Antheraea mylitta*, Drury. *Journal of Environmental Biology*, 44, 415-424.

Luo Y, Amanda T, Weigelt P, Guenard B, Economo E, Nowak A, Inderjit, and Kreft H. 2023. Climate and ant diversity explain the global distribution of ant-plant mutualisms. *ECOGRAPHY*, e06841.

Majumdar S, Kaur H, Rinella MJ, Kundu A, Vadassery J, Erbilgin N, Callaway RM, Cadotte M, Inderjit\*. 2023. Synergistic effects of canopy chemistry and autogenic soil biota on a global invader. *Journal of Ecology*, 111: 1497-1513.

Cai L, Kreft H, Taylor A, Denelle P, Schrader J, Essl F, van Kleunen M, Pergl J, Pyšek P, Stein A, Winter M, Barcelona J, Fuentes N, Inderjit, Karger D, Kartesz J, Kuprijanov A, Nishino M, Nickrent D, Nowak A, Patzelt A, Peller P, Singh P, Wieringa J, Weigelt P. 2023. Global models and predictions of plant diversity based on advanced machine learning techniques. *NEW PHYTOLOGIST*, 237: 1432-1445.

Inderjit\*, Callaway RM and Meron E. 2022. Vegetation patterning and biodiversity of plant communities: Reply to comments on “Belowground feedbacks as drivers of spatial self-organization and community assembly”. *PHYSICS OF LIFE REVIEWS*, 42: 29-32

## Research Projects

Project entitled “Integrated Project on the Restoration and Restitution of Degraded Landscapes and Waterscapes and also for Prevention and Control of Pollution in and around Simbhaoli area (including Phuldera Drain and Syana Escape Canal) degraded by M/s Simbhaoli Sugars Ltd.” funded by Uttar Pradesh Pollution Control Board (UPPCB), Government of U.P sanctioned with Prof. Radhey Shyam Sharma as Co-PI.

### **Seminar / Conference Presentations**

Prof Inderjit Singh delivered an invited keynote lecture on “Biodiversity Parks: A living museum-cum-laboratory for taxonomic studies on and ex-situ conservation of living plants that yield traditional medicines.” at the 2<sup>nd</sup> International Symposium on Plant Taxonomy, Ethno-Botany and Botanic Gardens (BSI ISPTEBG-2023) held at Kolkata on 13-14 February, 2023.

Prof Inderjit Singh delivered an invited keynote lecture on “Plant Taxonomy and Applied Sciences” at International Seminar on “Advances in Plant Taxonomy, Biogeography and Biodiversity Conservation” held on 25-27 November 2023 at University of Calcutta, Kolkata.

### **Other Inter-Institutional Collaboration**

The Centre has been providing technical advices to State Government Departments of UP, MP, AP, Chhattisgarh, Maharashtra and Bihar, for development of Biodiversity Parks and development of constructed wetlands for treatment of sewage.

### **Extension and Outreach Activities**

The DDA Biodiversity Parks Programme is fully funded by DDA with annual grant of about Rs 12 crores. This is the largest outreach programme of the University and serving as hub for imparting practical environmental education for 0.2 million students including DU students every year.

**Number of Ph.D. Degrees Awarded: 1**

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## **Centre for Genetic Manipulation of Crop Plants**

### **Brief History**

The Centre for Genetic Manipulation of Crop Plants (CGMCP) at the University of Delhi, South Campus, was established in 1996 with financial support from the National Dairy Development Board (NDDB). The main objectives of the grant were the improvement of oilseed mustard for yield, and oil and meal quality. From its inception in 1996 till 2016, CGMCP received around 50 crores of funding from the NDDB in four phases of five-year duration.

Currently, R&D work on mustard at CGMCP is being funded by a ‘DBT-UDSC Partnership Centre on Genetic Manipulation of Brassicas’. R&D work at CGMCP has led to some significant breakthroughs in the area of genetics and genomics of the crop, and the development of tangible products – productive hybrids, breeding lines/ varieties containing resistance to white rust, and oil and meal quality traits.

### **Major Activities and Achievements**

The major activity of the center has been on the genetic improvement of oilseed mustard (*Brassica juncea*) through conventional and molecular breeding. The focus is on heterosis breeding, genomics-assisted breeding, quality breeding, and breeding for resistance to diseases and pests. It involves extensive work on field breeding, application of microspore-derived doubled haploids (DH) in breeding, transgenic development, and application of molecular mapping and genome sequencing in marker-assisted breeding.

The Centre's work has led to the development of some CMS-based and GM-based productive hybrids, several pure lines with improved quality and white rust resistance lines, and the identification of some promising combiners for heterosis breeding. The lab has sequenced the genome of seven important oilseed mustard lines which will help in the identification of candidate genes for some traits of importance and also help in the diversification of important QTL and genes.

### **Research Projects**

MHRD, 2020-2024, Optimizing the deployment of Host Mediated Pathogen Gene Silencing (HIGS) for enhancing resistance against *Sclerotinia sclerotium*, causal agent for stem rot in plants.

SERB, 2021-2023, Unraveling the genetic components underlying resistance against phytopathogenic fungus *Alternaria Brassicaceae*, Rs.41,24,376.00

Royal Society, 2020-2024, Establishing an effective surveillance system for tracking white rust pathogen and precision breeding for resistant oilseed mustard varieties in India, 31805 GBP

### **Seminar/Conference Presentations**

FS-Bio 2023 organized by IISER Thiruvananthapuram on 15 March 2023.

Organized 45th All India Cell Biology Conference International Symposium on Biology of Development and Disease in January 2023.

### **Extension and Outreach Activities**

Four white rust-resistant mustard lines developed through marker-assisted backcross breeding is being evaluated by the All-India Co-ordinated Research Project on Rapeseed and Mustard.

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## **Centre for Global Studies**

### **Brief History**

The Centre for Global Studies, earlier known as Developing Countries Research Centre (DCRC) was set up by the University of Delhi on 20 April 1993, under the Board of Interdisciplinary Program through Ordinance XV-A. The academic space so created soon became a hub for teachers, students and researchers engaged in researching developing societies of Asia, Africa and Latin America. Since 14 September 2021 the University has changed the nomenclature of the Centre as Centre for Global Studies [CGS].

### **Major Activities and Achievements**

The Centre organised many academic events including workshops, webinars, conferences and interactive discourses during the academic session, 2022-23. Some of the important events included 'Revisiting the Subaltern' on 2 May 2022, 'The Russia Ukraine NATO War: An Indian Perspective' on 31 May 2022, 'Understanding Indian Political Thought' on 23 May 2022, 'China-Taiwan: Collision and Implications for

India' on 12 August 2022, a Two-Day National Workshop titled, 'Humanism from an Integral Perspective: Executing the Ideas of Pandit Deendayal Upadhyaya' on the birth anniversary of Pandit Deendayal Upadhyaya on 25-26 September, 2022 and the fourth lecture of the series 'Atal Bihari Vajpayee Memorial Lecture' on 25 December 2022.

### **Publications**

Bhuwan K Jha, (2022), Mahatma and Mahamana: Agreement within Differences, *Indian Historical Review*, 1, 49, 143-165, NA

### **Journals**

Sunil K Choudhary, (2022), Sanshleshan, *Centre for Global Studies*, 12, V, NA

Sunil K Choudhary, (2023), Sanshleshan, *Centre for Global Studies*, 1, VI, NA

### **Books**

Bhuwan K Jha, (2022), 'Political voices, colonial state and partition of India', Delhi, Routledge, 978-1-032-30734-3, 221-249

### **Seminars Organized**

Seminar entitled "Humanism from an Integral Perspective: Executing the Ideas of Pandit Deendayal Upadhyaya, Across States, Professors and Social Scientists", by ICSSR on 25-26 September, 2022.

### **Seminar/Conference Presentations**

Delivered the keynote address titled 'Lensing Jammu and Kashmir from C<sup>3</sup> Perspective' at the National Conference on the Role of Jammu and Kashmir in the Freedom Movement of India, hosted by Maharaja Agrasen College, University of Delhi, in collaboration with the Indian Council of Social Science Research (ICSSR), New Delhi, on 30 March 2023.

The Jai Narain Vyas University in Jodhpur, Rajasthan, in collaboration with the Commission for Scientific and Technical Terminology, Ministry of Education, Government of India, organized a Seminar on Indian Presidency of G-20 and Technical Terminology. The keynote lecture, titled 'Executing G-20: J-20 Perspective,' was presented on 14 March 2023.

An online lecture delivered on topic 'Vocal for the Local: The Local Bodies', in the Certificate Program in Constitutional Law, organised by Institute of Constitutional and Parliamentary Studies, held on 8 January 2023.

The National Conference on Social Sciences in India's Knowledge Traditions, organized by Rastriya Samaj Vigyan Parishad and Hansraj College, University of Delhi, featured a lecture titled 'Social Science: Then and Now' and a Panel Discussion on 'Social Sciences: Retrospect and Prospects.' The event took place on

16 October 2022.

An online lecture delivered on topic ‘Local Bodies: Changing Perspective’, in the Certificate Program in Constitutional Law, organised by Institute of Constitutional and Parliamentary Studies, held on 26 June 2022.

### **Extension and Outreach Activities**

CGS Samiksha Election Survey Series undertaken in various poll-bound states like UP, Punjab, Himachal, Gujarat, Delhi, Tripura, Meghalaya and Nagaland.

**Faculty Strength: 12**

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## **Centre for Innovation in Infectious Disease Research, Education, and Training**

### **Brief History**

Centre for Innovation in Infectious Disease Research, Education, and Training (CIIDRET) was established under the ordinance XV-A of the University of Delhi in October 2015. In the eight years since inception, as per its mandate, CIIDRET has carried out path-breaking Innovation-driven translational research in Infectious diseases for improved human health.

CIIDRET has been carrying out outreach activities involving interaction with college students of science to inspire them to take up a research career. It has organized Public Lectures by international and national scientists, Industry-Academia Interaction through ‘Entrepreneurship Guest Public Lecture Series’ and Hands-on training courses covering different aspects of Genomics and Proteomics in collaboration with Industry Experts.

The centre provides state-of-the-art Proteomic and Genomic services along with expert advice to scientists, and offers consultancy to the Biotech Industry. Professor Vijay Chaudhary was the Founder Director followed by Professor Yogender Singh. Professor Amita Gupta is the current Director.

### **Major Activities and achievements**

To align with the centenary celebrations of the University of Delhi, CIIDRET organised ‘100 days festival of Training and Skill Enhancement’. This Skill Festival began from 17 December 2022 and successfully concluded with its valedictory ceremony on 9 May 2023. In the 100-days festival, 13 training workshops, including One Faculty Development Programme (FDP), were conducted. 400 participants from 90 different institutions and courses across the nation were trained on different technologies in sciences, with the contribution of 50 resource persons from academia and industry. This massive programme was successful due to whole-hearted intellectual and logistic contribution from 9 academic institutions including colleges of the University, and 9 Industry partners. Besides this, CIIDRET organised other training programs on Genomics and immune techniques.

## Honours/Distinctions

Dr. Amita Gupta, Director CIIDRET, received Outstanding Scientist Award in November 2022 by the Society for Bacteriophage Research and Therapy for her contributions in the field of bacteriophage research.

Dr. Vijay Chaudhary was felicitated with the Lifetime Achievement Award by the Association of Microbiologists of India in September 2022, for his outstanding contributions in the field of microbiology.

## Research Projects (New/Ongoing)

DBT-funded Project: “Understanding the Role of Ser/Thy Protein Kinases in the Regulation of Toxin-Antitoxin Loci in Mycobacterium tuberculosis” with SVC as collaborator. Funding Amount: Rs. 123 Lacs, Duration: July 2021- July 2024.

DBT-BIRAC-funded project on “Therapeutic Antibodies for COVID-19” in collaboration with Genova Biopharmaceuticals Ltd., with a grant of Rs. 16.5 lacs, Duration: December 2020 to November 2023.

DBT-funded Project, Centre of Excellence entitled “Antibody Technology: Research for therapeutic and diagnostic application” with a funding Amount: Rs. 608 Lacs, Duration: December 2017- December 2023.

## Publications

Varsha Dwivedi, Rakesh Kumar Gupta, Amita Gupta, Vijay K Chaudhary, Sanjay Gupta and Vandana Gupta. Repurposing Novel Antagonists for Targeting p7 Viroporin of HCV Using in Silico Approach. Letters in Drug Design & Discovery 2022; 19(11) 969-981. <https://dx.doi.org/10.2174/1570180819666220124112150>

## Patents granted/ published

A process of producing ORF-enriched phage display library and uses thereof. (Indian Patent no. 418973). Awarded on 23 January 2023.

## Conference Presentations

Prof. Amita Gupta delivered a lecture on “TB Confirm: A bench to bedside success story” at ‘Impulse '22’, a symposium organized by SYNAPSE, Department of Zoology, Miranda House, University of Delhi on 18 April 2022.

Prof. Amita Gupta delivered a lecture on “Phage Display Technology” at the 3rd International Conference on Bacteriophage Research and Therapy at Karnataka University, Dharwad.

Prof. Vijay Chaudhary delivered a lecture on “Human Antibody technology using Phage Display Libraries” at the 3rd International Conference on Bacteriophage Research and Therapy at Karnataka University, Dharwad.

## Extension and Outreach Activities

Conducted a Student Skill Enhancement Workshop on “Bacterial genome identification, sequencing and Characterization”, on 20 April 2022. In this, hands-on training was provided to 20 PG students and Research scholars to impart knowledge and hands-on Learning experience in bacterial genome sequencing and data analysis.

Conducted a Student Skill Enhancement Workshop on “ELISA (enzyme-linked immunosorbent assay) and its application” from 14 – 21 June 2022. In this, hands-on training was provided to 20 UG and PG students about methods for use of Immunological techniques employed in diagnostics.

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## Centre for Inter-Disciplinary Studies of Mountain & Hill Environment

### Brief History

Centre for Inter-Disciplinary Studies of Mountain & Hill Environment was established as an R&D Centre for conducting studies related to issues of environment impact and environment management in the power sector. Realizing the significant contributions of the Centre in the field of environment impact assessment of power projects and environmental sensitivity studies of river basins, Ministry of Power, Government of India recognized it as Centre of Excellence in 2001-2002.

The Centre has conducted numerous studies related to environment impact assessment and biodiversity conservation across India. The Centre also provides expert advice and consultancy services to various institutions of Government of India, its PSUs and Private sector in the field of environment impact assessment and sustainable development.

### Publications

Mishra, V., Mudgal, N., Rawat, D., Poria, P., Mukherjee, P., Sharma, U., Kumria, P., Pani, B., Singh, M., Yadav, A., Farooqi, F., & Sharma, R. S., (2023), Integrating microalgae into textile wastewater treatment processes: Advancements and opportunities, *Journal of Water Process Engineering*, 0, 55, 104128, 0

Rawat, D., Sharma, U., Yadav, A., Poria, P., Farooqi, F., Pani, B., Mukherjee, P., Singh, M., Sharma, R.S., & Mishra, V., (2023), A bottom-up approach to select microbes from textile wastewater for detoxification of aromatic amine and azo dye in a single stage, *Journal of Water Process Engineering*, 0, 53, 103668, 0

Sharma, S., Malhotra, L., Mukherjee, P., Kaur, N., Krishanlata, T., Srikanth, C.V., Mishra, V., Banerjee, B.D., Ethayathulla, A.S., & Sharma, R.S., (2023), Putative interactions between transthyretin and endosulfan II and its relevance in breast cancer, *International Journal of Biological Macromolecules*, 0, 235, 123670, 0

Garg, S., Mishra, V., Vega, L.F., Sharma, R.S., & Dumée, L.F., (2023), Hydrogen Biosensing: Prospects, Parallels, and Challenges, *Industrial & Engineering Chemistry Research*, 11, 62, 4676–4693, 0

Sharma, U., Rawat, D., Mukherjee, P., Farooqi, F., Mishra, V., & Sharma, R.S., (2023), Ecological life strategies of microbes in response to antibiotics as a driving factor in soils, *Science of The Total Environment*, 0, 854, 158791, 0

Rawat, D., Sharma, U., Poria, P., Finlan, A., Parker, B., Sharma, R.S., Mishra, V., (2022), Iron-dependent mutualism between *Chlorella sorokiniana* and *Ralstonia pickettii* forms the basis for a sustainable bioremediation system, *ISME Communications*, 1, 2, 1-14, 0

Kumar, P., Mishra, V., Bhardwaj, S., Garg, S., Dumée, L.F., & Sharma, R.S., (2022), Five-wheel framework for system-based monitoring of heavy metal pollution in rivers, *Environmental Quality Management*, 0, 0, <https://doi.org/10.1002/tqem.21918>, 0

### **Seminar/Conference Presentations**

Vandana Mishra presented her research findings at various academic events in 2023. In an International Seminar on Microplastics and its Remediation at the University of Delhi on 14 June 2023, she discussed about the “Ecotoxic Potential of Microplastics” and proposed solutions to minimize their adverse impacts.

Additionally, she presented her paper on the “Potential for Anticancer Drug Development in Indian Mistletoe from the Himalayas and Western Ghats” during the Two-Day National Conference on ‘Medicinal Plants: Frontier Areas of Research and Development’ at the University of Delhi on 16–17 March 2023.

Furthermore, she addressed the environmental implications of Fast Fashion and explored ways for industrial sustainability in a National Seminar on ‘Pollution & Human Health: Current Understanding & Future Directions’ held at Zakir Hussain Delhi College, New Delhi, on 24 January 2023.

### **Other Inter-Institutional Collaborations**

The ongoing collaborations span both national and international partnerships. Internationally, collaborative efforts involve esteemed institutions such as Khalifa University in the UAE, University College London, University of Exeter in the UK, and North Carolina State University (NCSU) in the USA.

Domestically, the collaborations extend to institutions like All India Institute of Medical Sciences (AIIMS) in New Delhi, the Centre for Fire Explosive and Environment Safety (CFEES) under DRDO in New Delhi, and the Department of Anthropology at the University of Delhi. These collaborative initiatives contribute to a diverse and enriching network of research and academic cooperation.

**Number of Ph.D. Degrees Awarded: 02**

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## **Centre for Professional Development in Higher Education**

### **Brief History**

Centre for Professional Development in Higher Education (UGC-HRDC) is committed to provide opportunities for professional and career development to teachers across the various universities of India. CPDHE was established on 21st November 1987. It has illustrious record of 35 years of service to the teaching profession. Keeping in view the role of higher education in national development, CPDHE helps in building competence in the areas of research methodologies and pedagogy, expansion of technologies in the field of ICT, Science and Technology, Environment and Education. For making higher education centre hub of academic activity, CPDHE has envisaged new multidimensional and integrative role, through re-



engineering Professional Development Programmes for teachers.

CPDHE organizes workshops for faculties involved in university and college administration and Orientation/Refresher courses for teachers, with the objective to create awareness of linkages among Society, Culture, Linguistics, Environmental Science, Education and Development, Management, IT/Computer Awareness, Gender Issues and many such areas. Goal of CPDHE is to achieve excellence in Higher Education.

### **Major Activities and Achievements**

CPDHE is one of the best HRDCs in the country and is reputed for its dynamic and interdisciplinary programmes round the year. Thus, it leads an example for other HRDCs through its innovative practices and has created a niche for itself in the country than any duplication of work. It is very much reflected from the number of applications it receives per course per year. Thus, CPDHE tries to have the most innovative and vibrant courses and practices (as per the feedback of the resource persons and participants). In accordance with the UGC Guidelines, the curriculum of every programme is carefully framed keeping Indian educational philosophy and goal of national integration at its core. Aimed at contributing to the overall professional development and intellectual growth of the teachers, these courses in turn also help in development of students through their teachers' growth.

### **Honours/Distinctions**

The centre was awarded "Sahitya Garima" by Mandhvi Prakashan, Delhi on 19May 2022.

### **Books/Chapter in Books**

(ed.) Singh, Geeta, (2020), Nagarikta Sanshodhan Adhiniyam Tathya Evam Satya: Ek Bauddhik Vimarsh, *New Delhi*, Prabhat Prakashan, 978-93-90378-16-6,

### **Seminars Organized**

Faculty Induction Programme (FIP-3) titled "Value Creation through Value Added Education," led by Prof. Geeta Singh as the Coordinator, featured a collaboration with 63 Resource Persons and was conducted by Director CPDHE (UGC-HRDC), University of Delhi. The program spanned from 1June 2022 to 2 July 2022 and was endorsed by UGC.

Faculty Induction Programme (FIP-4), themed "भारत बोध से शिक्षा," was conducted under the coordination of Prof. Geeta Singh. The event, hosted by Director CPDHE (UGC-HRDC), University of Delhi, took place from 18 January 2023, to 20 February 2023, and featured the participation of 88 resource persons. This initiative was endorsed by the UGC.

Refresher Course on Chemistry titled "Role of Chemistry in NEP 2020," coordinated by Prof. Ashok K. Prasad, along with 44 resource persons, held at the University of Delhi, Delhi from 12 to 25 July 2022, supported by UGC.

Refresher Course on Constitution, Law, and Spirituality (IDC) coordinated by Prof. Usha Tandon, with the participation of 39 Resource Persons, held at the University of Delhi and took place from 16 August 2022 to 30 August 2022, and was endorsed by the UGC.

Seminar titled "Refresher Course on Sanskrit se Sanskriti (IDC)" with the theme "भारतीय संस्कृति के संवर्धन में संस्कृत की भूमिका", led by Dr. Saurabh as the Coordinator along with the participation of 55 Resource Persons from the Department of Sanskrit, University of Delhi, took place from 16 August 2022 to 30 August 2022. The seminar was endorsed by the UGC.

Refresher Course on Mathematics/Operational Research/Statistics and Computer Science (IDC) titled "Mathematics with an Emphasis on Topology, Analysis and Applications," coordinated by Prof. Tarun Kumar Das along with 30 Resource Persons from the Department of Mathematics, University of Delhi, held from 2 to 9 September 2022 and was endorsed by the UGC.

Refresher Course on Economics, Commerce, and Business Management (IDC) was conducted under the coordination of Prof. Ajay Kumar Singh, with the participation of 37 resource persons. Headed by the Department of Commerce at the University of Delhi, the course spanned from 17 to 30 November 2022 and was accredited by the UGC.

Seminar titled "Bauddhika Ātmanirbharatā with special reference to Science and Technology - Faculty Development Programme, 2022 in India's Knowledge Traditions: भारत की ज्ञान - परम्पराएँ (Bhārata kī jñāna Paramparāen) Recovery, Positioning, and Mainstreaming" was conducted by Dr. Richa Chopra as the Coordinator, along with 62 Resource Persons and Core Faculty members. This event took place at the Centre of Excellence for Indian Knowledge Systems, Indian Institute of Technology (IIT) Kharagpur, West Bengal, spanning from 22 November to 9 December 2022. The seminar was endorsed by the UGC.

Short Term Course on Academic Leadership and Resource Management, coordinated by Prof. Geeta Singh and featuring 13 Resource Persons, hosted by the Director of CPDHE (UGC-HRDC) at the University of Delhi, held from 16 June to 22 June 2022, endorsed by the UGC.

### **Seminar/Conference Presentations (National/International)**

Prof. Geeta Singh delivered a lecture as Chief Guest in the One-day Multidisciplinary International Conference on "Changing Global Dynamics in Law, Social Science, Science and Engineering", jointly organized by International Council for Education Research and Training (ICERT) and PGDAV College, University of Delhi, Delhi on 13 September 2023.

Prof. Geeta Singh delivered a lecture as a Speaker in Short Term Course on NEP Implementation 2020 on 10 October 2023 organized by UGC - Human Resource Development Centre, Aligarh Muslim University.

Prof. Geeta Singh delivered an inaugural lecture in the 10th & 11th Faculty Induction Program on 7 August 2023 organized by UGC - Human Resource Development Centre, Banaras Hindu University.

Prof. Geeta Singh delivered a lecture as a Speaker in the C-20 Namsai Conclave on "Diversity, Inclusion, Mutual Respect in Arunachal Pradesh", organized by Vivekananda Kendra Institute of Culture (VKIC) on 9-12 June 2023.

Prof. Geeta Singh delivered a lecture as Special Guest in the अंतरराष्ट्रीय संस्कृत विदुषी सम्मलेन 2023 organized by संस्कृत संस्कृति विकास संस्थान, दिल्ली प्रान्त and Lakshmi Bai College, University of Delhi on 9-10 June 2023.

Prof. Geeta Singh delivered a lecture as Chief Guest in the Seminar on 'Diversity, Inclusion & Mutual Respect' organized by Vivekananda Kendra Kanyakumari, Delhi Branch on 27 April 2023

Prof. Geeta Singh delivered a lecture as Chief Guest in the 'Janaki Prakatyotsav Samaaroh 2023', organized by Vaidehi Foundation Ker Aatham on 29 April 2023.

Prof. Geeta Singh delivered a lecture as Special Guest in the Anandshila titled 'Bhartiya Gyan Parampara aur Gurukul Shiksha' organized by Aditi Mahavidyalaya, University of Delhi on 19 April 2023.

Prof. Geeta Singh delivered the Inaugural Lecture in the 3rd Refresher Course in History on 23 January 2023 organized by UGC - Human Resource Development Centre, Banaras Hindu University.

Prof. Geeta Singh participated in 2 days National Summit of Institutional Leaders 2023 by Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh on 16-17 January 2023

**Faculty Strength:** 01 permanent Director

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### **Cluster Innovation Centre**

#### **Brief History**

Cluster Innovation Centre (CIC), University of Delhi was established in 2011 as an academic institute to inculcate a culture of innovation in the realm of higher education. The Centre initiated three multidisciplinary programs that are directly linked with industry, education and social clusters, making classroom learning realistic and practical.

CIC ecosystem follows the principles of inclusiveness, imparts necessary skills and enhances the knowledge base of students by following a hands-on activity approach. Since the centre initiated these changes a decade ago, it is now easy for the centre to adapt to the vision of the National Education Policy (NEP)-2020. The innovative programmes at CIC enhance the creative potential of students, have an innovative curriculum, and are more project-oriented and tailored to the needs of society and industry

#### **Students with Distinctions**

B. Tech students achieved notable accomplishments: Kavya Jaiswal secured a position in the Outreach internship program, Arpita Kesharwani earned a Summer Research Fellowship from the Indian Academy of Sciences, and Saurab Kumar and Saransh Chopra were chosen for the MITACS Globalink Internship.

## Publications

Shobha Bagai, (2022), Scrutinizing String Art Through a Mathematical lens, *PRIMUS*, 3, 33, 314-327, NA

S. Chaudhary, Pankaj Kumar, M. Kaushik\*, (2022), Exploring the interaction of Guanidine ligands Amiloride, Rimeporide and Cariporide with DNA for understanding their role as inhibitors of Na<sup>+</sup>/H<sup>+</sup> Exchangers (NHEs): A spectroscopic and molecular docking investigation, *International Journal of Biological Macromolecules*, 3, 21, 834-844, NA

P. Kumar, N. Sarkar, A. Singh, M. Kaushik\*, (2022), Nanopaper Biosensors at Point of Care, *Bioconjugate Chemistry*, 6, 33, 1114-1130, NA

Mehra, K., Khurana, S., Kukreti, S., Kaushik. M., (2022), Nanomaterials and DNA multistranded structures: a treasure hunt for targeting specific biomedical applications, *Journal of Biomolecular structure and dynamics*, NA, NA, 1-17, NA

Singh, A., Kumar, P., Sarkar, N., & Kaushik, M., (2022), Influence of Green Synthesized Zinc Oxide Nanoparticles on Molecular Interaction and Comparative Binding of Azure Dye with Chymotrypsin: Novel Nano-Conjugate for Cancer Phototherapy, *Pharmaceutics*, 1, 15, 74, NA

Kaushik, M., Sarkar, N., Singh, A., & Kumar, P., (2023), Nanomaterials to address the genesis of antibiotic resistance in Escherichia coli, *Frontiers in Cellular and Infection Microbiology*, 12, 1919, NA, NA

Verma, A. K., & Dixit, V. S., (2023), Collaborative filtering-based recommendations against shilling attacks with particle swarm optimiser and entropy-based mean clustering, *International Journal of Information and Computer Security*, (1-2), 20, 133-144, 1

Sonam Tanwar, Lalhmingsangi Famhawite, Pooja Raj Verma, (2023), Numerical Simulation of bio-heat transfer for cryoablation of regularly shaped tumours in liver tissue using multiprobes, *Journal of Thermal Biology*, 1, 13, NA, NA

Anjuman Antil, Neha Saini, Sanjeevani Sehgal, Shalini Agrawal, Umer Shahzad, (2023), Effectiveness of Metaphorical Communication in Government Campaign on Digitization, *FIIB Review*, NA, NA, 1-14, NA

A Singh, SB Modak, MM Chaturvedi, JS Purohit, (2023), SWI/SNF Chromatin Remodelers: Structural, Functional and Mechanistic Implications, *Cell Biochemistry and Biophysics*, NA, NA, 1-21, NA

## Books/Chapter in Books

Browne, S., Bhatia, S., Sarkar, N., & Kaushik, M., (2023), Antibiotic-resistant bacteria and antibiotic-resistant genes in agriculture: a rising alarm for the future, in, *Degradation of Antibiotics and Antibiotic-Resistant Bacteria from Various Sources*, Academic Press, NA, 247-274

## Seminars Organized

Seminar titled "Innovation in Higher Education through PPP Model" featuring Dr. Jitender Singh, Minister of State, Science and Technology; Prof. Yogesh Singh, Vice Chancellor, University of Delhi; Prof. Dinesh

Singh, Former Vice Chancellor, University of Delhi; and Sonam Wangchuk, Innovator, was organized from 13—15 March 2023 at the University of Delhi.

A Seminar was organised, with Mr. Lalit Kumar discussing the "Interdisciplinary Approach in Innovation and Solution Needed for Persons with Disabilities" on 1 November 2022.

A seminar on "Innovation in Engineering" on 4th November 2022, with Professors Bala Vaidyanath and Kirti Ruikar from Loughborough University as the speakers.

Mr. Brij Bakshi, former Additional Director General of Door Darshan, shared insights on creativity with his talk titled "Creativity has no finish line" on 17 January 2023.

A series of significant workshops were meticulously arranged, starting with the International Workshop and Certificate Course on "Social Innovation, Entrepreneurship, and Start-up" held from 10 to 12 November 2022. Following this, a hands-on workshop focusing on ICT embedded pedagogy for diverse mathematics school teachers, was conducted on the 13-14 December 2022.

### **Seminar/Conference Presentations**

Invited lecture delivered by Prof Shobha Bagai on "Application of Keller Box Method to Fluid Flow and Heat Transfer" at International Conference on 'Dynamical Systems and Numerical Methods' at Jamia Millia Islamia on 21st May 2022.

Invited lecture delivered by Prof Shobha Bagai on "Keller Box Method and its Application to Nanofluid Flow" at the 5th International Conference on 'Frontiers in Industrial and Financial Mathematics' at Central University of Haryana on 23 December 2022.

Paper presented by Dr. Anjani Kumar on the topic, "An Earthquake prediction through BNN" at the International Conference of IEEE on Recent Advancement and Innovation in Engineering & Technology (RAIET – 2023) at Lucknow on 24—25 February 2023.

### **Other Inter-Institutional Collaborations**

8 students from Islamia University of Science and Technology came to the centre to carry out their internship.

### **Number and percentage of students placed**

In the MME program, 12 out of 14 students secured placements, achieving an 85% placement rate. In the B. Tech program, 25 out of 40 students opted for jobs, while an additional 5 students chose to embark on their entrepreneurial ventures.

### **Faculty Strength: 2**

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## **Delhi School of Journalism**

### **Brief History**

Delhi School of Journalism (DSJ) was established in the year 2017, on the proposal of the Department of Adult Continuing Education and Extension, with a vision to identify and nurture aspiring journalists, enable them through quality teaching and training, to become a driving force for an engaging and accountable public sphere, and an instrument in the information economy and thereby promote democracy and development in the truest sense. The department is situated at the stadium of the University of Delhi, equipped with most of the modern amenities for the students.

### **Major Activities and Achievements**

DSJ has set up its own media production Lab with a multi-camera setup and teleprompter. DSJ publishes a monthly E-newsletter: The Flux- Pravah and the Annual Magazine Srijan based on the contribution of students and faculty members.

Two students of DSJ participated as member of team of D U centenary brochure in April-May 2022.

DSJ was invited by the Central Tibet Administration, Dharamshala, Himachal Pradesh to visit the Head Office of the Tibet Government and interact with His Holiness Dalai Lama in October 2022, in which two faculty and 25 students constituted the delegation to complete the visit.

DSJ students and faculty member also published a self-Audited and self-experimental Environmental Audit Report 2022-23 of the Sports complex 2022-23.

Students of final year of FYIPJ worked on dissertation as part of the course where in 55 thesis were produced by the students under the supervision of the faculty.

### **Honours/Distinctions**

EFE Diploma awarded to Prof. J. P. Dubey in recognition of his commitment to Journalism and academic education.

### **Publications**

J. P. Dubey & Ms. Sneha Bhati, (2022), Media Literacy among students in India., *Journal of Positive School Psychology*, 6, 4, 12021–12031, 1

Shipra Raj, (2023), Digital Media and Women's political participation in India, *Sage Journals*, 3, 14, 366-385, NA

Namira Arif, (2022), Diverse Physiological Roles of Flavonoids in Plant Environmental Stress Responses and Tolerance. *Plants*, 11, 22, 3158, NA

Namira Arif, (2022), Metal/Metalloid-Based Nanomaterials for Plant Abiotic Stress Tolerance: An Overview of the Mechanisms, *Plants*, 11, 3, 316, NA

Haris Hasan, (2022), A Critical Study Of Media Representation Of Women In Sports : Construction Of Narratives Around Sexuality, Male Gaze And Sexism, *Journal of Women Empowerment and Studies (JWES)*, 2, 2, 1-4, 2

Vikas Singh, (2023), Analysis of Gender in Media Education in Delhi University Since 2017, *International Journal of Education, Modern Management, Applied Science & Social Science (IJEMMASSS)*, 1, 5, 165-172, NA

Pravin Jha, (2022), Champaran jile ke sthaniya krishi aadharit udyogo par vaishwikan ka Prabhav, *Gagnanchal*, 4, 45, 84-87, NA

Garima Dutt, (2023), Role of electronic media in promoting environmental sustainability in India, *IJCRT*, 6, 11, 808-812, NA

Pravin Jha, (2022), Swatantrata samar me mahilao ka yogdan,, *Bohal shodhmanjusha*, 15, 5, 107-112, NA

Suresh Chandra, (2022), Investigation of Spatio–Temporal Changes in Land Use and Heat Stress Indices over Jaipur City Using Geospatial Techniques, *Sustainability*, 15, 14, 1-30, NA

Saurabh, (2022), वैदकवाङ्मयेपर्यायवरणं, *पुराणम्*, 1, LXV, 12-19, NA

Kamal Beniwal, (2022), Cooperation and Coordination Protocols in Cross-Border Insolvency, *Journal of Education*, 6, 25, 25-35, NA

Kamal Beniwal, (2022), Control, Prevention, and Investigation of Corporate Frauds in India Under the Companies Act, 2013: With Critical Study of Relevant Laws and Regulations, *Journal of the Asiatic Society of Mumbai*, NA, 96, 45-51, NA

### **Books/Chapter in Books**

Shipra Raj, (2023), Gender, Media and the Covid-19 Pandemic An Investigation into Missing Gendered Narratives in Indian News Media, *New York*, Routledge, 978-10-3252-415-3, 28-40

Vikas Singh, (2022), Restructuring the higher education of the Media Institutions of Delhi NCR post NEP 2020, *Kerala*, Internal Quality Assurance Cell (IQAC) and UGC-HRDC, University of Kerala. Kerala, India, 978-93-5768-134-6, 225-227

Pravin Jha, (2022), Sanchar Madhyam : Atit aur Vartaman Part 1, *Delhi*, K L Pachauri, 978-93-91318-21-5, Complete book

Pravin Jha, (2022), Sanchar Madhyam : Atit aur Vartaman Part 2, *Delhi*, K L Pachauri, 978-93-91318-21-6, Complete book

### **Seminars Organized by the Centre**

Seminar on “Media and Accountability” organised on 09 November 2022, with speakers as Shri Raj Kumar Bhatia, Member Executive Council, University of Delhi; Shri Ashok Kumar Tandon, Member, Prasar Bharti Board; and Shri Mahesh Chandra Sharma, Chairman, R&D Foundation for Integral Humanism.

### **National/International MoUs Signed**

International MOU signed with EFE Spanish NEWS Agency.

### **No. of Students under Exchange Programme**

1 student has joined from Japan under the exchange program

### **Placement Details (Number and percentage of students placed)**

15 students (25%) have been placed in various sectors of media including CNBC Awaaz. NEWS 18 Digital, NEWZERA, Amar Ujala, and Wisden.

### **Extension and Outreach Activities**

Educational Visit to Central Tibet Administration in Dharamshala, Himachal Pradesh organized by Indo-Tibetan Coordination Office in collaboration with Delhi School of Journalism from 19-21 October 2022. Also organized an educational trip to National Science Centre for the students of 4th year. And a visit to the National Human Rights Commission on 18 November 2022 for students of third and fifth-year.

Press Council of India Invited 15 student of DSJ led by two faculties on the occasion of National Press Day 2022.

On 8 July 2022, Spanish students of the IX semester accompanied by faculty Ms. Dinita Mehta visited the Uruguay Embassy and met Uruguay Ambassador, H. E. Alberto A. Guani.

EFE News organized a programme on Journalism and Spanish language on 15 February 2023 in which students and faculty along with the Director participated.

**Faculty Strength: 91**

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## **Delhi School for Skill Enhancement & Entrepreneurship Development**

### **Brief History**

The Delhi School of Skill Enhancement & Entrepreneurship Development (DSSEED) at the University of Delhi was established under Ordinance XX -U of the University as a part of the Institution of Eminence



Tag conferred to the University of Delhi. The DSSEED is mandated to serve as the key platform to promote and foster research and teaching excellence through Skill Enhancement Courses and inculcate entrepreneurial spirit among all stakeholders through different courses and inspirational interactions. DSSEED aims to fill the gap in the current knowledge delivery at DU for meeting the immediate and future challenges with ever-evolving programs involving all streams of education with training across faculties including Sciences (Biological, Chemical and Physical, Mathematical and Informatics), Humanities, Social sciences, Commerce and Economics, Finance and Management.

The DSSEED functions as directed by the Governing Body comprising renowned personalities under the Chairmanship of Prof. N. K. Ganguly (Former Director General, ICMR). The GB has approved many proposals to initiate activities to meet the objectives. The GB approved collaborations with other centers of the University, including Centre for Innovation in Infectious Disease Research, Education and Training (CIIDRET), a university center established under Ordinance XV-A.

### **Major Activities and Achievements:**

To foster Entrepreneurship Development, DSSEED joined hands with Shaheed Sukhdev College of Business Studies (SSCBS), University of Delhi, to design and offer Generic Elective (Entrepreneurship) course based on the Undergraduate Curriculum Framework-2022 scheme of examination, through a set of 7 Papers in the Pool of Generic Elective.

### **Publications by IoE Fellows:**

Wang N., Mei H., Dhawan G.\*, Zhang W.\*, Han J.\*, Soloshonok V.\* (2023) New approved drugs appearing in the pharmaceutical market in 2022 featuring fragments of tailor-made amino acids and fluorine, *Molecules*, 28(9), 3651 DOI: [Ihttps://doi.org/10.3390/molecules28093651](https://doi.org/10.3390/molecules28093651) [IF: 4.927]

Agrawal N., Khanna M.\*, Dhawan G.\*(2023) Identification of suitable house-keeping genes during chikungunya virus infection. *Indian Journal of Medical Microbiology*, 42, 49-52 DOI: <https://doi.org/10.1016/j.ijmmb.2023.01.007> [IF: 1.347]

Agrawal N., Saini S., Khanna M.\*, Dhawan G.\*, Dhawan U.\* (2022). Pharmacological manipulation of UPR: Potential antiviral strategy against chikungunya virus. *Indian Journal of Microbiology*, 62, 634-640 DOI: <https://doi.org/10.1007/s12088-022-01046-5> [IF: 3.73]

H Jena, Z Ahmadi, P Kumar\*, G Dhawan\* (2022) Bioreducible polyethylenimine core–shell nanostructures as efficient and non-toxic gene and drug delivery vectors. *Bioorganic & Medicinal Chemistry*, 69, 116886 DOI: <https://doi.org/10.1016/j.bmc.2022.116886> [IF: 3.461]

Jeengar C., Tomar M., Jindal K., Sharma A., Jha P.K. (2023) Influence of post deposition annealing on thermoelectric properties of In<sub>2</sub>Se<sub>3</sub> thin films. *Materials Science in Semiconductor Processing*, 153, 107127 [IF:4.644].

Yadav G., Jindal K., Tomar M. (2023) Influence of pulsed laser deposited hafnium oxide thin film as gate dielectric on the fabrication of Al<sub>0.1</sub>Ga<sub>0.9</sub>N/GaN MOS-HEMT. *Materials Science in Semiconductor Processing*, 153, 107136 [IF:4.644].

Yadav G., Jindal K., Tomar M. (2023) Fabrication of GaN-based MSM droplet triboelectric nanogenerator by the conjunction of photovoltaic and triboelectric effect. *Journal of Alloys and Compounds*, 153, 169178 [IF:6.37].

Bharati M., Rana L., Jindal K., Gupta R., Sharma A., Tomar M. (2023) Lamb Wave Resonator for UV Photodetection and Impact of Induced Piezopotential on Schottky Barrier Height Toward Enhanced Sensitivity. *IEEE Sensors Journal*, 23(10), 10568-10576 [IF:4.325].

Kumar A., Chowdhuri A., Tomar M., Singh M. (2023) Boost in the Electromagnetic Shielding Effectiveness of Polystyrene–Polyaniline Composites by Addition of Carbon Nanofibers. *Arabian Journal for Science and Engineering*, 48(1), 1009-1019 [IF:2.807].

Bharati M., Rana L., Gupta R., Sharma A., Jha P.K., Tomar M. (2023) Realization of a DNA biosensor using inverted Lamb wave MEMS resonator based on ZnO/SiO<sub>2</sub>/Si/ZnO membrane. *Analytica Chimica Acta*, 1249, 340929 [IF:6.911].

Lamichhane S., Sharma S., Tomar M., Chowdhuri A. Lamichhane S., Sharma S., Tomar M., Chowdhuri A. (2022) Realization of a DNA biosensor using inverted Lamb wave MEMS resonator based on ZnO/SiO<sub>2</sub>/Si/ZnO membrane. *Journal of Applied Physics*, 132(13), 134102 [IF:2.877].

### **Presentation in Conferences:**

Prof. Vijay K. Chaudhary delivered the lecture “Our Story of Learning about Patent, Trade Mark and Technology Transfer” at 100 Days Skill Festival Workshop on IPR & Technology Transfer, University of Delhi South Campus on 18 March 2023.

Prof. Vijay K. Chaudhary delivered lecture on “Science of Antibody - Lab to Market” at, 63<sup>rd</sup> Annual International Conference of Association of Microbiologists of India (AMI) Microbial Technologies for Sustainable Biosphere at Maharshi Dayanand University, Rohtak, Haryana from 2 - 4 February 2023.

Prof. Vijay K. Chaudhary delivered a lecture “From Innovations to Products: Translating Science for Society” at the 62<sup>nd</sup> Annual International Conference of Association of Microbiologists of India (AMI) Microbes and Society: Current Trends and Future Prospects at University of Mysore from 21 - 23 September 2022.

### **Extension and Outreach Activities through Skill Enhancement workshops**

DSSEED, in collaboration with CIIDRET; organized a several Skill Enhancement Workshops throughout the year.

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## **Delhi School of Transnational Affairs**

### **Brief History**

Delhi School of Transnational Affairs aims to provide a platform for dialogue across disciplines by engaging political scientists, economists, environmentalists, philosophers, sociologists, lawyers, development professionals, scholars as well as policy practitioners from across the world to share their research and collaborate on key transnational issues that are important for India and the world. It strives to bring together scholars and students from around the world to work on various topics of importance and explore opportunities for engagement and networking with like-minded individuals. The school also hopes to collaborate with foreign universities for dual degree and exchange programs for students and scholars.

The Delhi School of Transnational Affairs aims to study and analyze the power and purpose behind India's rise in the global inter-state hierarchy. Its focus areas include diplomacy and foreign policy, defense and international security, global governance and multilateralism, human rights and environment, and global justice.

### **Seminars/Conferences organized:**

On 12 April 2022, DSTA organized an online panel discussion on "Reflections on Russia-Ukraine Crisis". The distinguished guests and panelists were former Ambassador to Russia and former Chairman, National Security Advisory Board, P S Raghavan, Nandan Unnikrishnan, Distinguished Fellow, Observer Research Foundation and Nidhi Razdan, Consulting Editor, NDTV.

Seminar entitled "Why Nations Abandon Peaceful Grand Strategies: Ukraine War in Historical Context" on 4 May 2022 by Prof. T.V. Paul, James McGill Professor of International Relations, Department of Political Science, McGill University organized by DSTA in collaboration with Department of Political Science, University of Delhi.

The Department of Political Science, Maitreyi College in collaboration with Delhi School of Transnational Affairs organized an International Conference on "Indian Perspectives on Global Politics: Analyzing the First Two Decades of the 21st Century" on 29-30 September 2022.

Seminar entitled "Global Governance and the Emergence of Global Institutions for the 21st Century" including a talk by visiting faculty Augusto Lopez Claros, Executive Director and Chair of the Global Governance Forum on 24 November 2022 at Satyakam Bhawan.

Centre for Disaster Management Studies, Shaheed Bhagat Singh College in collaboration with Delhi School of Transnational Affairs organized an Online Symposium on "Disaster Induced Vulnerabilities and Cross Border Human Trafficking: Role of NGOs" on 26 November 2022.

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## **Dr. B.R. Ambedkar Centre for Biomedical Research**

### **Brief History**

Dr. B.R. Ambedkar Centre for Biomedical Research is a University of Delhi maintained Institute to carry out teaching and research activities in Biomedical Sciences. ACBR was instituted in 1991 but the first batch for M.Sc. Biomedical sciences started in 1998. Admission to M.Sc. and Ph.D. programs is done through the All-India entrance test every year. The courses are currently being run by 13 faculty members and experts in various disciplines of biomedical sciences. In addition, ACBR is also a mentoring Institute for 3 colleges where B.Sc. biomedical sciences programs are being conducted.

Dr. B.R Ambedkar Centre for Biomedical Research is the first Institute in India for teaching/research in biomedical sciences. M.Sc. Biomedical Sciences offered by ACBR is a truly interdisciplinary course where theoretical concepts are well integrated with practicals. The practical learning is further well integrated with project-based learning during the final semester research projects. ACBR also instituted a postgraduate diploma in Bioinformatics in 2022-23.

### **Major Activities and Achievements**

ACBR continues to do quality research in diverse areas like public health, therapeutics, diagnostics as well as basic sciences and has 57 published papers/book chapters with high citations and applied for 2 patents. Online workshops and interactive webinars were also conducted in collaboration with mentored colleges and DSPH.

### **Publications**

Jetly S.#, PriyaBhardwaj#, GeetikaArora, Daman Saluja, Sunita K. Yadav, Kumar P Naidu and Jyoti Taneja, (2022), Hesitancy and Acceptance of COVID-19 Vaccination Amidst the Second Wave of Pandemic in India: A General Population Study, Asian Pacific Journal of Public health, 4, 34, 446 - 449, na

Geetika Arora, Jyoti Taneja, Priya Bhardwaj, Shorya Goyal, Kumar Naidu, Sunita. K. Yadav, Daman Saluja, Sunita Jetly, (2022), Adverse events and breakthrough infections associated with COVID-19 vaccination in the Indian population, J Medical Virology, 9, 7, 31473154, 12

Yadav, S.K., Bhardwaj, P., Gupta, P., Saluja, D., Jetly, S. and Taneja, J., (2022), Association of gender, age, and comorbidities with COVID-19 infection in India, Journal of Integrated Science and Technology, 10, 2, 61, 66

Bhardwaj, P., Yadav, S.K., Saluja, D. and Taneja, J., (2022), Association of ABO blood group and antibody class with susceptibility and severity of COVID-19 infection in Indian Population, Journal of Integrated Science and Technology, 10, 1, NA, NA

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Sonkar, S.C., Arora, G., Wasnik, K., Ali, M., Mittal, P. and Saluja, D., (2022), Improved management can be achieved by introducing additional parameters in the syndromic diagnosis of nonviral sexually transmitted infections at low-resource settings, *AJOG Global Reports*, 2, 1, 100037, NA

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## **Books/Chapter in Books**

Swapan K. Ray Springer Nature, (2023), Establishment of a 6-OHDA Unilateral Lesion Male Wistar Rat Model of Parkinson's Disease, NA, Neuroprotection, Editor, NA, NA

Sonali Kumar 1, Ozasvi R Shanker 1, Jyotirmoy Banerjee 2, Manjari Tripathi 3, P Sarat Chandra 4, Aparna Banerjee Dixit 5, (2023), Epigenetics in epilepsy, na, Prog Mol Biol Transl Sci ., 1877-1173, 249-269

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Dheer, A., Dixit, A.B., Tripathi, M., Chandra, P.S., Banerjee, J., (2022), Glia in Epilepsy: An Overview, na, Springer, Singapore, na, 323-351

Meenakshi Sharma, Pragati Yadav and Deepika Tripathi, (2022), Bacterial Biofilm: Contribution to AMR and Approaches to Tackle, na, Focus on Bacterial Biofilms, na, 1-24

## **Research Projects**

IoE, DU, 2022-23 funded project titled, “Investigations into the role of Potassium ion channel in mediating immune responses upon mycobacterial infection”. Sanctioned amount: Rs. 5 lakh. PI: Prof. K. Natarajan.

IoE, DU, 2022-23 funded project titled, “Deciphering the cross-talk between Toll-Like Receptors and C-type Lectin Receptors in mediating immune responses upon mycobacterial infection”. Sanctioned amount: Rs. 12.5 lakh. PI: Prof. K. Natarajan.

DBT, 2023-28 funded project titled, “National Network Project, Sanctioned amount: Rs. 104 lakh. PI: Prof. Madhu Chopra.

DBT, 2020-25 funded project titled, “Drug Development: From Target Identification, Validation to Drug discovery”. Sanctioned amount: Rs. 189.36 lakh. PI: Prof. Madhu Chopra.

IoE, DU, 2022-23 funded project titled, “Statins and HDAC’s inhibition: A new combination strategy for cervical cancer therapy: A meta-analysis, transcriptomic and in vitro study”. Sanctioned amount: Rs. 5 lakh. PI: Prof. Madhu Chopra.

## **Patents Filed**

2022 Patent no 2021/ 09489 and Method for designing multifunctional agents as anti AD agents South African patent granted

2022 Patent no C07D 241/04 and 2. A system for developing new anticonvulsants and antidepressants German patent granted

### **Seminars Organized by the Centre**

Organized National Symposium on “Frontiers in Biomedical Research 2022 (FBR-2022): Communicable and Non-communicable Diseases: Prevention, Cure, and Future Preparedness” from 02 to 04 November 2022 in collaboration with Research Council, University of Delhi, DBT, DST-SERB and CSIR.

**Faculty Strength: 13**

**Number of Ph.D. Degrees Awarded: 11**

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### **Institute of Cyber Security and Law**

#### **Brief History**

The Institute of Cyber Security and Law was established under the aegis of University of Delhi in 2017 by Professor Yogesh K Tyagi, the then Vice Chancellor, Dr. Gulshan Rai National Cyber Security Coordinator at the Prime Minister’s Office, Government of India, Shri NR Wassan, Former Director General of Police, Dr. Madan Oberoi, Special Commissioner Cyber Crimes, Delhi Police and Professor Sunaina Kanojia, Department of Commerce, University of Delhi as its co-founders. ICSL was launched with a unique course of Post Graduate Diploma in Cyber Security and Law to cater for demand in the domain of cyber-security as one of the niche subjects of modern studies.

#### **Major Activities and Achievements**

Post Graduate Diploma in Cyber Security and Law (PGDCSL) started its first batch from the Academic Session 2018-19 under the aegis of Institute of Cyber Security and Law (ICSL), University of Delhi with Shaheed Sukhdev College of Business Studies as a self-financing course. The 2022-23 batch enrolled 36 students.

### **Seminars Organized by the Centre**

Seminar entitled “Malware Analysis and Crypto Currency Trends” by Mr. Jitender Singh, ACP on 29 April 2023.

Seminar entitled “Supervisory Control and Data Acquisition” by Prof. H. S. Sharma on 31 May 2023.

Seminar entitled “Network Segmentation and Segregation in SCADA” by Prof. H. S. Sharma on 16 May 2023.

Seminar on VAPT by Mr. Namit Gupta, FIS Global on 17 June 2023.

Seminar entitled “VAPT and other Security Threats” by Mr. Abhijeet Singh on 20 June 2023.

**Placement Details (Number and percentage of students placed): 56%**

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## **Institute of Informatics & Communication**

### **Brief History**

The Institute of Informatics and Communication, University of Delhi, has evolved into one of the country's premier institutions since 1997. It targets fulfilling the increasing demand for trained professionals in the industry. It has been designed by leading academics in the world of computing as well as communication. Today, the most recognized need in the world of industry and corporate environment is for an informatics professional who understands not only computing and telecommunication technology but also related software applications. The institute, in its nurturing environment, gives birth to and nourishes the mind that goes on to innovate in the field of communications and information technology.

### **Major Activities and Achievements**

Awards received by IIC Students in AIOSP Hackathon in 2022 by IEEE Signal Processing Societies, Delhi Chapter and in Smart India Hackathon in 2022 by Ministry of Education & MOE'S Innovation cell.

### **Publications**

Amit Birwal, Kamlesh Patel, Sanjeev Singh, (2022), A directional wide-band antipodal Vivaldi antenna for imaging applications, *Progress In Electromagnetics Research C*, 10, 127, 227-237, 1

"Sanchit Gandhi, Ashish Bhushan, Unmesh Shukla, Amit Pundir, Sanjeev Singh, Tapasya Srivastava", (2023), "Downregulation of lncRNA SNHG1 in hypoxia and stem cells is associated with poor disease prognosis in gliomas", *Cell Cycle*, 9, 22, 1135-1153, 0

### **Books/Chapter in Books**

Nitisha Aggarwal, Unmesh Shukla, Geetika Jain Saxena, Manish Kumar, Anil Singh Bafila, Sanjeev Singh & Amit Pundir, (2023), An Improved Technique for Risk Prediction of Polycystic Ovary Syndrome (PCOS) Using Feature Selection and Machine Learning, *Lecture Notes in Electrical Engineering (LNEE, volume 968)*, Springer Singapore, 978-981-19-7346-8, 597-606

### **Research Projects**

Ministry of Education, 2019-2026, "SAMARTH", An Open Source, Open Standard enabled Robust, Secure Scalable and Evolutionary Process Automation Engine for Universities and Higher Education Institutions" sponsored by the Ministry of Education, Government of India. Sanctioned amount: 12.49 crore.

**Placement Details (Number and percentage of students placed): 08**

**Faculty Strength: 01**

**Number of Ph.D. Degrees Awarded: 01**

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## **Institute of Lifelong Learning**

### **Brief History**

The Institute of Lifelong Learning (ILLL) is dedicated to the cause of those who believe that learning is neither age-bound nor classroom-bound; rather it takes place throughout life in all kinds of situations. The Institute has been striving to develop state-of-the-art infrastructure to help University of Delhi's teaching faculty, administrative staff, and students in capacity building for ICT skills. ILLL is continuously expanding its horizons towards achieving excellence in higher education. The Institute of Lifelong Learning is a nodal agency for the creation and uploading of e-content for Undergraduate Students (UG) of the University of Delhi. The endeavour is an attempt to provide additional quality e-learning resources for students in the form of e-lessons, e-lecture videos, e-labs and e-quizzes for students enrolled in UG courses.

### **Seminars Organized by the Centre**

Seminar organized on CUET/Orientation Cum Guidance Programme for Common University Entrance Test 2023 by Delhi University Teachers on 27 June 2022 and on 07 July 2022.

Seminar organized on "Indian Knowledge System (Short Term Course)" by Prof. A.D.N. Bajpai, Prof. Ajay Kumar Singh and Prof. Simrit Kaur from 16 to 22 January 2023 in collaboration with the Department of Commerce, Faculty of Commerce & Business, Delhi School of Economics.

Seminar on "Financial Literacy (Short Term Course)" by Prof. K.P. Singh, Prof. Ajay Kumar Singh, Prof. Amit Kumar Singh, Dr. Pratibha Maurya and Mr. Surya Kant Sharma from 30 January to 03 February 2023.

Seminar on "Academic Writing: English" by Academic Fellows from 06 February to 31 March 2023 in collaboration with ONGCF.

Academic Writing: Hindi by Academic Fellows from 13 February to 07 April 2023 in collaboration with ONGCF.

**Faculty Strength:** 05 Academic Fellows

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## **Inter Disciplinary Centre for Plant Genomics**

### **Brief History**

The Inter Disciplinary Centre for Plant Genomics (ICPG) was established in 2005 to seek and impart knowledge on Genomics, to carry out frontline research in the area of Plant Genomics, to generate new ideas for the acceleration of the pace of progress in Plant Genomics, to apply knowledge gained from basic concepts in Structural and Functional Genomics for crop improvement, to train and enrich human resources in the area of Genomics and to provide a platform for interaction at an institutional and inter-institutional level among scientists specializing in biology, chemistry, computer science, engineering, mathematics, physics and allied sciences, to bring together the policymakers, civil society and researchers for interaction

and need-based development of enabling technologies/information in Genomics and their application. The Centre is currently located on the 3rd floor of the Biotech Centre in the South Campus of the University.

### Major Activities and Achievements

ICPG members are actively involved in discovering and characterizing genetic and bioinformatic resources related to plant reproductive development and responses to environmental stress. They have made significant contributions to global genome sequencing projects for rice, tomato, and wheat. An ICPG-PMB-led program, funded by DBT, uncovered the functions of genes in rice's floral transition, gametophyte development, and seed development. The center's one of the group has been pivotal in establishing the 'Indian Biological Data Centre (IBDC),' India's first national life science data repository. Research on the seed-specific MADS-box transcriptional regulator, OsMADS29, unveiled regulatory mechanisms during developmental transitions. Grain chalkiness in rice, a negative agronomic trait linked to rising temperatures during grain filling, prompted another group to develop a genetic technology that reduces chalkiness (patent filed). The group also utilizes insights from seed development and starch accumulation to develop cell-line-based biofactories for starch production using cellular agriculture methods.

### Publications

Mahto A, Yadav A, Aswathi PV, Parida SK, Tyagi AK, Agarwal P,, (2023), Cytological, transcriptome and miRNome temporal landscapes decode enhancement of rice grain size, *BMC Biology*, NA, 1, 21, NA

Prusty A, Sharma S, Malik N, Kapoor S, Tyagi AK,, (2023), Functional Versatility of Multi-Protein Mediator Complex in Plant Growth and Development, *Critical Reviews in Plant Sciences*, 3, 42, 138-176, NA

Verma V, Boora N, Nayar S, Kumar G, Thapliyal S, Ankur S, Khurana R, Gawande G, Kapoor M, Kapoor S,, (2023), Ca<sup>2+</sup>-Calmodulin regulates nuclear translocation of the rice seed-specific MADS-box transcription factor OsMADS29, *FEBS JOURNAL*, NA, NA, NA, NA

Balyan S, Kansal S, Jajo R, Behere PR, Chatterjee R, Raghuvanshi S,, (2023), Delineating the tissue-mediated drought stress governed tuning of conserved miR408 and its targets in rice, *Functional and Integrative Genomics*, 3, 23, NA, 2

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Sharma A, Samtani H, Sahu K, Sharma AK, Khurana JP, Khurana P,, (2023), Functions of Phytochrome-Interacting Factors (PIFs) in the regulation of plant growth and development: A comprehensive review,, *International Journal of Biological Macromolecules*,, NA, 244, 125234, NA

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Jain N, Khurana P, Khurana JP, (2023), AtTLP2, a Tubby-like protein, plays intricate roles in abiotic stress signaling, *Plant Cell Reports*, 5, 42, 235-252, NA

Singh S, Sharma P, Mishra S, Khurana P, Khurana JP, (2023), CRY2 gene of rice (*Oryza sativa* subsp. indica) encodes a blue light sensory receptor involved in regulating flowering, plant height and partial photomorphogenesis in dark, *Plant Cell Reports*, 5, 42, 73-89, NA

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Gambhir P, Raghuvanshi U, Parida AP, Kujur S, Sharma S, Sopory SK, Kumar R, Sharma AK., (2023), Elevated methylglyoxal levels inhibit tomato fruit ripening by preventing ethylene biosynthesis, *Plant Physiology*, 2, 192, 2161–2184, NA

Singh S, Vergish S, Jain N, Sharma AK, Khurana P, Khurana JP, (2023), OsCRY2 and OsFBO10 co-regulate photomorphogenesis and photoperiodic flowering in indica rice, *Plant Science*, NA, 330, NA, NA

Pasricha Sarin L, Sree KS, Bóka K, Keresztes Á, Fuchs J, Tyagi AK, Khurana JP, Appenroth KJ, (2023), Characterisation of a Spontaneous Mutant of *Lemna gibba* G3 (Lemnaceae), *Plants*, NA, 12, 2525, NA

Chaudhary C, Sharma N, Khurana P, (2023), Genome-wide identification of Aux/IAA and ARF gene families in bread wheat (*Triticum aestivum* L.), *Protoplasma*, 2, 260, 257-270, 4

Sharma N, Shree B, Khurana P, (2023), Myo-inositol phosphate synthase improves heat stress tolerance by ethylene-mediated modulation of chlorophyll content and photosynthetic efficiency, *Protoplasma*, 2, 260, 1097-1107, 1

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Gahlaut V, Samtani H, Gautam T, Khurana P., (2022), Identification and Characterization of DNA Demethylase Genes and Their Association With Thermal Stress in Wheat (*Triticum aestivum* L.), *Frontiers in Genetics*, NA, 13, NA, NA

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## **University Science Instrumentation Centre**

### **Brief History**

University Science Instrumentation Center (USIC) was established in 1984 with funds received from UGC and Indo-Japanese grant-in-aid and was housed in a separate building. Subsequently in the year 2006, it was restructured, and most of the old instruments were replaced with state-of-the-art instrumentation through funds received under the special grant in the XI-Plan.

### **Major Activities and Achievements**

A centralized facility with sophisticated analytical instruments is maintained by the University Science Instrumentation Centre for all researchers and faculty members of science departments and constituent colleges of the University of Delhi. The USIC has an in-campus research facility center established by the University of Delhi to impart state-of-the-art sophisticated scientific instruments to facilitate high-quality research work in the emerging areas of physical and life sciences. The University departments under the Faculty of Science are actively involved in conducting research in various disciplines, in addition to teaching. To carry out the experimental research work, the researchers need various scientific sophisticated analytical instrument facilities. These facilities are mainly supported by the USIC to various departments, centers, and colleges. This is reflected by the huge number of publications appearing consistently in journals of international repute over the years. In addition to internal users, the facility is extended to outside users (academic and industry) on a payment basis. In addition to providing access to modern research facilities, the centre also extends mentorship through training and workshops for researchers.

### **Training programs conducted by the Center:**

STUTI Program for PhD students organised from 14 -20 December 2022

Laboratory Staff Training Program organised from 5-9 December 2022

Laboratory Staff Training Program organised from 19-23 December 2022

Laboratory Staff Training Program organised from 16-20 January 2023.

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## **Women's Studies and Development Centre for Advances Studies**

### **Brief History**

The Women's Studies and Development Centre (WSDC) at the University of Delhi was established in 1987, in response to the University Grants Commission's (UGC) and the University's need to promote, develop, and encourage women's studies in institutes of higher education while also addressing the multiple concerns relating to women's issues in the society. It has been a pioneering force in the field of women's studies and gender research in India. Over the past three decades, WSDC has expanded its programs and activities, achieving recognition as an Advanced Centre of Study by the UGC in 2016. Throughout its existence, WSDC has been nurtured and guided by prominent women Professors from various disciplines, each serving as Director and bringing their unique expertise to the realm of women's studies.

## **Major Activities and Achievements**

Commenced the Certificate Course on Gender and Society in Hybrid mode (offline for Delhi participants & online for outstation participants) from June – August 2022 which included a total of 29 male & female participants enrolled from the country. The Valedictory Programme of this Course was held on 17 September 2022

The centre organized a documentary screening on ‘women in sex work’ on 12 August 2022. The documentary was titled ‘Tales of the Night Fairies’.

The centre organized a Book Launch event by Prof. Payal Mago, Director, WSDC, DU on ‘Indian Woman, Feminism and Women’s Liberation’ on 29 November, 2022.

## **Seminars Organized by the Centre**

Seminar entitled, “Politics of Precarity: Gendered Subjects and the Healthcare Industry in Contemporary Kolkata” by Dr. Panchali Ray, Associate Professor, KREA University, held on 26 August 2022.

Seminar entitled, “Carceral Feminism and Carceral Spillovers: Reflections on Narratives of Women Prisoners in India” by Dr. Mahuya Bandyopadhyay, Professor, Department of Humanities and Social Sciences, IIT Delhi, held on 2 September 2022.

## **Other Inter-Institutional Collaborations**

The Centre has collaborated with the Woman’s Development Cells and Sensitisation Units of various colleges in the University of Delhi to institute the WSDC Forum.

**Faculty Strength:** 01 Director

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## COLLEGES

### ACHARYA NARENDRA DEV COLLEGE

#### **Brief history of the College**

Acharya Narendra Dev College was founded in 1991 and was named after great educationist and social reformer Shri Acharya Narendra Dev Ji. Starting from 4 rooms in SPS structure in 1991, ANDC moved to its current premises in 1992. In a short span of 32 years, ANDC has made substantial progress. Starting with two undergraduate courses, the College currently offers 13 undergraduate honours courses, 2 postgraduate courses. The foreign language center of the college offers part time certificate, diploma and advanced diploma courses in French, German, Spanish and Russian. The total intake of students in the first year in 13 UG courses is 863. Currently, the college has 116 teaching faculty and 117 non-teaching staff. In building this institution, founder Principal, Late Dr. A. S. Kukla, OSDs/Officiating Principal, Dr. Najma Siddiqui, Dr. Bharati Sarkar, Dr. Mamta Bhatia, Dr Pratibha Jolly and Dr Savithri Singh has played a key role and the College is reaping the benefits of the strong foundation established by them. Post 2018 the college is headed by Professor Ravi Toteja and his passion for UG research and social inclusivity resulted in getting DBT STAR STATUS to the college and bagging the flagship schemes like Paramarsh Scheme of UGC, Skill Hub Center and Unnat Bharat Abhiyaan of Govt. of India. The College is now promoting virtual lab development, Skill development Centres, Language Lab and Central Instrumentation facilities for promoting skill and research. ANDC houses a full-fledged business incubator, ANDC-inStart Foundation, since 2017. The ANDC-inStart Foundation nurtures the spirit of creativity, encouraging students to embark on their entrepreneurial journey with mentorship, resources, and networking opportunities.

#### **Major Activities and Achievements**

The college is recognized for its strong academic foundation and has been accredited with a score of 3.31 and Grade 'A' by NAAC in first cycle of accreditation. The college has also been ranked as the 19<sup>th</sup> Best Science College in India by the India Today survey based study this year besides garnering 21<sup>st</sup> position under the National Institutional Ranking Framework (NIRF) of Ministry of Education, Govt. of India. The College has also been awarded STAR STATUS by the Department of Biotechnology, Government of India. The funding received from these schemes have been utilized to develop following Skill centres in the college: Mushroom Research and Skill Development Centre, Zebrafish Culture Facility, Sericulture Skill Enhancement Centre, Central Instrumentation Facility (Physical Science and Life Science) and Language Lab. Under this scheme, the college has also established state-of-the-art laboratories for Skill Enhancement, including PCB Design and Fabrication Lab, Artificial Intelligence Lab, and Internet of Things (IoT) Lab.

This year nine students have bagged Merit Positions in the University of Delhi and eighteen students have got Merit Positions in the University of Delhi South Campus (UDSC). Ten students have been awarded Meritorious Students Award by Directorate of Higher Education, Government of NCT of Delhi and seven students have been granted fellowship by the Faculty of Science, University of Delhi.

Several new digital initiatives like Virtual lab at ANDC (V-Lab@ANDC) have also been taken by the college to conceptualize the idea of Virtual lab to provide remote access of various labs to the undergraduate science students through the internet, and thus became the first college in the University

of Delhi to start V-Lab at its campus. The course structure of various labs and experiments available on V-Lab@ANDC is futuristic, following a four quadrant model for e-content, and is developed considering the National Education Policy (NEP)-2020. V-Lab@ANDC website is created and maintained by our own students for four domains i.e. Biological Science, Chemical Science, Electronics and Physical Science which include seven departments i.e. Biomedical Science, Botany, Chemistry, Computer Science, Electronics, Physics and Zoology. So far, **37** V-Labs have been created and are available for public access on college website.

The college has established Acharya Narendra Dev Kaushal Kendra, Skill Hub @ ANDC under central component of Pradhan Mantri Kaushal Vikas Yojana 3.0 (PMKVY 3.0) through National Skill Development Corporation (NSDC). It aims to provide skill development and vocational training opportunities to target population segments from school dropouts and out-of-education candidates. Acharya Narendra Dev Kaushal Kendra, Skill Hub @ ANDC is selected as a Training Provider for Web Developer Course, and a batch of 19 students has successfully completed the course in 2022. The college has also conducted 3 value addition courses, namely Research Methodology, Tools and Techniques in Biological Sciences and Basics in Research Methodology. The aim of the course was to teach students outside of the classroom and aided them in developing their capacity to carry out useful research. The course inspired them to consider a career in research. These Courses were conducted for both Life Science and Physical Science students, and were designed and taught by 16 Prime Minister Research Fellows (PMRF), IIT Delhi.

### **Honours/Distinctions**

Prof. Urmi Bajpai featured among 35 Vigyan Vidushis in the country as Future Hopes 2023 by Vigyan Prasar, Department of Science & Technology (DST), Government of India. She was also awarded by Indian Bacteriophage Society for Distinguished and Sustained contribution to Bacteriophage Science Communication on 27 November 2022.

Prof. Gagan Dhawan awarded with 'INSA Teachers award' by Indian National Science Academy on 16 December 2022.

Prof. Shallu Sachdeva awarded with Global academic Research Excellence Award of Best Faculty in Chemical Sciences by MKSES Educational Society, Lucknow on 31 July 2022.

Dr. Sunita Jetly awarded with Shikshak Samman by Lions International on 12 September 2022.

Prof. Shallu Sachdeva awarded with Proud Indian Iconic Reader and Researcher Award 2023 by Ratna Prasad Multidisciplinary Research and Educational Society on 26 January 2023.

### **Students with Distinctions**

Rishi Sarbobhoum of B.Sc. (Hons) Computer Science III year was the college class topper.

Mohini Sharma of B.Sc. (Hons) Chemistry III year was the college class topper.

Vridhi Singh of B.Sc. (Hons) Botany II year was the college class topper.

Vaibhav Thapliyal of B.Sc. (Hons) Physics II year was the college class topper.

Anshuman Panigrahi of B.Sc. Physical Sciences I year was the college class topper.

## Research Publications

Sinha, S. N., Ungarala, R., Kumar, D., Sangaraju, R., Kumar, S. (2022). A novel RP-HPLC method for quantification of cholinesterase activity in human blood: An application for assessing organophosphate and carbamate insecticide exposure. *PLoS ONE*, 17(12), e0279287.

Deb, S., Baruah, A., Kumar, S. (2022). Ensemble-based unsupervised machine learning method for membership determination of open clusters using Mahalanobis distance. *Monthly Notices of Royal Astronomical Society*, 515(4), 4685–4701.

Lamichhane, S., Sharma, S., Tomar, M., Chowdhuri, A. (2022). Effect of variation in glancing angle deposition on resistive switching property of WO<sub>3</sub> thin films for RRAM devices. *J. Appl. Phys.*, 132(13), 134102.

Kohli, S., Rathee, G., Hooda, S., Chandra, R. (2023). An efficient approach for the green synthesis of biologically active 2,3-dihydroquinazolin-4(1H)-ones using a magnetic EDTA coated copper based nanocomposite. *RSC Advances*, 13(3), 1923-1932.

Das, R., Bajpai, U. (2023). Functional characterization of a DNA-dependent AAA ATPase in a F-cluster mycobacteriophage. *Virus Research*, 323, 198957.

Badawi, M. N., Bhatia, M., Ramesh, S., Ramesh, K., Kuniyil, M., Shaik, M. R., Khan, M., Shaik, B., Adil, S. F. (2023). Self-healing, flexible and smart 3d hydrogel electrolytes based on alginate/PEDOT: PSS for supercapacitor applications. *Polymers*, 15(3), 571.

Joshi, R., Goyal, A., Kumar, P., Mohan, M. (2022). Theoretical analysis of relativistic energy corrections, partition function and thermodynamic properties of spherically confined hydrogen atom. *European Physical Journal D*, 76(8), 149.

Johari, R., Sonker, R. K., Victor, O., Khan, Z. H., Aggarwal, D., Gupta, S., Kumar, S. (2023). Optoelectronic Study of Polymer Electrolyte Incorporated Perovskite Sensitized Solar Cel. *Macromol. Symp.*, 407(1), 2200126.

Antil, S., Abraham, J. S., Sripoorna, S., Maurya S., Dagar, J., Makhija, S., Bhagat, P., Gupta, R., Sood, U., Lal, R., Toteja, R. (2022). DNA barcoding, an effective tool for species identification: a review. *Molecular Biology Reports*, 50, 761–775.

Poswal, P., Chauhan, A., Arya, D. D., Boadh, R., Rajoria, Y. K., Gaiola, S. U. (2022). Optimal strategy for remanufacturing system of sustainable products with trade credit under uncertain scenario. *Materials Today: Proceedings*, 69(2), 165-173.

## Research Projects

Project funded by SERB – DST (Department of Science and Technology) from April 2022 to March 2023. Title of the project - DNA barcoding for ciliate species identification of Delhi for Rs. 41.97 lakhs.

Project funded by Indian Council of Medical Research (ICMR) from April 2022 to March 2023. Title of the project - MERA INDIA PROJECT: Mera/3/2020-ECD-II entitled “Attractive Toxic Sugar Bait (ATSB) methods to control mosquitoes in different regions of Delhi and NCR” for Rs. 39.34 lakhs.

Indian Council of Medical Research (ICMR), Was active during April 2022 to March 2023, "An investigational study on Mycobacteriophages and their enzymes as new drugs (IND) for treating tuberculosis"., 22.16

Four following projects funded by Defence Research & Development Organization (DRDO) from April 2022 to March 2023:

- Development of process and evaluation of electron suppression coating on the grids used in TWTs [MTRDC / MMG / 20206 / CARS / LPO/125/2021- 22/BUP]

- Fabrication of packaged high frequency SAW devices of given specification [1115/TS/SPL/CARS-98/2022]

- Development of thermoelectric energy harvester using Indium Selenide thin films [CRG/2022/005474]

- Development of process and evaluation of electron suppression coating on the grids used in TWTs [MTRDC / MMG / 20206 / CARS / LPO/125/2021- 22/BUP]

For Rs. 115.45 lakhs

Department of Science and Technology (National Council for Science and Technology), Was active during April 2022 to March 2023, Medical Awareness, capability, patient empowerment and partnership for managing cancer through e-learning, 19.63

### **Seminars Organized**

Seminar entitled, ‘Ciliates in extreme environments, (Ciliate Biology)’ presented by Prof. Gaytha Langlois, Professor of Environmental Policy, Bryant University, Rhode Island, USA on 8 November 2022.

Seminar entitled, ‘Environmental microbiome to advance ecosystem services (Microbial Ecology)’ presented by Prof. Brijesh Singh, Director-Global Centre for Land-Based Innovations and Distinguished Professor, Australia on 4 February 2023.

Seminar entitled, ‘Hydroelectric cell the best option to do away global warming and green hydrogen generation by water splitting’ presented by Dr. R. K. Kotnala, Former Chief Scientist and Head Environmental Sciences and Biomedical Metrology, CSIR-NPL on 21 March 2023.

Seminar entitled, ‘Millets: Our National Pride’ presented by Dr. Sumer Pal Singh, Principal Scientist Division of Genetics, ICAR-IARI on 23 March 2023.

Seminar entitled, 'Accounting Standards' presented by CA Dr. P. C. Tulsian, Former Director, Institute of Chartered Accountants of India (ICAI) on 1 February 2023.

### **Conferences Organized**

7<sup>th</sup> International Conference of National Soil Contamination and Research (INSCR 2022) Modulating the Environment with Microbes was organized by Acharya Narendra Dev College, in collaboration with Deen Dayal Upadhyaya College, Gargi College, Kirori Mal College, Department of Zoology, Magadh University, Ramjas College, Sri Venkateswara College, Sri Guru Tegh Bahadur Khalsa College, C.M.P. College, Bhaskaracharya College of Applied Sciences, Shivaji College, Miranda House, KIIT Bhubaneswar, Devbhoomi Uttarakhand, Kolhan University, Jharkhand, PhiXgen Pvt. Ltd., Gurugram and College of Commerce, Arts & Science, Patna on 7 November 2022.

3<sup>rd</sup> International Symposium on Ciliate Biology (ISCB 2022) was organized by Acharya Narendra Dev College and Maitreyi College, in collaboration with Indian Network for Soil Contamination Research (INSCR) on 8 November 2022.

National conference on "One Earth, One Family, One Future" was organized by the College and Department of Commerce, Delhi School of Economics, University of Delhi and Indian Commerce Association (ICA) on 3 April 2023.

### **Seminar/Conference Presentations**

Prof. Urmi Bajpai presented a paper entitled 'Mycobacteriophages: Potential Therapeutic Agents against Drug-Resistant Tubercular and Non-Tubercular Mycobacterial (NTM) Infections' in an International conference Towards End TB: Achievements, Challenges and Future directions at DBT-THSTI, Faridabad on 23-25 March 2023.

Prof. Sarita Kumar presented a paper entitled 'Management of Aedes-borne diseases through vector management using an IGR- Diflubenzuron' in 2<sup>nd</sup> International Conference on Natural Products and Human Health-2022 at Deshbandhu College, University of Delhi on 4-6 November 2022.

Prof. Seema Makhija presented a paper entitled 'Bioinformatics analysis of heavy metal (cadmium and copper) binding proteins and cysteine-rich proteins in Tetrahymena sp. SEJ-2015 to affirm their roles in heavy metal tolerance' in 3<sup>rd</sup> International Symposium on Ciliate Biology (ISCB) organized by Acharya Narendra Dev College and Maitreyi College in Collaboration with INSCR on 8 November 2022

Prof. Anju Agrawal presented a paper entitled 'Academic use of Chat GPT' in National Conference on "One Earth One Family One Future" organised by the Department of Commerce, Acharya Narendra Dev College, University of Delhi held on 3 April 2023.

Prof. Arijit Chowdhuri presented a paper entitled 'Low temperature NO<sub>2</sub> gas sensors with high efficiency' in 2<sup>nd</sup> International Conference on "Advanced Functional Materials and Devices" (AFMD-2023), organized by Atma Ram Sanatan Dharma College on 13-15 March 2023.

Prof. Geetu Gambhir presented a paper entitled 'A Study of thermal stability of multi component Functionalized Bio composite materials' in the 2<sup>nd</sup> International conference on Advance Interdisciplinary Research (ICAIR-2023), jointly organized by Digvijay Nath Post Graduate College, Gorakhpur, UP and Sci.Tech Inst., Lucknow.

Prof. Charu Khosla Gupta presented a paper entitled 'The New Face of Education Beyond the Realms of the Regular Classroom: Innovation in Practice' in an International Conference on Education 2023 organized at Bangkok, Thailand on 16 – 17 March 2023.

Prof. Pooja Bhagat presented a paper entitled 'Characterization of Acharya Narendra Dev College campus soil: A Pilot Project to access the soil quality' in an International conference 44<sup>th</sup> All India Cell Biology Conference and International Symposium on Molecular and Cellular Insights of Human Diseases organized by University of Kashmir on 2-3 September 2022.

Prof. Rachna Joshi presented a paper entitled 'Towards development of Hydrogen fuel : For clean and safe environment (Study of properties of Hydrogen atom under pressure)' in the 7<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR), "Modulating the Environment with Microbes" on 8-11 November 2022.

Dr. Shalu Mahajan presented a paper entitled 'Impact of Economic, Social and Governance on Sustainable Business Growth: An Insightful Review' in the National Conference on "ONE EARTH • ONE FAMILY • ONE FUTURE" organized by Acharya Narendra Dev College and Department of Commerce, Delhi School of Economics, University of Delhi in collaboration with Indian Commerce Association, Delhi NCR Chapter on 3 April 2023.

### **National/International MoUs Signed**

MoU signed with National Institute of Immunology: National Institute of Immunology and Acharya Narendra Dev College joined together to launch the NII-Acharya Narendra Dev College Science Setu Programme. Such an endeavor is urgently needed since it raises public understanding of the value of science. The main objective is to support the national initiative to entice more and more talented young minds to choose a profession in science and technology.

MoU signed with Auburn University of Montgomery, Alabama, USA (International): The program would encourage international credit transfer and progression arrangements, academic articulation agreements for various programs, the exchange of research and academic materials of mutual interest, collaborative and foster research activities and projects, the exchange of teaching expertise, the development of e-learning training, and the application of distance learning.

MoU signed with International Bacteriophage Research Consortium (International), an Open Health System Laboratory (OHSL), a social benefit corporation established under the laws of the state of California in the United States of America covers collaboration to establish an International Bacteriophage Research Consortium (IBRC) and pursue further research. ANDC-DU and OHSL have already created a web portal for IBRC with the url: <https://ohsl.us/bacteriophage/international-bacteriophage-research-consortium>,

MoU signed with Translational Health Science Technology Institute THSTI: MoU under Science-Setu program is in collaboration with the Translational Health Science Technology Institute (THSTI), Department of Biotechnology, Ministry of Science and Technology, Government of India. In this programme the scientists share their research interests with the undergraduate students of Acharya Narendra Dev College.

### **Other Inter-Institutional Collaboration**

Collaboration with IIT, Delhi: College has been recognized as nodal centre for creation of virtual labs, an initiative of MoE, under NMEICT. Theoretical concepts can be delivered to students online but for better understanding of various concepts, a hands-on is a must. ANDC has conceptualized the idea of Virtual lab (V-lab) to provide remote access of various labs to the undergraduate science students through internet.

Th!nk Lab – Collaboration with CUBE : Th!nk Lab is an autonomous lab of the students, which works without any supervision of teachers in collaboration with CUBE (Collaborative Understanding Biology Education) network, an initiative of Homi Bhabha Centre for Science Education, TIFR, Mumbai. Under the network, students are connected with students, teachers and research scientists across the country and abroad to discuss and seek answers to various research questions.

NPTEL-SWAYAM Local Chapter @ ANDC : The National Programme on Technology Enhanced Learning (NPTEL) was initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science, Bangalore in 2003 (Online web portal <http://nptel.ac.in>). NPTEL began offering open online courses in March 2014 along with certificates from the IITs/IISc for those who completed the courses successfully. To encourage more students of our college to participate in this initiative, a SWAYAM NPTEL Local Chapter is established in our college.

OPEN Initiative - Creative Commons Network @ ANDC: Acharya Narendra Dev College is known for being a pioneer in Open Educational Resources (OER) within the University of Delhi. Being committed to OER, the college became an institutional member of the Creative Commons network in May, 2018.

University of Delhi @ ANDC SPIE Student Chapter: The Society of Photo-Optical Instrumentation Engineers (SPIE), an international society advancing an interdisciplinary approach to the science and application of light, formally approved University of Delhi at Acharya Narendra Dev College SPIE Student Chapter in August 2010. The chapter is open to both students of Acharya Narendra Dev College and University of Delhi. With its establishment, college has joined the elite group within India of IITs, IISc, NIITs and DTU where this chapter has been successfully running for years besides more than 150 well established chapters in other countries like USA, UK, Europe, China, Russian Federation and Canada etc.

### **Number and percentage of students placed**

Total number of students placed: 22

Total number of students placed for Internship: 31

## Number of Companies visited for campus recruitment

The companies visiting ANDC campus this year were Accenture, Wipro Limited, Dell Technologies, NTPC Vidyut Vyapar Nigam Ltd., Unacademy, Byju's, Monster.com, Morgan Stanley, Swiggy, Infosys, Kotak Mahindra Bank, ICICI Lombard General Insurance Company Limited, NatWest (RBS), The Leading Solutions Pvt. Ltd., Concentrix, Winspark Innovations Learning Pvt Ltd, Delta X, WNS Global Services (P) Ltd, Rising Ed. Tech Company, The Vedica Scholars Programme for Women, GlobalFoundries Inc., Apna Campus, Ruhvenile, Skillenza, FinX, EDU-Station, Ensvee, School 2 Campus, Tata, Learning Link Foundation, Zuno, TVS Eurogrip, Tata Strive, Connection Media, Team Lease Digital, Intellipaat, RSM Delivery Center Private Limited, Xcrino Business Solution, Chartered Financial Expert, B S R & Co. LLP Chartered Accountants.

## Extension and Outreach Activities

In commemoration of centenary celebrations of University of Delhi, Acharya Narendra Dev College organized an Outreach Workshop on Cell and Molecular Biology Techniques from 12-13 October 2022. Fifty candidates participated in the workshop including twenty four B.Sc students and 26 M.Sc. students from GD Goenka University, Gurugram, Delhi. The students were given complete hands-on training on cell and molecular biological techniques like Preparation of Competent cells and Transformation Experiment, making of mitosis slides, plasmid DNA isolation, polymerase chain reaction, agarose gel electrophoresis and restriction mapping.

Organized **Microsphere 2.0**, an International Outreach Program as an initiative to promote Microbial Literacy and Celebrating the diversity and wide applications of microbes on 17 September 2022. NSS@ANDC organized a stationery collection drive in collaboration with UBA@ANDC. The event was organized under the aegis of our project vidipsa. The collected stationery was then distributed to the needy children. The event took place from 11-27 July 2022.

Cancer screening camp and awareness talk at Daulat Ram College: A cancer screening camp was organized in the premises of Daulat Ram College, in which our programme officer Dr. Sunita Jetly participated with our volunteers. An awareness lecture was also given by the eminent field experts present at the venue. The event took place on 27 July 2022.

Cleanliness & Plantation Drives at Govindpuri: Trees are the foremost source for producing the oxygen in environment; they help to reduce the level of CO<sub>2</sub>. We understand the value of trees and carry out plantation drives many times in a year. On 2 October 2022, NSS@ANDC successfully completed the event of Tree Plantation at Mirabai park, Govindpuri. Volunteers also cleaned the park. NSS@ANDC organized a plantation drive on 18 March 2023 in the presence of **Ms. Atishi Singh, MLA (Kalkaji)** and Minister of Education, Delhi. The main purpose of the plantation drive was to enhance the green cover and beauty of the park. The event was held in collaboration with Eco club Paritantra and UBA@ANDC. Volunteers planted many plants and decided to take care of them regularly.

## Library Development

Total number of books in the Library: 34242.

Total number of Magazines & Journals: 19.



New books added during the year 2022-23: 653.

Digital notice boards are installed in the Upper & Lower Reading Hall of the Library for displaying library related information.

Login Id for accessing e-resource of Delhi University Library System & N-List have been created for those students who have requested.

A webinar on “Quill Bot an Awareness Program for One Stop Place for Making Writing Painless” was organized by the Library on dated 29 September 2022. Around 50 participants had attended the event including faculty members, research scholars, Library and Administrative staff and many other libraries professional. Mr. Aman Jain from Quill Bot described the unique features of writing tools like paraphrasing, summarization, plagiarism checking etc.

Library has organized two days Annual Book Exhibition from 11-12 October 2022 in the library for faculty and students. Many renowned Publishers & Book Sellers like Prentice Hall of India, Unilib Book Dist. Pvt .Ltd., Asian Book Centre, Narosa Publishing House, N.R.Book Distributor, Pearson Education, S.Chand and Co., Cambridge University Press, Orange Books International, Viva Books Pvt.Ltd., Orient Blackswan Pvt. Ltd., Panima Educational Agency participated in the exhibition and displayed their books in the library. Faculty and students selected books for the library as well as for their personal use.

### **Faculty Strength**

Total number of faculty: 116

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 47,70,00,000/-

Grants Utilized: Rs. 47,70,00,000/-

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## **ADITI MAHAVIDYALAYA**

### **Brief history of the College**

Situated on the outskirts of Delhi's Bawana, Aditi Mahavidyalaya - The only institution of higher learning for a cluster of 52 villages was conceptualized in 1994 with the vision and mission to empower women with the indispensable tool of education. Therefore, our aim at 'Aditi' is to empower rural women by imparting quality education. With a humble beginning of 200 students and a handful of courses, the college has transformed over the last three decades and proudly offers prestigious courses like B.el.ed. Honours Courses in Social Work, Geography, Hindi Patrakarita, B.Com. to name a few. With an illustrious and dynamic staff – both teaching and non-teaching – Aditi is moving steadily and surely on the path of excellence by offering quality education with a proliferation of new courses and a concomitant increase in the number of students. Under the flagship of the University of Delhi, Aditi Mahavidyalaya is working with

determination, persistence and perseverance to conquer newer horizons and soar higher and higher in the skies of success. At the core of our mission is a dedication to research excellence. We strive to create an environment that encourages and supports cutting-edge research across all disciplines.

### **Major Activities and Achievements**

This academic year has been a dynamic year for its growth and achievement of our students through community enrichment via promotion of ecotourism and rural tourism in villages around the college. College has been improved by the building of several ramps, supportive grills, sustainable toilets. The college is inclusive as the accessibility and brought gold medals. Ms. Manju from B.A. Prog. III year won gold medal in wrestling. The women development cell of the college has conducted a Legal Literacy course and Legal Cell has also been established in the college. Disaster Management training have been done in the college and online conference on Disaster Management for nearly 300 participants with National Institute of Disaster Management (NIDM) and Zone 4 Solutions was organized. The college has successfully framed SES REC (Social Entrepreneurship, Swachhta and Rural Engagement Cell) and constituted 10 working groups for improving waste management, water management, energy conservation, greenery post Covid-19 through Mahatma Gandhi Council of Rural Education, D.H.E, M.O.E, G.O.I. Through VOICES Society, college has initiated a community intervention centre (CIC) for providing psychological and legal support to the women in communities in Bawana.

### **Honours/Distinctions**

Dr. Mamta Sharma, the Principal, has been lauded for her exceptional contributions in the realm of education, earning a Certificate of Appreciation from Zee Hindustan on 19 October 2022. Her support in conducting a 30-hour e-course on "Women in Data" by the Learning Link Foundation from 17 September 2022 to 16 October 2022, earned her another certificate of recognition. Additionally, she was honored with the prestigious Dr. APJ Abdul Kalam Award as Best Principal by Genius Brain and HRD Mission on 20 November 2022. Her dedication to social causes was acknowledged by SAKSHI under the RAKSHIN project to #Stop Child Sexual Abuse, recognized during a webinar by NSS under the Ministry of Youth Affairs and Sports on 9 November 2022. Furthermore, she was felicitated with the "Sashakt Mahila Samman" by Bharat Vikas Parishad on 10 July 2022, at NDMC Convention Centre, Sansad Marg.

Dr. Seema Rani was honored by her alma mater, Aditi Mahavidyalaya, for her distinguished support and contributions as an alumna in 2023.

### **Students with Distinctions**

Swati Saini of B. Com. (Prog) III year was awarded with gold medal in Benchpress and Deadlift Championship at Delhi State Powerlifting, Delhi on 10 February 2022. She also got the Gold Medal for National powerlifting All India open Deadlift and Bench Press Championship at Raigarh on 5-8 January 2023

Radhika of B. A. (Hons) Social Work III year was awarded with Silver Medal in Benchpress and Deadlift Championship on 30 October 2022. She also got Silver Medal in Subrata Classic National Powerlifting and Benchpress Competition at Rajgarh on 8 January 2023. She was awarded with Gold Medal at All India Open Deadlift and Benchpress Championship, Muradnagar on 7 April 2022.

Khushi of B. A. (Prog) III year was awarded with Gold Medal in 1<sup>st</sup> WFI Grand Prix Wrestling Tournament 2023. She also got the Silver Medal in First under 20 National Open Ranking Wrestling Tournament on 26-29 May 2022.

Palak of B. Com. (Prog) I year was awarded with Gold Medal at 12th National Junior and Sub Junior Para Athletics Championship, Gujarat on 27-29 January 2023

Radhika Sharma of B.EL.ED III year was awarded with Gold Medal at Delhi State Powerlifting, Bench Press and Deadlift Championship, Delhi on 12 February 2022

### **Publications**

Sharma, M., Sharma, B., **Shukla, S.**, Rattan, R., Fatima, M., Goel, M., Bhat, M., Dutta, S., Ranjan, R.K., (2022). Antimicrobial Agents Based on Metal Complexes: Present Situation and Future Prospects. *International Journal of Biomaterials*, 2022(ID 6819080), 21.

Sharma, M., Bahmani, S., Sawariya, M. D. (2023). Legal Advocacy for all Genders in Media Practices: An Inclusive Approach for Future Social Work Profession. *Research Review International of Multidisciplinary Volume*, 8 (3) (2455-3085), 266-272.

Sharma, M., Bahmani, S., Swariya, M. D. (2022). Volunteerism, Crisis Management, and Intervention in Covid-19 pandemic: A case study of Jeevan Rakshika Initiative. *Indian Journal of Development Research and Social Action*, 18(1) (0973-3116), 45-56.

Rani, S., Neeraj., Anjali. (2022). Relapse in Drug Addicts: A Study of Drug Rehabilitation Centre in LNJP Hospital. *Journal of Research in Humanities and Social Sciences*, 10.

Rana, N., Kaur, R. (2022). Is Gender Diversity Significant in Affecting Financial Performance of a Firm? The Case of Indian Automobile Sector. *Journal of Commerce and Trade*, 17(0973-4503 ISSUE 1), 8.

Kumar, N. (2022). Representation of Identity through Narrativization of Food in Julie and Julia. *Litinfinit Journal*, IV (2582-0400), 71-82.

### **Seminars Organized**

Seminar entitled ‘Investment and Depository (Interactive & Awareness Session)’ was presented by Dr. Shikha Gupta, Course Coordinator, CDSL on 17 September 2023.

Seminar entitled ‘Unlocking the Potentials of Intellectual Property (Panel discussion)’ was presented by Mr. Ajay Singh Rajawat, Project Director, SASTRA Rashtriya University, Ministry of Home Affairs on 06 October 2022.

Seminar entitled ‘Lecture series, Entrepreneurship Mindset and Actions’ was presented by Mr. Piyush Singhal, CEO and Director at Jagannath Polymers Pvt. Ltd on 08 October 2022.

Seminar entitled ‘How to Crack Government Exam’ was presented by Ms. Purna Chauhan, HR expert from TIME Education, interactive live session on 21 January 2023.

## **Conferences Organized**

Conference on 'Renaissance of Resilience, re-emergence, strengthening and re-building of the nation' and sponsored by Indian Council of Social Science Research (ICSSR) was organized on 19 January 2023.

## **Seminar/Conference Presentations**

Prof. Mamta Sharma presented a paper entitled 'The Emergence of Helplines as Innovative and Effective Tools during Covid-19 and Beyond' in the National Conference on Local Governance in India @ 75: Issues, Challenges and Contemporary Developments organized by Centre for the Study of Law and Governance, Jawaharlal Nehru University on 25-26 March 2023.

Prof. Mamta Sharma presented a paper entitled 'The Emergence of PPP as an Innovative Venture in Higher Education' in the National Seminar on Innovation in Higher Education through Public Private Partnership organized by Cluster Innovation Center, University of Delhi organized at Conference Centre from 13-15 March 2023

Prof. Mamta Sharma presented a paper entitled 'Adolescent Mental Health: Issues and Coping Strategies' in the ICSSR funded Conference on 'Reconnaissance of Resilience, Re-emergence, strengthening, Re-building of the Nation' organized from 19-20 January 2023

Prof. Suniti Datta presented paper on 'Sant Meerabai Vayaktitav Aur Krititav' at Vrindavan E- Conference organized by the Chaitnay Prem Sanstaan Vyanjana Art and Culture Society on 7-8 October 2022.

Prof. Neenu Kumar presented a paper on 'Lending a Helping Hand: India and the Project of Peace Building' at an International Conference on India as a Global leader in Peace Building organized by Aditi Mahavidyalaya, University of Delhi and Media Adhyayan Kendra, New Delhi at Bharatiya Vidya Bhavan, New Delhi on 27 June 2022.

Dr. Nitu Rana presented paper on 'Role of Socially Responsible Business Practices in India for Peacebuilding and Conflict Management' in an International Conference on India as a Global Leader in Peace Building organised by Aditi Mahavidyalaya, University of Delhi in collaboration with Media Adhyayan Kendra (New Delhi) and sponsored by Indian Council of Social Science Research (ICSSR) on 27 June 2022.

Dr. Seema Rani presented a paper entitled, 'Bhagavad Gita and Its Implications in Social Work Education and Practice: An Analysis' in an International Gita Seminar organized by Kurukshetra University Kurukshetra in November 2022.

## **Other Inter-Institutional Collaboration**

Department of Commerce in collaboration with SEBI, and CDSL organized a visit to the Trade Fair, Pragati Maidan for the Investor awareness program by SEBI, NSE, and CDSL on Sunday, 20 November 2022. Department in collaboration with the training partners "N.I.I.T. Foundation" introduced a 30 hours short term course titled "Cyber Security Essentials" in an online mode for the students in the month of January 2023. An interactive workshop on "CYBER SECURITY" was organized by the same department in collaboration with Shri Kartik Bhardwaj, Master trainer - NIIT foundation on 16-17 January 2023.

A Workshop on Air Quality in collaboration with Lung Care Foundation under the aegis of Delhi Effective Education and Pedagogy Cluster on 11 January 2023 in the Reading Hall of the college.

Department of social work organized a youth talk on health and wellness in collaboration with the Indo Global Social Service Society on 24 January 2023, for social work students. Ms. Jyoti (Project Coordinator, Indo Global Social Service Society).

### **Number and percentage of students placed**

Number of students placed: 8

Number of students placed for Internships: 19

### **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment: 19

### **Extension and Outreach Activities**

Adoption of villages under “Unnat Bharat Abhiyan”- Auchnadi village, Harewali village, Daryapur Kalan, Sultanpur Dabas, Sannoth village. A number of activities such as street plays, rallies (cleanliness, single use of plastic, HIV AIDS, sensitization towards differently able), children day celebration, participatory rural appraisal (PRA) with 85 students and 10 teachers in all the five villages.

### **Library Development**

Library Development: One hundred seventy-two (172) new books were added in this academic session. Computers were also installed. The automation of library is under process.

### **Faculty Strength**

Total number of faculty: 89

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 35,59,00,000 /-

Grants Utilized: Rs. 31,46,00,000 /-

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## **AHILYA BAI COLLEGE OF NURSING**

### **Brief history of the College**

Ahilya Bai College of Nursing has a glorious journey from School of Nursing to College of Nursing. School of Nursing is an integral part of Lok Nayak Hospital and was established in the year 1936 with intake of 15 students in order to fulfil the requirement of nurses in the hospital.

With improving health infrastructure and changing demand of health care services, School of Nursing, became one of the largest Schools of Nursing in Delhi under the Delhi administration with intake of 100 students per year. School was also upgraded to College of Nursing in the year 1993 by Shri Madan Lal Khurana on 30 May 1994 and named as Lok Nayak Jai Prakash Narayana College of Nursing and later it was renamed as Ahilya Bai College of Nursing after the name of “AHILYA BAI” the Holkar Queen of the Maratha Malwa kingdom “Rajmata Ahilyabai”. The new naming ceremony was graced by Dr. Harsh Vardhan in the year 1996.

### **Major Activities and Achievements**

Department of continuing nursing education started at Ahilya Bai College of Nursing during the academic session 2022-23 under the chairmanship of Dr. Suresh kumar (MD. LNH) and Mrs. Ellen Beck (CNE Coordinator, Vice-Principal ABCON)

### **Students with Distinctions**

Tanishka Kandari and Anjali Choudhari were the Semester VIII toppers.

### **Publications**

Kashyoti, U. (2022). Breast feeding - Importance in early development of immune system. *Journal of communicable diseases*, 54(2), 1-3.

### **Seminars Organized**

Seminar entitled, ‘Neurophysiology & Epidemiology of PAIN’ was delivered by Dr. Suresh Kumar, on 15 December 2022.

Seminar entitled, ‘Epidemiology of mental illness’ was delivered by Ms. Ellen Beck, Vice-Principal on 7 October 2022.

Seminar entitled, ‘Levels of prevention’ was delivered by Ms. R.B. Rojha, Associate Professor on 8 October 2022.

Seminar entitled, ‘Assessment of Pain’ was delivered by Dr. Shobha Gusain, Sister Tutor, Assessment of Pain on 16 December 2022.

Seminar entitled, ‘Faculty Empowerment Strategies’ was delivered by Ms. Ritu Singh, Sister Tutor on 24 February 2023.

### **Conferences Organized**

A Conference was organized on ‘Preventive Psychiatry’ and sponsored by Ministry of Health & Family welfare, Govt of India on 7 October 2022.

A Conference was organized on ‘Pain management’ and sponsored by Ministry of Health & Family welfare, Govt of India on 15 December 2022.

A Conference was organized on ‘NAAC accreditation of nursing institutions’ and sponsored by Ministry of Health & Family welfare, Govt of India on 24 February 2023.

### **Other Inter-Institutional Collaboration**

Ahilya Bai College of Nursing is designated as Study Center (29006P) of Indira Gandhi National Open University, Maidangarhi, New Delhi for running Post Basic B.Sc. Nursing Programme.

Ahilya Bai College of Nursing is collaborating with Ministry of Health & Family welfare, Govt of India for Development of Nursing Services in India.

College incollaboration with Maulana Azad Medical College celebrated the Pharmacovigilence Week during the month of September 2022.

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## **AMAR JYOTI INSTITUTE OF PHYSIOTHERAPY**

### **Brief history of the College**

Amar Jyoti Institute of Physiotherapy (AJIPT), affiliated to University of Delhi is known for providing to its students a conducive environment and facilities, for the development of skill and competencies – both clinical as well as academic. Our educational ecosystem is driven by a team of dedicated and talented faculty who work collaboratively, resourcefully and creatively to enhance the academic standards of the Bachelor’s and Master’s programs. We take pride in our community outreach programs and research endeavours. The Institute completes a successful journey of 22 years and our quest to achieve excellence will continue.

### **Major Activities and Achievements**

Amar Jyoti Institute of Physiotherapy received certificate of appreciation for volunteering and providing services during the Yashoda Half Marathon, Kaushambi, Ghaziabad II edition on 13 November 2022.

Amar Jyoti Institute of Physiotherapy has actively participated in singing/ dancing/ acting/ rap/ comedy/ fitness challenge / fashion show during PHYSIO Talent Show and Fiesta organised by The Savara Foundation for the arts on 12 March 2023.

Brain teasers: An inter house Quiz competition was organized on 13 and 14 March 2023.

Zenith: The fresher’s party was organized on 5 November 2023.

Ripples: A Sports and cultural event was organized on 9 - 11 March 2023.

Self defence Workshop: One-day workshop on “Self Defence” was conducted on 31 January 2023 by a team of officers of Special Police Unit for Women and Children (SPUWAC). They demonstrated various

techniques of Attacks, Blocks and ways to deal with some troublesome situations followed by participation of students to perform and practice the techniques.

### **Honours/Distinctions**

Dr. Jeyanthi. S presented a Research Paper and received a second position in Professional category for the topic “Efficacy of School Based Exercises on Muscle Endurance, Flexibility and aerobic capacity of children with ADHD compared to typically Developing Children” during the National Conference organised by Indian Association of Physiotherapist held on 6 November 2022.

Dr. Jeyanthi. S was invited to deliver a talk entitled “Diaphragmatic breathing, Pelvic floor control and back pain – have we ignored important contributors to its rehabilitation?” in a National Conference on SIPCON held on 30 April 2022 at Chennai.

Dr. Jeyanthi. S was invited to deliver lecture on “Ergonomic advices and strategies for police officers” organised by Indian Association of Physiotherapist held on 11 September 2022 at Jyoti Nagar Police Welfare Association.

Dr. Mansi Mittal presented a paper entitled “Impact of the COVID – 19 pandemic on the social and educational aspects of Indian student lives” during the 6<sup>th</sup> Annual Conference of Society of Indian Physiotherapists held on 30 April 2022 at Chennai.

Dr. Nidhi Singh conducted a one-day hands on workshop on ‘Assessment of Gait’ during the 8<sup>th</sup> Annual Rohtak Medical students conference’ (ARMSCON) on 14 October 2022 held at Rohtak. She was also invited to deliver lecture entitled “Clinical gait analysis: low tech and High-tech strategies” in a National Conference, SIPCON held in May 2022 at Chennai.

Dr. Sampada Jahagirdar was invited to deliver a talk entitled “Significant contributions of physical, psychological, and social factors to the fear of falls” at the 7<sup>th</sup> Annual Conference of the Society of Indian Physiotherapists held at Bhubaneswar, Odisha held on 24 March 2023.

Dr. Prerna Mohan Saxena was invited to deliver a lecture on “Managing balance problems linked to vestibulopathies in chronic diabetics” during the 7<sup>th</sup> Annual Conference of the Society of Indian Physiotherapists held in March 2023 at Odisha.

### **Students with Distinctions**

‘Piyush Trivedi’ award for the most meritorious student was awarded to Ms. Ayushi Goel, of BPT fourth year.

‘Kaushalya Mehta’ award for the meritorious student who belong to economically weaker section was awarded to Ms. Eshita of BPT second year.

‘Dr. Kamla and G.H. Gidwani’ award for academic excellence in MPT - Musculoskeletal and Neurology was awarded to Ms. Sonali Tushamer and Ms. Sneh respectively.



Ms. Shivani Ahuja of MPT (Musculoskeletal Physiotherapy) and Ms. Mridula Dua of BPT received BEST ACADEMIC PERFORMER Award as Master of Physiotherapy student in Physiotherapy Conference on 4 September 2022 at Maharaja Hall, Santosh deemed to be University, Pratap Vihar, Ghaziabad.

## **Publications**

Meena,R.L.,Kumar,T., Singh,S. (2022). Physical Therapy in Hemiplegic Shoulder Pain: A Systematic Review.*Journal of Clinical and Diagnostic Research*, 16(4): 1-5.

Jahagirdar,S., Bansal,K., Parasher,R.K. (2022). Impact of Inclusive Education with Holistic Approach on Self-Esteem, Self-Concept and Attitude towards Disability in Indian Elementary School Children.*International Journal of Enhanced Research in Educational Development*, 10(5), 14-24.

Gupta, S., Bansal,K., Saxena,P. (2022). A clinical trial to compare the effects of aerobic training and resistance training on sleep quality and quality of life in older adults with sleep disturbance. *Sleep Science*, 15(2), 188-195 .

Singh,N., Gu gnani,A., Parasher,R.K. (2022). A Framework for Cognitive Rehabilitation for Cancer Survivor Reporting Cognitive Deficits: A Systematic Review. *NeuroQuantology*, 20(10), 9432-9442.

Singh,N., Gu gnani,A., Parasher,R.K. (2023). A Cross-Sectional Study of deficits in Quality of life associated with post-chemotherapy in Indian Cancer Survivors. *NeuroQuantology*, 21(1), 626-632.

Sethi, P, Desh,D., Chhabra,M., Sampada, S. J., Nandini,D . (2023). Infection transmission factors and their perception amongst healthcare workers infected with SARS-CoV-2 in a tertiary care hospital . *Indian Academy of Clinical Medicine*, 24(1), 6-11.

Singh,N., Gu gnani,A., Parasher,R.K., Mehta,P., Shankar Sood,S. (2022). Comparison between subjective and objective assessment of chemotherapy induced peripheral Neuropathy in Cancer survivor: A Case Study. *Journal of Pharmaceutical Negative Results*, 15(5), 2503-2505.

Bansal,K., Saxena,P.M. (2022). Development and validation of a questionnaire - to find usage patterns and beliefs about therapeutic ultrasound among physiotherapists in Delhi NCR. *International Journal of Science and Research archive*, 10(2), 321-325.

Jeyanthi, S., Parasher,R.K. (2022). Development and validation of a screening tool to determine the prevalence of urban women predisposed to Poly Cystic Ovary Syndrome (PCOS). *Journal of Society of Indian Physiotherapists*, 6(2), 77-78 .

## **Research Projects**

Project entitled “Relationship of core muscle performance with static and dynamic balance in young adults” in 2021-2023. Principal Investigators are Dr. Tarun Kumar, Dr. Jeyanthi S, and Dr. Nidhi Singh.

Project entitled “Prevalence of proximal strength deficits and efficacy of structured training program on knee Osteoarthritis” in 2022-2023. Principal Investigators are Dr. Tarun Kumar, Dr. Sandeep Singh, Dr. Raju K Parasher.

Project entitled “EMG analysis of scapular muscles during hand grips activity in individuals with and without Scapular Dyskinesia: A comparative study” in 2022-2023. Principal Investigators are Dr. Jeyanthi S, Dr. Aashish Yadav and Dr. Avni Joshi.

Project entitled “Efficacy of Low Level Laser Therapy on hair growth among individuals with Androgenetic Alopecia and Alopecia Areata: A randomized controlled trial” in 2022-2023. Principal Investigators are Dr. Aashish Yadav, Dr. Sanjib Kumar Das, Dr Raju K Parasher.

Project entitled “Efficacy of Galvanic Vestibular Stimulation (GVS) and Vestibular rehabilitation exercises on balance in Diabetic patients with Vestibular dysfunction” in 2022-2023. Principal Investigators is Dr. Perna Mohan Saxena.

### **Seminars Organized**

Seminar entitled 'Core concept of cyriax approach, Musculoskeletal Physiotherapy' was delivered by Dr. K Ramprabhu, Assistant Professor at Pt. Deendayal Upadhyaya on 16 March 2023.

Seminar entitled 'Healing in Sports Injuries' was delivered by Dr. Shilpa Jain, Associate Professor and Head, School of Physiotherapy, DPSRU on 16 March 2023.

Seminar entitled 'Sensory Integration, Neurological Physiotherapy' was delivered by Dr. Nalina Gupta, Professor, College of Physiotherapy, Sumandeep Vidyapeeth (deemed-to-be University) on 17 March 2023.

Seminar entitled 'Various methods to Immigrate to Canada' by Dr. Gowtham Pidaparth on 1 April 2022.

### **Conferences Organized**

Workshop was organized on ‘Understanding the role of vestibular and visual system in neurodevelopment disabilities’ which was conducted by Dr. Asha Chitnis on 9 April 2022.

SIPTALK was organized on ‘Creating Effective Learning Environment using Multiple Intelligence’ by Dr. Amit Sharma on 13 May 2022.

### **Seminar/Conference Presentations**

Dr. Jeyanthi. S presented a paper entitled “Comparison of Maitland and Mulligan’s manual therapy technique for treatment of cervicogenic vertigo- A narrative review” at Jamia Millia Islamia University on 6 November 2022.

Dr. Jeyanthi. S presented a paper entitled “To evaluate the physical fitness of college students in COVID-19 Pandemic” at Jamia Millia Islamia University on 6 November 2022.

Dr. Jeyanthi. S presented a paper entitled “Effect of WBVT on balance in elderly” at Jamia Millia Islamia University on 6 November 2022.

Dr. Jeyanthi. S presented a paper entitled “Physical activity and fitness in children with cerebral palsy” at Jamia Millia Islamia University on 6 November 2022.

Dr. Jeyanthi. S presented a paper entitled “Moving past breast cancer with physical therapy: A narrative review” at Jamia Millia Islamia University on 6 November 2022.

Dr. Jeyanthi. S presented a paper entitled “Importance of transversus abdominis in physiotherapy- A narrative review” at Jamia Millia Islamia University on 6 November 2022.

### **Number and percentage of students placed**

Percentage of students placed: 70%

### **Extension and Outreach Activities**

Community Based Physiotherapy Camps was conducted along with Internship students. The camps were conducted at various economically and socially weaker areas in East Delhi and the response was excellent. A total of four camps were organized during the year 2022-23. There were more than fifty patients who were assessed and remedial home exercise were prescribed.

The following camps conducted in this academic session 2022-23:

Free bone and joint awareness camp in Vishwas Nagar, Delhi on 21 May 2022.

Bone health awareness camp in Nand Nagri, Delhi on 30 July 2022.

Women’s health awareness camp in Nathu Colony, Shahdara, Delhi on 3 September 2022.

Physiotherapy awareness camp in Jagatpuri, Delhi on 10 September 2022.

The college conducted Physical Fitness Camp in Amar Jyoti School, Delhi on 8 September 2022 and also a Physical Fitness Camp in Vivekanand School, Delhi on 17 September 2022

### **Library Development**

Total no. of books in library: 4554

BPT additional Books: 41

Number of Journals: 6

### **Faculty Strength**

Total Number of faculty: 14

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## **ARYABHATTA COLLEGE**

### **Brief history of the College**

Established in the academic year 2014-15, Aryabhatta College is an emerging Institution of Higher Education in India. A constituent college of University of Delhi, it is named after the earliest Indian mathematician, Aryabhatta, in honour of his unparalleled mathematical and astronomical contributions, as well as his visionary approach.

Living up to its treasured motto, the college has been devotedly working towards the creation of an educational space that believes in the wholesome impartation of empirical knowledge. Located amidst the picturesque Aravali range, Aryabhatta College is being distinctly recognised for its achievements in extracurricular activities along with its academic performance. Students' enthusiastic engagement in a myriad of cultural and sports events, conducted throughout the year, allow for their holistic development. Many amongst the college's growing faculty are distinguished authors and prominent researchers.

### **Major Activities and Achievements**

College infrastructure witnessed a massive improvement during the year 2022-23. Three additional floors were built on the under-construction permanent academic and office buildings. Interior works are underway, and these buildings shall be of use during the next academic session. Some of the additions include: Solar power Plant with a capacity to generate 180 KW of electricity, one elevator each for the two buildings, remodelling of the sports field, a roof over the canteen dining area and designing and creation of the Student Activity Room. Other augmentation concerns creation of an Incubation Centre, a Language Laboratory-cum-recording room and a room designated for NCC and NSS.

College was credited with A+ with CGPA of 3.38 on a four-point scale in its first cycle of NAAC assessment.

College is ranked within top 100 colleges of India as per India Today Ranking 2022: 77<sup>th</sup> for the B.Sc. Programmes, 78<sup>th</sup> for the Art Programmes and 82<sup>nd</sup> for the Commerce Programmes.

College has been selected as one of the centres of Bharatiya bhashas – 'Sindhi Bhasha Kendra' for two years under the prestigious initiative by Indian Knowledge Systems (IKS), Ministry of Education, GOI.

Seven Delhi BN NCC two platoons (108 seats) were awarded to Aryabhatta College.

IGNCA and its partners gifted a 'Students Activity Centre' to Aryabhatta College in lieu of the research partnership between IGNCA and Aryabhatta College for Azadi Ka Amrit Mahotsav project MoU signed with of the Ministry of Culture, Govt. of India.

College has been ranked as the 10<sup>th</sup> Best Festival for Financial Awareness at national level by UNSTOP Awards.

Aryabhatta College is recognized a publication house.

### **Honours/Distinctions**

Dr. Devender Singh was promoted as Associate Professor in college and later was also selected as Associate Professor in the Department of English, University of Delhi.

Dr. Vibhuti Gaur was selected as Associate Professor in IGNOU.

Dr. Shiv Poojan Pathak joined Dr. Ambedkar International Centre, Ministry of Social Justice and Empowerment, Government of India, on deputation basis.

Ms. Aakansha Singh was awarded with Commendable Research Award worth Rs. 50,000/- by Indira Gandhi Delhi Technical University for Women, Delhi on 15 March 2023 for a journal publication in the year 2022.

Dr. Sangeeta Kumari has been nominated for Sharda Awards by Zakir Hussain Centre for Educational Studies, JNU for her thesis entitled “Development of Women’s Education in Delhi 1911-47”.

Dr. Shivani Raheja received the Honorary Star Alumni Award for excellence in research for the year 2022 by Delhi Institute of Advanced Studies, GGSIP University in July 2022.

Dr. Ruchi Sharma received award for ‘Ingenious Research Scholar in Commerce’ by Ratnakar Prasad Educational Society registered with NITI Aayog.

Dr Ruchi Jain was awarded the best woman faculty of the year 2022, by the Scholars Academic and Scientific Society (SAS), Guwahati.

### Students with Distinctions

Name of Students	Class
Tanya Yadav	B.Sc. (Hons.) Mathematics
Vaibhav Maheshwar	B.Sc. (Hons.) Computer Science
Gayathri Vemuri	B. A. (Hons.) Economics
Shubham Sehgal	B. Com.(Honours)
Khushi Singhal	BMS (Bachelor Of Management Studies)

### Publications

Ahuja, O., Çetinkaya, A., Jain, N. K. (2022) Mittag-Leffler Operator Connected with Certain Subclasses of Bazilevic Functions. *Journal of Mathematics*. 1-7.

Kumar, S., Prasad, R. P., Nishad, C., Tiwary, A. (2023). Analysis and Chaos Synchronization of Genesio–Tesi System Applying Sliding Mode Control Techniques. *International Journal of Dynamics and Control*, 11, 656-665.

Khan, I., Kumar, N. (2023). Solving Hesitant Fuzzy Linguistic Matrix Game with Regret Theory. *Granular Computing*. 8(6):1-16.

Kumari, S. (2023). Contextualizing Colonial Education from a Historiographical Perspective in the Nineteenth Century: Institutions and Policies. *History and Sociology of South Asia*. 15(1-2).

Kumar, P. (2023). ‘डॉ बी आर अंबेडकर पर दक्षिण पंथी इतिहास लेखन: अरुण शौरी का एक आलोचनात्मक अध्ययन’ Shodh Drishti.

Singh, V., Prasad, R. B. (2022). Relationship between Social Media Addiction, Self-esteem and fear of missing out. *The International Journal of Indian Psychology*, 2(10).

Sinha, M., Sangwan, T. (2022). Comparative Analysis of India, China, the United States and the United Kingdom: Rising Leadership of India in Climate Change (1750 – 2020). *Prabandhan: Indian Journal of Management*, 15(9).

Sharma, M., Kumar, S., Jain, N. K. (2022). Differential Subordinations for Functions with positive real part using admissibility conditions. *Asian-Eur. J. Math.*, 15 (04), 2250066.

Thangbiakching. (2022). Mindfulness-based Interventions for Weight Loss: a Review of Literature. *Journal of Psychosocial Research*, 17(2), 359-370.

## **Journals**

Mind over Matter - Journal published annually.

## **Research Projects**

Project sanctioned by University of Delhi under the Institution of Eminence Scheme for Rs 2,00,000/-

Project entitled, ‘A Machine Learning Framework for Financial Fraud Forecasting’, was sanctioned by Indian Council of Social Science Research (ICSSR) in 2022 for Rs. 5,00,000/-.

## **Patents Filed/Granted**

Intelligent Financial Risk: Early Warning Model Development Using Kernel Function Adjustment Algorithm and Data Digitisation during the year 2022-23

## **Seminars Organized**

Seminar entitled, ‘Financial Literacy’ was delivered by Ms. Shikha Mittal, Founder Be –Artsy on 14 march 2023.

Seminar entitled, ‘Union Budget: an Economist Perspective’ was delivered by Ms. Yuvika Singhal, Economist, QuantEco Research on 16 February 2023.

Seminar entitled, ‘Evolving Role of Media: Opportunities and Challenges Machine Learning’ was delivered by Ms. Pooja Upadhyay a Journalist, Urban Update on 15 June 2022.

Seminar entitled, ‘From finite to infinite Horizon Optimal Control Problems in Discrete Time, optimal control problems in discrete time and application in various fields’ was delivered by Prof. Agnieszka Wiszniewska, Institute of Applied Mathematics and Mechanics, University of Poland on 20 February 2023.

Seminar entitled, ‘Vishwa Guru Bharat – Use of Indian Knowledge in Developing Interventions and Innovations for Contemporary India’ was delivered by Shri Mukul Kanitkar on 13 December 2022.

## **Seminar/Conference Presentations**

Ms. Aakansha Singh, presented a paper entitled, ‘On solving transportation problem with fermatean fuzzy numbers’ in an International Conference on ‘Optimization, Learning and Analytics in Business’ organized by Department of Mathematics, Heritage Institute of Technology, Kolkata, India and Operational Research Society of India (Kolkata Chapter) from 15-17 December 2022.

Mr. Binoy Bhushan Agarwal presented a paper entitled, ‘Toxic Self: Race, Gender and Violence in William Faulkner’s Dry September’ during the Interdisciplinary Colloquium organized at the Centre for Postcolonial and Gender Studies at the University of Trier, Germany on 7-8 July 2022.

Dr. Krishna Murari presented a paper entitled, ‘Buddhism’ at the National Seminar on ‘Vishwa Guru Bharat: Use of Indian knowledge in developing interventions and innovations for contemporary world’ organized by the college during 13-14 December 2022.

Dr. Gufran Malik presented a paper entitled, ‘Some Direct Theorems on beta type Szasz Mirakian Operators’ in an International Conference on ‘Analysis and its Applications ICAA 2023’ organized by Department of Mathematics, Shivaji College, University of Delhi on 27-28 February 2023.

Dr. Rajendra Dayal presented a paper entitled, ‘Post-Partition India: Ambedkar’s Imaginary of Nation and Savarkar’s Swaraj’ at the National Seminar on ‘Dr. B.R.Ambedkar: Context, causes, consequences of partition and the challenges for contemporary India’ organized by Dr. Ambedkar International Center on 22 February 2023.

Dr. Satish Kumar Jha presented a paper entitled, ‘Federal Predicament or Consociational Hope: Decoding Nation-Democracy Dialogue in India’ in a Workshop organized by CPR- CSH CSDS on 29 August 2022.

Dr. Thangbiakching presented a paper entitled, ‘Yoga and Meditation in Health Promotion and Intervention: A Literature Review’ at the ICSSR sponsored National Seminar on Vishwa Guru Bharat- Use of Indian Knowledge in developing intervention and innovation for contemporary World’ organized by the College on 13 December 2022.

Dr. Varsha Singh presented a paper entitled, ‘Avidya to Moksha – Learning from Yogic and Vedantic Approaches’ at the ICSSR sponsored National Seminar on Vishwa Guru Bharat- Use of Indian Knowledge in developing intervention and innovation for contemporary World’ organized by the College on 13 December 2022.

Dr. Shivani Raheja presented a paper entitled, ‘Spiritual Intelligence, Happiness and Success of Students in Select Higher Education Institutions of University of Delhi’ during the two day Global Conference on ‘Emerging Technologies, Business, Sustainable Innovative Business Practices & Social Well-Being’ co-organized by Confab 360 Degree and Swami Vivekananda Institute of Science & Technology, Kolkata, West Bengal and held on 10-11 December 2022.

### **National/International MoUs Signed**

MoU signed for Research partnership between Indira Gandhi National Centre for Arts (IGNCA) for Azadi Ka Amrit Mahotsav Project.

MoU signed with of the Ministry of Culture, Govt. of India.

### **Other Inter-Institutional Collaboration**

Aryabhatta College, University of Delhi in collaboration with Shiksha Sanskriti Utthan Nyas and Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi, organised a one week Online Faculty Development Programme on ‘Significance of Vedic Mathematics in Modern Era’ from 5-10 December 2022.

Nibs and Brushes in collaboration with Rotaract Club of Delhi, Pegasus organized a painting competition. It also joined hands with a non-profit organization ‘Sarvahitey’ that works for the welfare of underprivileged children and helped in painting the walls of the children library at the NPO to help create a beautiful and engaging environment for the children. The society made a major contribution and was invited by IGNCA for a three day long festival entitled ‘Deepotsava’.

A workshop on film making was conducted by Picwic, the Photography Society in collaboration with Apeejay Institution of Mass Communication (AIMC) and a three day festival under the aegis of IGNCA whereby the society was invited to organize the Deepotsava.

### **Number of Companies visited for campus recruitment**

Total number of companies visited: 40

### **Extension and Outreach Activities**

College has initiated Peer-Support Programme – SAHAYANA under Department of Psychology where students are trained by experts to be Peer supporters and help distressed students in college.

College has duly established Institution's Innovation Council (IIC) in the campus, under the aegis of Ministry of Education and has been playing an instrumental role in architecting and driving the entrepreneurial ecosystem in the campus.

Dr. Devender Singh, Associate Professor in the Department of English, University of Delhi, instituted a Smt. Pista Devi Memorial Fellowship and contributed an amount of Rupees Three Lakh towards Endowment Fund of Aryabhatta College that would help in the promotion of education for all.

### **Faculty Strength**

Total number of faculty: 84

### **Financial Allocation and Utilization**

Total Grant sanctioned: Rs. 44,49,21,000/-

Total Utilized: Rs. 31,03,90,117/-

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## ATMA RAM SANATAN DHARMA COLLEGE

### Brief history of the College

Atma Ram Sanatan Dharma (ARSD) College a co-educational constituent college of the University of Delhi was established on 3 August 1959 by Sanatan Dharma Sabha based in Delhi. The visionaries Sh. Mela Ram Jaggi, Sh. Ganga Ram Gujral Sh. Lala Devi Ditta Shah Talwar and Shri Atma Ram Chadha were members of the college governing body in the year 1968. ARSD College is an esteemed institution that has earned recognition for its commitment to excellence in education. Excellence, Equity, and Inclusivity are the founding principles of the college. During the sixty years since of its inception, ARSD has emphasized the creation of a progressive and egalitarian community which is focused on continuous improvement. College's exponential growth over the past few years is geared towards the facilitation of sustainable and self-sufficient systems. The promotion of women's education and ensuring a barrier-free, non-discriminatory, and supportive ecosystem for all members of the college are, therefore, a priority at ARSD College. The motto of the College, Tejasvi-naav-adhitam-astu, has been taken from the Taittiriya Upanishad.

### Major Activities and Achievements

College is accredited with A++ and the highest score of 3.77 in colleges of University of Delhi by the NAAC. College takes great pride in upholding rigorous quality standards in all aspects of our academics.

ARSD has also achieved All India 6<sup>th</sup> rank in the NIRF 2023 by the Ministry of Education. Our accreditation and consistent rise in the NIRF rankings serve as a testament to our unwavering dedication to providing a superior educational experience.

### Honours/Distinctions

Prof. Sunita Bhagat has been awarded with the 'Teaching and Research Excellence Award' from University of Delhi in March 2023. She is also selected as a Fellow of Institute of Eminence by University of Delhi in 2022.

Dr. Anjali Sharma Kaushik selected as a Fellow of Institute of Eminence by University of Delhi, 2022.

Dr. Achingliu Kamei has been a champion runner and dedicated mentor in numerous marathons and races throughout 2023. Have been twice first prize winners, in their age category, at the Sundown Run, Dwarka Half Marathon along with top three finishes in the IFFCO Tokio Starry Nights Marathon and New Gurugram Half Marathon. Beyond running, Dr. Kamei was also felicitated with Dr. Sharvapali Radhakrishnan Award in 2022.

Dr. Ashok was nominated as a Member, Advisory Committee, Commission for OBC, Govt of NCT Delhi for a period of one year. He is recipient of a Research Excellence Award for Commendable Research during Ph.D. at the Department of Applied Physics, Delhi Technological University, Delhi, for the year 2022.

Mr. Dilip Kumar Gupta was awarded with 'Best Teacher Award 2022' by Thamitz Amuthu Trust on the occasion of Dr. A. P. J Abdul Kalam's Birthday on 15 October 2022.

## Students with Distinctions

Himanshu Nadalof B.A. (Hons) Political Science II year, a Para Athlete, was awarded a cash prize of Rs.10,000/- by the college and was recognized as the 'Best Sports Person' of the year.

Sudipto Ghosh of B.Sc. (Hons) Computer Science III year awarded with a gold medal at 99<sup>th</sup> annual convocation for securing first position in the University Semester Examination.

Harsh Dahiya of B.Sc. (Hons) Physical Science with Chemistry has been selected in the Indian Army as Commissioned Officer, Scored first rank in 2023.

Lucky Sharma of B.Sc. (Hons) Computer Science got selected as Lt. in the Indian Army in 2022-23.

## Publications

Vishvakarma, V.K., Singh, M.B., Jain, P., Kumari, K., Singh P. (2022). Hunting the main protease of SARS-CoV-2 by plitidepsin: Molecular docking and temperature-dependent molecular dynamics simulations. *Amino Acids*, 54(2), 205-213.

Kumar, A., Kumar, D., Kumar, R., Singh P., Chandra, R., Kumari, K. (2022). DFT and docking studies of designed conjugates of noscapines & repurposing drugs: promising inhibitors of main protease of SARS-CoV-2 and falcipar-2. *Journal of Biomolecular Structure and Dynamics*, 40(6), 2600-2620.

Yadav, S., Raman, A.P.S., Meena, H., Goswami, A.G., Bhawna, Kumar, V., Jain P., Kumar, G., Sagar M., Rana, D.K., Bahadur I., Singh P. (2022). An Update on Graphene Oxide: Applications and Toxicity. *ACS Omega*, 7(40), 35387-35445.

Shivesh, K., Alam, I., Kushwaha, A.K., Kumar, M., Singh, S.V. (2022). Investigating the theoretical performance of Cs<sub>2</sub>TiBr<sub>6</sub>-based perovskite solar cell with La-doped BaSnO<sub>3</sub> and CuSbS<sub>2</sub> as the charge transport layers. *International Journal of Energy Research*, 46(5), 6045-6064.

Raj, A., Kumar, M., Kumar, A., Laref A., Anshul A. (2022). Investigating the potential of lead-free double perovskite Cs<sub>2</sub>AgBiBr<sub>6</sub> material for solar cell applications: A theoretical study. *International Journal of Energy Research*, 46(10), 13801-13819.

Bhawna, Kumar, S., Sharma, R., Gupta, A., Tyagi, A., Singh, P., Kumar, A., Kumar, V. (2022). Recent insights into SnO<sub>2</sub>-based engineered nanoparticles for sustainable H<sub>2</sub> generation and remediation of pesticides. *New Journal of Chemistry*, 46(9), 4014-4048.

Chandekar, K.V., Shkir, M., Yadav, S.P., Behera, P.K., AlFaify, S. (2022). Facile synthesis of Mn-doped ZnO nanoparticles by flash combustion route and their characterizations for optoelectronic applications. *Journal of Materials Science: Materials in Electronics*, 33(7), 3849-3869.

Sadiq, M., Khan, M.A., Hasan Raza, M.M., Aalam, S.M., Zulfequar, M., Ali J. (2022). Enhancement of Electrochemical Stability Window and Electrical Properties of CNT-Based PVA-PEG Polymer Blend Composites. *ACS Omega*, 7(44), 40116-40131.

Bharti, Kumar, Y., Gupta, M., Sharma, S. (2022). Study of Quantum Capacitance of Pure and Functionalized Nb<sub>2</sub>C and Ti<sub>2</sub>C MXenes for Supercapacitor Applications. *ECS Transactions*, 107(1), 1751-1760.

Patanjali, P., Mandal, A., Chopra, I., Singh R. (2022). Adsorption of cationic dyes onto biopolymer-bentonite composites: kinetics and isotherm studies. *International Journal of Environmental Analytical Chemistry*, 102(19), 8467-8489.

### **Research Projects**

Project entitled 'Predictive online convex optimization' and funded by SERB-Department of Science and Technology for 2022-25 and sanctioned amount of Rs. 22.70 Lakhs.

Project entitled 'New strategies for Regioselective C-H functionalization of Aromatic and Heterometric Precursors' and funded by SERB-DST for 2021-24 and sanctioned amount of Rs. 42.44 Lakhs.

Project entitled 'Archiving Gandhi's Buniyadi School: Towards an Inclusive and Sustainable School System' and funded by Star Innovation Project, University of Delhi during the year 2022 and sanctioned amount of Rs. 18.25 Lakhs.

Project entitled 'Preparation of manganite-ferrite nanocomposites for sensor applications' and funded by CSIR-HRDG for the period 2019-22 and sanctioned amount of Rs. 16.6 Lakhs.

### **Seminars Organized**

International seminar entitled, 'Notion of India: History, Politics and Literature' was delivered by Prof. Dinesh Singh, Chancellor, K.R. Manglam University along with other Professors on 23-24 February 2023.

### **Conferences Organized**

International conference on 'Trends in Federalism: Expanding horizon, Exploring new terrains' was organised by the Department of Political Science in collaboration with the Comparative Federalists Research Group of University of Delhi, Shaheed Bhagat Singh College, Bharati College and Satyawati College on 10 December 2022.

An online 2<sup>nd</sup> International Conference on 'Advanced functional materials and devices' (AFMD-2023) was organised on 15 March 2023.

### **Seminar/Conference Presentations**

Dr. Anjali Sharma Kaushik was invited to present her work entitled 'Electronic Devices based on nanotechnology' during the Physics Society Festival, Kalinidi College, University of Delhi, New Delhi on 6 February 2023.

Dr. Anjali Sharma Kaushik was invited to present her work entitled 'Room temperature thermoelectric generators based on In<sub>2</sub>Se<sub>3</sub> & Bi<sub>2</sub>Te<sub>3</sub> thin films for self-powering devices' at an International Conference

on Electron Microscopy and XII Annual Meeting of Electron Microscope Society Of India (Emsi-2023) organized by Department of Physics and Astrophysics, University of Delhi from 8-10 February 2023.

Dr. Prashant Singh presented a paper entitled ‘Covid prediction and Covid detection via X-Ray Images’ at the 2<sup>nd</sup> International Conference on Advance Computing and Innovative Technologies in Engineering, ICACITE 2022 on 28-29 April 2022.

### **National/International MoUs Signed**

MoU with Inclusive Divyangjan Entrepreneur Association (IDEA): An MoU was signed between Atma Ram Sanatan Dharma College and Inclusive Divyangjan Entrepreneur Association (IDEA), Dwarka, with the object of promoting cooperation in placement workshop, mentorship programs and job fairs for the PwD students.

### **Other Inter-Institutional Collaboration**

Apart from the above mentioned MoU, college has several collaborations:

DBT Science Centre

Centre for Innovation and Entrepreneurial Leadership (CIEL) in partnership with the Ministry of Micro, Small & Medium Enterprises

Star College Scheme of Department of Biotechnology

NPC, GoI for capacity building programmes

NGO Jagruti for recycling waste papers

Society for Disability and Rehabilitation Studies for betterment of differently-abled students

Netaji Subhas University of Technology and Shri Ramswaroop Memorial University, Barabanki to provide more opportunities for students and faculty for enhancing their technical skills and research temperament.

### **Number and percentage of students placed**

Number of students placed: 250

Number of student placed for Internship: 191

Percentage of student placed: 9.86%

### **Number of Companies visited for campus recruitment**

97 companies visited the campus for campus placements

48 companies visited the campus for campus Internships

A separate Job Fair was organized and 95 companies visited the campus

### **Extension and Outreach Activities**

NSS regularly organizes sensitization programs, donation drives, free health check-ups, awareness programs, blood donation camps, cleanliness drives, disaster relief activities during national emergencies, apart from participating in the governmental initiatives such as SVEEP, NSS week, Swacchta Pakhwara etc. NSS has adopted Sriram JJ Cluster under the initiative “SEVADEEP” in collaboration with Connecting Dreams Foundation. Volunteers interacted with SDMC officials addressing water and sanitation issues of that slum.

Enactus ARSD, through its projects, has impacted more than 1500 lives and created 8 entrepreneurs.

Women Development Cell empowered students by creating awareness about socio-political, cultural and legal issues through events like annual self-defence training workshops in collaboration with Delhi Police, gender sensitization workshops and interactive sessions with eminent resource persons.

Equal Opportunity Cell (EOC) works to promote inclusivity on campus by ensuring barrier-free access to all. EOC in collaboration with Help the Blind Foundation, Hong Kong, has been providing financial assistance worth Rs.10,000/- each to six visually-challenged students. College distributed motorized wheelchairs, scooties, and Apple MacBook Air laptops to differently-abled students of University of Delhi as part of its MoU with SDRS.

Dramatics Society demonstrated societal issues through plays and nukkad natak. Rangayan organized street plays and a Theatre Training Workshop for the children of the slums.

College has adopted five villages of South-West Delhi under Unnat Bharat Abhiyan programme to address issues like education, health, sanitation, drinking water, solid waste management, use of renewable energy, etc.

### **Library Development**

Library functions as resource centre for both printed and electronic resources. Apart from textbooks and other reading material, Library also has a large collection of reference sources such as encyclopaedias, dictionaries, atlases, yearbooks, handbooks, among others.

Library procured 1,617 books, 21 periodicals and 30 magazines in the year 2022-23 in various disciplines to fulfil the information needs of user community. The library has a vast collection of 1,23,590 (Approx.) books. The library also received gifted books from various organizations and faculty members etc.

Circulation: Approximately 27,343 student-entires and faculty members visited the Library. Library recorded approx. 18,879 books issued and 17,947 books returned during the period 2022-23. It has an up-to-date Textbook Section in addition to a Students’ Aid Fund section.

Online Resources: Library provides access to various e-resources subscribed by the University of Delhi. It has also subscribed the National Library and Information Service Infrastructure for Scholarly Content (NLIST) project of INFLIBNET. It provides the remote access to various e-resources. Library has also registered with Developing Library Network (DELNET) to provide books on loan to faculty as well as students along with online resources.

Automation: Library uses SOUL 3.0 Integrated Library Management Software to automate housekeeping operations. Library software facilitates OPAC (Online Public Access Catalogue) module, enabling users to access their required documents. Library has installed electronic security system called Radio frequency identification (RFID).

Infrastructure: Library is equipped with 35 computers to access the e-resources of DULS resources, NLIST resources, DELNET, other open access resources. Two computers are available for Online Public Access Catalogue (OPAC) separately. Library has a separate section for Divyang students with computers with useful and relevant equipments (JAWS software, INDO-NVDA software, CDs, Daisy Reader etc.). Seating capacity of the library is 130 for the students and 30 faculty members.

Internship: Each year the Library provides practical training to the students of University of Delhi, Delhi Library Association and IGNOU where they work in different sections of the library.

Professional Growth: Library staff attended online conferences, workshops, seminars and lectures. The staff is also engaged in writing research paper and has published several papers during the period in Journals, National and International Conference.

### **Faculty Strength**

Total number of faculty: 186

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 67,61,61,546/-

Grants Utilized: Rs. 72,82,48,000/-

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## **BHAGINI NIVEDITA COLLEGE**

### **Brief history of the College**

Bhagini Nivedita College is a constituent college of the University of Delhi. It was established during the academic session 1993-94 and was named after Sister Nivedita, the renowned disciple of Swami Vivekananda, in the rural and semi-urban outskirts of South West Delhi. Starting with only B. A. (Pass) and B. A. (Hons.) Hindi in 1993, it now offers 1. B. A. Honors (Hindi) 2. B. A. Honors (History) 3. B. A. Honors (Political Science) 4. B.Sc. Honors (Home Science) 5. B.Sc. Honors (Physics) 6. B. A. Program 7. B. Com Program 8. B.Sc. Physical Science with Chemistry 9. B.Sc. Physical Science with Computer Science. The college made significant strides in all fields in the 30th year of its inception.

## Major Activities and Achievements

Multifarious activities were organized by the various committees, departments, societies, and cells of Bhagini Nivedita College. The college was awarded the Industry-Academia Collaborative Grant 2022-23 (GBP 40,000) in collaboration with the School of Engineering, University of Ulster, United Kingdom, and industry partner Nanolatticex Llp to design and develop biosensors to address the problem of antibiotic abuse in India. Ms. Nitika, B. A Program, won gold medals in the All India Inter University Wrestling Championship and Khelo India National Wrestling Championship, in addition to winning gold, silver, and bronze medals in various competitions.

## Honours/Distinctions

Prof. Alokka Dutta was coordinator of a project entitled "CGS Samiksha: Gujarat Assembly Elections" organized by the Center for Global Studies, University of Delhi from 24 Nov to 3 December 2022.

Prof. Alokka Dutta was coordinator of a project entitled "Samiksha: Delhi Municipal Corporation Election" organized by the Center for Global studies, University of Delhi on 29 December 2022.

Dr. Vishal Chaudhary co-authored- Expanded Universal Science: Physics- Grade 11, Vol. 1 and Grade 12, Vol. 1(Pearson 2022).

## Students with Distinctions

Sakshi of B.Sc. (H) Physics was awarded rank

Sakshi of B.Sc. (H) Physics III year was topper in this course.

Divya Kkumari of B.Com III year was topper in this course.

Shiavi Jha of B.Sc. (Hons) Home Science III year was topper in this course.

Anchal of B.Sc. Physical Science Chemistry III year was topper in this course.

Sneha of B.Sc. Physical Science Computer Science III year was topper in this course.

## Publications

Dutta, A. (2022). Democratic Transitions in Taiwan: Challenges and Prospects, *Journal of National Development*. Winter. 35: 157-172.

Gupta, S. (2022). Dynamic DEA Model using Window Analysis Approach with Weight Modeling. *Journal of Scientific Research*. 4 (66): 100-106.

Parmar, S. (2022). Rani Lakshmi Bai of Jhansi: A Role Model for Contemporary India. *Academic Jagat*. 36: 104-107.

Parmar, S. (2022). Bhartiya Naari ki Swatrata Sagram mein Bhumika. *Rashtra Dharma Magazine*. 6: 49-50.

Chaudhary, V. (2022). Prospects of green nanotechnology for efficient management of neurodegenerative diseases. *Frontiers in Nanotechnology*. <https://doi.org/10.3389/fnano.2022.1055708>. 4:1-6.

Chaudhary, V., Gautam, A., Silotia, P., Malik S., Hansen, R.O., Khalid M., Khosla, A., Kaushik, A., Mishra, Y. (2022). Internet-of-Nano-things (IoNT) driven intelligent face masks to combat airborne health hazards. *Material Today*. <http://dx.doi.org/10.1016/j.mattod.2022.08.019>. (Elsevier, IF: 26.943, ISSN: 1369-7021). 60: 201-226.

Chaudhary, V., Mostafavi, E., Kaushik, A. (2022). De-coding Ag as an efficient antimicrobial nano-system for controlling cellular/biological functions. *Matter*. <https://doi.org/10.1016/j.matt.2022.06.024> (Cell Press, IF: 19.967, ISSN: 2590-2385). 7(5):1995-1998.

Chaudhary, V., Ashraf, N., Khalid, M., Walvekar, R., Kaushik, A., Yan, Y., Mishra, Y. K. (2022). Emergence of MXene-polymer Hybrid Nanocomposites as High-Performance Next-generation Chemiresistors for Efficient Air Quality Monitoring. *Advanced Functional Materials*. <https://doi.org/10.1002/adfm.202112913>, 33(32):1-44.

Chaudhary, V., Khanna, V., Taimoor, H., Khalid, M., Mishra, Y., Kaushik, A. (2023). Towards Hospital-on-chip supported by 2D MXenes-based 5th generation intelligent biosensors. *Biosensors and Bioelectronics*. <https://doi.org/10.1016/j.bios.2022.114847> . NA (220): 1-25.

Chaudhary, V., Taimoor, H.A., Badola, P., Khalid, M., Khosla, A. (2023). Progress in engineering interlayer space modulated MXenes to architect next-generation airborne pollutant sensors. *Sensors and Actuators B: Chemical*. <https://doi.org/10.1016/j.snb.2022.133225>, NA, 379, NA.

## Research Projects

Nanolatticex Llp (Industry Partner), 2022-23, Industry-Academia Collaborative Grant in collaboration with the School of Engineering, University of Ulster, United Kingdom to design and develop biosensors to address the problem of antibiotic abuse in India. Sanctioned amount of Rs. .40 lakhs. PI: Dr. Manisha Bhutani and Dr. Nikhil Bhalla of Ulster University

## Seminars Organized

Seminar entitled, ‘Inclusion of Masses in Educational Pursuits ‘ by Ajay Kumar Pandey, Professor and Executive Director, Clinical Programs, O. P Jindal Global Law School organized by Department of Economics on 1 January 2023.

Seminar entitled, ‘Law and Economic Empowerment’ by Neha Mishra, Associate Professor of Law and Associate Dean, O P Jindal Global Law School, organized by Department of Economics on 1 January 2023.

## Seminar/Conference Presentations

Prof. Alokka Dutta delivered a lecture in a seminar entitled “Gandhi Darshan Avam Vichar” organized by Central University of Jharkhand on 28 September 2022.

Prof. Alokka Dutta delivered a lecture in an international seminar entitled “India-South Korean Ties: Exploring linkages through History, Values and Interest” organized by Jamia Milia Islamia University during 11-12 November 2022.



## **Library Development**

The college library offers a wide range of resources to students - 33,519 books, 44 journals and periodicals, and 14 newspapers. In addition, 1,00,000 e-books and 6000 e-journals are also accessible via the N-List Program of UGC.

Total No. of Books in library: 33519

Total No. of Magazine and Journals subscribed: 44

## **Faculty Strength**

Total Faculty Strength: 67

## **Financial Allocation and Utilization**

Grants Allotted: Rs. 22 Crore

Grants Utilized: Rs. 29.21 Crore

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## **Bharati College**

### **Brief history of the College**

Bharati College, a premier and prestigious college for women, was established as a constituent college with permanent affiliation to the University of Delhi by Delhi Administration on 20 September 1971 as Bharati Mahila College. The College started functioning from the premises of a Government Senior Secondary School for Boys located on the Link Road in Karol Bagh. A modest number of two hundred and forty-one students and a team of thirteen teaching staff spread over six disciplines formed the building bloc. In 1998, the college started operating from its new location. Situated in an eco-friendly environment, it possesses 23 classrooms, 46 tutorial rooms, a seminar and conference room, a studio theatre and 3 Computer Labs with over 120 computers, and now a state-of-the-art Auditorium.

The new building in the campus with 26 rooms, 2 labs and a staff room has been a welcome addition to the College. The College boasts of a successful alumni profile with its students making a mark in diverse fields, as Professors, in Corporates and even a Miss Earth.

### **Major Activities and Achievements**

Outstanding performance in Academics

Excellence in Sports

Onboarding of new ERP software

Impetus to Entrepreneurship

Successful completion of second cycle of NAAC accreditation

### **Honours/Distinctions**

Prof. Mala Rani Received the “Master’s Award” from Spoken Tutorials, IIT Bombay in the ceremony held on 4 March 2023 at IIT Bombay.

### **Students with Distinctions**

Ria Manocha of BA (Hons) Psychology III year scored a CGPA of 9.014 and was awarded rank 1 in the college.

Aarti Kumari of B.Com. (Hons) III year scored a CGPA of 8.973 and was awarded rank 1 in the college.

Shalini Sharma of B.Sc. (Hons) Mathematics III year scored a CGPA of 8.946 and was awarded rank 1 in the college.

Simarjeet Kaur of B.Com III year scored a CGPA of 8.667 and was awarded rank 1 in the college.

Shalini Sharma of BA III year scored a CGPA of 8.545 and was awarded rank 1 in the college.

### **Publications**

Rajni. (2023). Crypto conundrum: Ban or limited Nod. *The Management Account.* 58(4): 53-56.

Gupta, A. (2023). On closed sets in Generalized Topological Spaces. *Journal of Advanced Studies in Topology.* 13(1-2): 7-13.

Bansal, V. (2023). Green Finance for sustainable development in the Indian context . *South India Journal of Social Sciences, XXI*(20): 145-155.

Kaushik, S., Murthy, K.V.B., Singh, A. K., Johri, R. (2022). Self-sufficiency through Development of Banking Market of Public Sector Banks in India. *Arthavaan.* 5(Special Issue): 37-50.

Johri, R., Murthy, K.V.B., Gupta, S., Kaushik, S. (2022). Sustainable Accounting Control System for Aatmanirbhar Bharat. *Arthavaan.* 5(Special Issue): 91-104.

Kataria, K. (2022). An Analysis of The Awareness Level of Consumers Regarding the Price & Quantity of Daily Consumables Items in NCR. *South India Journal Of Social Sciences.* XX(4): 15-24.

Srivastava, D. (2022). Instability festering in Central Asia: Probing the Interplay of Internal and External factors in Kazakhstan’s 2022 Unrest. *The Calcutta Journal of Global Affairs.* 6(3): 307-322.

Gupta, L. (2022). Analysis of the Indian National Education Policy 2020. *Journal of the Indian Economic Association.* NA(Special Issue): 23-28.

Dwivedi, S. S. (2022). Indian Cinema as a Soft-Power Tool in Africa. *World Focus.* 43(511): 18-23.

Sen, N. (2022). The Gendered Body in Manto’s Stories. *Critical Insights: A Journal of the English Language and Literature.* 1(1): 57-67.

## **Journals**

Editor: Editor in Chief: Gupta, S. (Bharati College), and Managing Editor: Johri, S. (Bharati College). (2022). *ARTHA VAAN. Bi-annual. 5*(Special Issue): 112.

Editors: Editor in Chief: Suthar, S.K., Jawaharlal Nehru University and Editors: Sapra, R. (Bharati College), Sen, N.C., (Bharati College). (2022). *The Research Post: An International Journal of Social Sciences and Humanities. Bi-annual, 5*(2): 116.

## **Seminars Organized**

Seminar entitled, 'Contribution Of Tribal Heroes in Freedom Struggle of India' by Mr. Ravi Shankar, Consultant, National Commission of Scheduled Tribes, And Director, Centre for Civilisational Studies organised by the Department of History on 27 March 2023.

Seminar entitled, 'Media Objectivity: Myth or Reality' by 'Mr. Ashok Srivastava, Editor, Anchor, Public broadcaster DD news and a TEDx Speaker organised by the Department of Journalism on 28 September 2022.

Seminar entitled, 'Gandhi and Youth' by Dr. Vikram Singh Amravat, Assistant Professor, Department of History and Culture, Gujrat Vidyapeeth organised by the Department of Political Science on 2 August 2022.

Seminar entitled, 'Television, TRP & Everything in Between' by Mr. Digvijay Singh, Former Vice-President BJYM & National In charge NEC BJYM organised by the Department of Journalism on 21 February 2023.

Seminar entitled, 'Governance by Surveillance: An Introduction' by Dr. Shivangi Narayan, Researcher at AGOPOL, Project funded by Oslo Metropolitan University, Norway and Norwegian Research Council organised by the Department of Sociology on 1 November 2022.

## **Conferences Organized**

Organised two days national conference funded by the ICSSR on 'Sustainable Business Models for Aatmanirbhar Bharat' on 21-22 November 2022.

Organised a one day International Conference on 'Trends in Federalism: Expanding Horizon, Exploring New Terrains' on 10 December 2022.

## **Seminar/Conference Presentations**

Prof. Mala Rani presented a paper titled "The Effect of Universities on the Choice of Spouse & the Socio-economic Structure of the Society at Large" at an International Conference organized by GGSIPU & JNU from 8-10 August 2022.

Prof. Rajni presented a paper titled "HRM: treading on the path of sustainability" at an International Conference organized by IPEM, Ghaziabad on 4 February 2023.

Prof. Sangit Sarita Dwivedi presented a paper titled “Revisiting Ambedkar’s Idea on India and his Legacy” at a National Seminar Organized by Dr. Ambedkar International Centre, Ministry of Social Justice and Empowerment, Govt. of India from 22-23 February 2023.

Prof. Kamini Bhutani presented a paper titled "Live Streaming Online Shopping" at a National Conference at Acharya Narendra Dev College, University of Delhi on 3 April 2023 (Awarded the best paper).

Dr. Sonia Kaushik presented a paper titled "Performance and Competition in Public Sector Banks in India: A study from 1992 to 2017" at a National Conference at Acharya Narendra Dev College, University of Delhi on 3 April 2023 (Awarded the best paper).

Dr. Jaspal Singh presented a paper titled “Dr. B.R. Ambedkar and Histories of Partition” at a National Seminar organized by the Dr. B.R. Ambedkar International Centre, Ministry of Social Justice and Empowerment, Government of India from 22-23 February 2023.

Dr. Anavisha Bannerjee presented a paper titled “Baul Singers of Bengal” at a National Conference organized by ARSD college, University of Delhi and IQAC (and English Department) in collaboration with ICSSR from 19-20 April 2023.

Dr. Anuranjita Wadhwa presented a paper titled “Viewing the Criticality of Water in Building a Sustainable Society” at the Indian Social Science Congress from 27-21 January 2023.

Dr. Nandini Sen presented a paper titled "Gender and Mau Mau Women" at a National Seminar organized by Motilal Nehru College, University of Delhi on 25 April 2023.

Ms. Shobhana Sinha presented a paper titled "The flavours of Vrindavani Bhakti: A study of Bhaktirasamritasindhu and other texts" at a National Seminar organized by SPM College, University of Delhi in collaboration with IGNCA on 23 February 2023.

### **National/International MoUs Signed**

**MoU with Connecting Dream Foundation (National):** In collaboration with Connecting Dream Foundation, the College has consistently worked to orient our youth towards becoming changemakers. Our young student ambassadors have organised and led many social justice initiatives. Ongoing Projects include: Project Sambhav and the Bottle for Change Project- being run in collaboration with Bisleri International Pvt Ltd. These efforts have been duly recognised too in the form of three prestigious awards- Upcoming Dream Team Award, Dream Project Award to Project Sambhav and Covid Response Team Award

**MoU with Delta Rights Advisors (National):** An MOU between Delta Rights Advisors and Bharati College has been signed to promote capacity building among students

**MoU with Sanskrit Bharati (National):** Committed to the promotion of Indian knowledge traditions, Bharati College has entered into an MOU with Sanskrit Bharati. In implementation of this collaboration, the College will organise workshops to impart the knowledge of the language.

**MoU with Spoken Tutorial, IIT Bombay (National):** Bharati College has entered into an MOU with IIT Bombay under its flagship Spoken Tutorial initiative. A wide variety of software courses are offered – knowledge of which is essential for students entering the job market and even faculty wishing to upgrade their skills.

**MoU with CDC, University of Delhi**

**MoU with IPCA** for Wet Waste management

### **Other Inter-Institutional Collaboration**

The College is collaborating with IIT Bombay under the Spoken Tutorial Programme to offer several Software Programmes free of charge to students.

### **Extension and Outreach Activities**

Bharati College recognises its responsibility to the society at large. The NSS Wing of Bharati College especially organised several activities towards outreach with the larger community. A Self Defence Training Camp for women in association with other colleges of DU and NGO Udankar was held. NSS students also reached out to residents of Silver Lining Old Age Home to spend time with them. In January 2023, they worked with the Poshangipur Sewa Basti on the occasion of Makar Sakranti. NSS has also started Project Paridhaan in association with Prashraya Welfare Foundation, which organises cloth donation drives. Blood Donation and Book Donation drives have also been held.

By providing a range of knowledge intensive and career-oriented Add on courses which are open to all, the College reaches out to the larger community and fulfils its primary mission of being a centre of learning. Students from all walks of society enrol in these programmes, and are assured of a safe and enriching learning environment. The following Add on courses are offered:

Certificate courses in Psychoanalytic Psychotherapy  
Digital Marketing and Social Media Advertising  
Advanced Skill Programme on Financial Markets  
Advanced Diploma in Financial Accounting  
Certificate courses in Intellectual Property in Business  
Certificate course in Design Thinking  
Certificate course in Life and Leadership coaching  
Certificate course in Psychiatry as a Clinical Neuroscience

### **Library Development**

Bharati college library collection covers art & commerce disciplines i.e. commerce, Political Science History, Punjabi, E.V.S, Economics, Journalism, Maths computers Science, Hindi, English, Sociology, Psychology, Sanskrit etc.

A part from in-house collection, the library has full access of thousands of journals online through duls. Access of online collection i.e. e-journals, theses, e-book etc. through N-List and delnet.

Library has excellent collection of text, general and reference books to help academic requirement of students, Faculty members and non-teaching staff.

Library also give membership college alumni on nominal charges.

Our college library provide plagiarism facility to faculty research work through urkund Software.

Our college library functioning their regular work by using mgrm Software.

Library also provide Book Bank Facility to needy Students.

College library have special collection for Competitive exams preparation i.e. CAT, MAT, CLAT, UPSC etc.

Every year college library trained library profession interns. Also provide library internship.

Total No. of Books in library: 55046

Total No. of Magazine and Journals subscribed: 20

### **Faculty Strength**

Total Faculty Strength: 85

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 44 Crore

Grants Utilized: Rs. 40.51 Crore

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## **BHASKARACHARYA COLLEGE OF APPLIED SCIENCES**

### **Brief history of the College**

Bhaskaracharya College of Applied Sciences (BCAS) is a well-established and reputed science college of University of Delhi established since 1995. BCAS is a constituent college of University of Delhi and is fully supported and funded by the Government of NCT, Delhi. The sprawling campus of the college spans about eight acres of land with exquisite landscaping and captivating architecture. The college has well-equipped state of the art well-ventilated laboratories, extensive library facility, classrooms with LCD projectors, auditorium, open air theatre and a spacious sports ground. The campus of the college is Wi-Fi enabled. Students enrolled are motivated to excel in academics and extracurricular activities. Each year students attain University positions in various disciplines. Besides this, in order to inculcate research aptitude, skills and synergy among students and faculties, various research and innovation projects are being carried out in the college. The college is a member of the Star College Scheme of the Department of Biotechnology, Government of India.

### **Major Activities and Achievements**

College is recently accredited by NAAC with A<sup>++</sup> grade and achieved NIRF college ranking 22 for the year 2023.

### **Honours/Distinctions**

Dr. Bhavya Deep was felicitated with 'Thinkers of Tomorrow' trophy for the college which was awarded by Symphony in partnership with CNBC News 18 Network, India on 10 March 2023.

Dr. Shalini Sehgal was awarded with 'Food Safety Mentor Award-2022' by Centre for Quality and Food Safety, New Delhi.

Dr. Pawan Kumar was felicitated with second prize in his research work which he presented in the Session IV of theme "Material Science and Technology" at a Research Conclave jointly organized by IEEE EDS-Delhi Chapter and Department of Electronic Science, University of Delhi, South Campus on 15 October 2022.

### **Students with Distinctions**

Megha Sapra of B. Sc. (Hons) Microbiology secured first position in Best Out of Waste Competition organized by Swachta and e-waste Management Committee on 31 March 2023.

Lavika Piplani of B. Sc. (Hons) Food Technology III year received the Italian Technical Services Award for her excellent performance in the course studies by All India Food Processors' Association for the year 2022 on 15 March 2023.

Ashmita Tanwar of B. Sc. (Hons) Food Technology received first prize in oral presentation on 'Packaging 3S- Safe, Secure, Sustainable' at Asian Packaging Congress organized by Indian Institute of Packaging, Delhi on 18 March 2023.

Kumari Khushi of B. Sc. (Hons) Biomedical Science II year won the third prize in the Micro-Doodle competition during Annual Inter-College Departmental Festival, Microquest 2023, of the Department of Microbiology held on 6 February 2023.

Sandhya Arya and Vanshika Sharma of B. Sc. (Hons) Biomedical Science II year won the first and second prize respectively in the Streak Art competition during Annual Inter-College Departmental Festival, Microquest 2023, of the Department of Microbiology held on 2 February 2023.

### **Publications**

Singh, R., Jha, D., Dhawan, U., Gautam, H.K., Kumar, P. (2022). Therapeutic Applications of Self-Assembled Indole-3-butanoyl-polyethylenimine Nanostructures. *Indian Journal of Microbiology*, 3(62), pages 411–418.

Srivastava, S., Nalla, V.K., Singh, V.P., Prasad, R. (2022). Optimization of in vitro micropropagation and root establishment through combinatorial approaches for enhanced production of secondary metabolites in the endangered species *Decalepis arayalpathra* KMA 05 clones. *Brazilian Journal of Botany*, 3(45), 869-881..

Kaur, S., Bharadvaja, A., Baluja, K.L. (2022). Electron interactions with AlF. *The European Physical Journal D*, 9(76), 176..

Goswami, K., Luthra, M., Bharadvaja, A., Baluja, K.L. (2022). Partial Ionization Cross Sections of Tungsten Hexafluoride Due to Electron Impact. *Atoms*, 10 (4), 101.

Luthra, M., Goswami, K., Arora, A.K., Bharadvaja, A., Baluja, K.L. (2022). Mass Spectrometry-Based Approach to Compute Electron-Impact Partial Ionization Cross- Sections of Methane, Water and Nitromethane from Threshold to 5 keV. *Atoms*, 10(3), 74.

Garkoti, P., Luthra, M., Goswami, K., Bharadvaja, A., Baluja, K.L. (2022). The binary-encounter-Bethe model for computation of singly differential cross sections due to electron-impact ionization. *Atoms*, 10(2), 60.

Kumar, S., Shukla, S.K. (2023). Synergistic evolution of flame-retardant hybrid structure of poly vinyl alcohol, starch and kaolin for coating on wooden substrate. *Journal of Polymer Research*, 30(2), 71.

Kushwaha, C.S., Singh, P., Shukla, S.K., Chehimi, M.M. (2022). Advances in conducting polymer nanocomposite based chemical sensors: An overview. *Materials Science and Engineering: B*, 284(-), 115856.

Sood, U., Dhingra, G.G., Anand, S., Hira, P., Kumar, R., Kaur, J., Saxena, A., Lal, R. (2022). Microbial Journey: Mount Everest to Mars. *Indian Journal of Microbiology*, 3(62), 323-337.

### **Research Projects**

Project funded by Indian Council of Medical Research (ICMR) from 2022-24. Title of Project- Metagenomic analysis of pulmonary microbiome to understand susceptibility to SARs-CoV and associated mucormycosis for Rs. 9.13 lakhs.

Project funded by Indian Knowledge Systems Division of MOE @ AICTE from 2022-24. Title of project- Development of eco-friendly and sustainable natural dyes from plant extract for Rs. 8.26 lakhs.

Project funded by SERB- DST (Department of Science and Technology) from 2022-23. Title of project- Role of RNA- binding proteins in rapid eye movement sleep loss associated neurodegeneration for Rs. 28.54 lakhs.

### **Patents Filed/Granted**

Patent Application No. 471/DEL/2013, entitled ‘Nutritional Compositions and Methods for Manufacturing the Same’

Patent Application No. 473/DEL/2013, entitled ‘Coating Compositions and Methods for Preparation Thereof’ INDIA

Patent granted: UK Design patent number: 6268246, entitled ‘Intelligent Sensor Based Biodegradable Waste Collection Unit’.

Patent DE File No. 20 2022 104 822.3 entitled ‘Nitrogen Fixation Enhancement in Pulses Under Moisture Stress Condition by Foliar Application of KNO<sub>3</sub>’

### **Seminars Organized**



Seminar entitled, 'Financial Literacy, Basics, Issues and Challenges' delivered jointly by Sh. Vedprakash, DGM, State Bank of India; Sh. R.K. Jaglan, GM, Union Bank of India; Sh. R. Dhingra, AGM, State Bank of India; and Sh. O.P. Singh, Deputy Director, Ministry of MSME, Govt. of India on 21 April 2022.

Seminar entitled, 'Ambedkar Ke Sapno Ka Bharat' presented by Prof. Rajkumar Falwaria on 12 April 2022.

Seminar entitled, 'Rajbhasha Neeti, to spread awareness on importance of Hindi and its constitutional status as Rajbhasha' presented by Dr. Harisingh Pal on 27 January 2023.

Seminar entitled, 'Sustainable Agriculture Practices under Climate Change: A Global Perspective' presented by Prof. P.V. Vara Prasad, University Distinguished Professor, Sustainable Crop Ecophysiology, Director Sustainable Intensification Innovation Lab, President of Crop Science Society of America, Kansas State University, Manhattan, Kansas, USA on 11 April 2022.

Seminar entitled, 'Evolution of Electric Vehicles and Charging Infrastructure in Delhi Real Time Load Transfer through Delhi SLDC' presented by Dr. Inderbir Kaur and Dr. Manoj Tiwari., Assistant Professor on 28 November 2022.

### **Conferences Organized**

Conference entitled, 'Air Pollution in Delhi NCR and North India During Winter: Causes and Remedies' was organized on 6 October 2022.

### **Seminar/Conference Presentations**

Dr. Inderbir Kaur presented a paper entitled "Design of a combustible gas sensor with an alert system: An environment Safety Initiative" at the 3rd International conference on Entrepreneurship, Research and Innovation for environmental sustainability & Planetary Health at VK-3, Bhagini Nivedita College from 7-8 April 2022.

Dr. Inderbir Kaur presented a paper entitled "Converting manual switching systems to energy efficient smart switching systems: An environment Initiative" at 3rd international conference on Entrepreneurship, Research and Innovation for environmental sustainability & Planetary Health at VK-3, Bhagini Nivedita college from 7-8 April 2022.

Dr. Jitender Kumar presented a paper entitled "Effects of Global Climate Change on Society and Future Needs" in the World Environment Summit 2022 held at Vallabhai Patel Chest Institute, University of Delhi, organized by Environment and Social Development Association (ESDA), Delhi and Grass Root Research & Creation India from 15-16 April 2022.

Dr. Amit Kumar, presented a Conference paper entitled "New Road Map for Academic Excellence Through Prospective Binary NAAC Accreditation" in NAAC sponsored Two-day Virtual Conference on Quality Enhancement of institutions of Higher Learning: Transformational Role of NEP 2020" Organized by Internal Quality Assurance Cell (IQAC). St. Aloysius College, Elthuruth, Thrissur, Kerala from 28-29 November 2022.

Dr. Amit Kumar presented a Conference paper entitled “A status review on publications in predatory journals in India” National Seminar (Virtual) on ‘Recent NAAC Accreditation Process with Special Emphasis on SSR’ under the Umbrella of IQAC & MPHEQIP’s Academic Initiative on 29 August 2022.

Dr. Amit Kumar presented a Conference paper entitled “UGC’s Mentorship Programmes: Perusal & Perception’ in two days National e-conference on ‘Industry 4.0 and Society 5.0” organized by Mahatma Gandhi Central University from 28-29 August 2022.

Dr. Amandeep Kaur presented a paper entitled “Role of health Care Instruments in Overcoming Covid Pandemic” in the National E-conference on Industry 4.0 and Society 5.0 on organized by Department of Management Science, Mahatma Gandhi Central University from 27-28 August 2022.

### **National/International MoUs Signed**

MoU signed with 21 Centaury Polymers to perform collaborative research and development projects and provide technical training and placement to students on 5 January 2023 (valid for a period of five years).

MoU signed with Shriram Institute for Industrial Research, Delhi to perform collaborative research and development projects in an expeditious manner and jointly organize seminars, conferences and workshops in different scientific fields of mutual interest on 29 November 2022 (valid for a period of five years).

MoU signed with Food Safety Foundation India (India Food Banking Network) to design and develop nutrition kitchen garden in urban setting on 24 August 2022 (valid for a period of one year).

MoU signed with Sir Vithaldas Thackersey College of Home Science, SNDT Women’s University, Mumbai for collaborative research, jointly organize seminars, conferences and workshops and internship of students on 28 June 2022 (valid for a period of three years).

MoU signed with Catholicate College, Pathanamthitta, Kerala to encourage joint research activities and projects as well as mutual exchange of students and faculty members for a short period on 27 June 2022 (valid for a period of two years).

MoU signed with Yeungnam University, Gyeongsan, Republic of Korea to stimulate and support educational, research and associated activities and projects on 1 June 2022 (valid for a period of five years).

MoU signed with Kansas State University, USA for research collaboration and exchange of students, professors and invitations to scholars on 5 May 2022 (valid for a period of one year).

### **Other Inter-Institutional Collaboration**

Collaboration with Shriram Institute for Industrial Research, Delhi to perform collaborative research and development projects in an expeditious manner and jointly organize seminars, conferences and workshops in different scientific fields of mutual interest.

Collaboration with Food Safety Foundation India (India Food Banking Network) to design and develop nutrition kitchen garden in urban setting.

Collaboration with Sir Vithaldas Thackersey College of Home Science, SNDT Women's University, Mumbai for collaborative research, jointly organize seminars, conferences and workshops and internship of students.

Collaboration with Yeungnam University, Gyeongsan, Republic of Korea to stimulate and support educational, research and associated activities and projects.

### **Number and percentage of students placed**

Number of students placed: 21

### **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment: 1

### **Extension and Outreach Activities**

College organized an outreach activity to commemorate 'World Ozone Day' on 16 September 2022. Prof. N.S. Abbas and Dr. Sujata Bhardwaj were the conveners for the event.

Yoga Club organized a workshop entitled 'Yoga for Youth' in association Department of Physical Education and NSS of the college on 21 June 2022.

Eco Club encourage visits of nearby resident to the college Herbal Garden under programme Life from January-February 2023.

National Service Scheme (NSS) unit facilitated enrolment of young electoral in college from January-February 2023. NSS volunteered participation in National Consultation on Suicide prevention youth India from 4-5 February 2023. NSS students participated in Youth Parliament Festival from 23-25 January 2023. NSS unit facilitated essay writing as a part of '25th National Youth Festival', part of 'Azadi Ka Amrit Mahotsav- India@75' during 12-16 January 2023. NSS unit also organized a blood donation camp on 28 October 2022

### **Library Development**

Apart from the regular subscription to some newspapers a magazines, this year. Library has renewed its subscription to N-LIST (National Library and Information Services Infrastructure for Scholarly Contents) programme of INFLIBNET. The AMC of RFID System has also been awarded during this academic year. A two-day book exhibition was organized on 9 and 10 March 2022. Library has a collection of 27068 volumes of books including reference books, 336 bound volumes of journals and 1231 CDs/DVDs. This has provided the facility to access a large number of e-resources to the students and staff throughout the year 24x7.

### **Faculty Strength**

Total number of Faculty: 91

Total number of Permanent Faculty: 43

Total number of Adhoc Facult: 48

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 32,04,59,218/-

Grants Utilized: 31,85,96,837/-

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## **COLLEGE OF ART**

### **Brief history of the College**

College of Art is an institution established in the year 1942 for imparting training in Visual Art (Creative and Applied) leading to a Bachelor degree in Fine Arts of University of Delhi and also providing advance training for Masters degree in Fine Arts, Visual Communication with emphasis on studio practicals and prescribed theory and research in selected fields. College is covered under the rules and regulations of Faculty of Music and Fine Arts, University of Delhi, for its academic issues and wholly administrated by the Government of National Capital Territory of Delhi.

### **Students with Distinctions**

Following students were the college toppers during the year 2022-23.

Ananya Kumar of Bachelors of Fine Arts (Applied Art)

Ananya Sharma of Bachelors of Fine Arts (Applied Art)

Anshika Anand of Bachelors of Fine Arts (Painting)

Yatika Rani of Bachelors of Fine Arts (Printmaking)

Shivam Kumar of Bachelors of Fine Arts (Sculpture)

### **Publications**

Beg, F., Mishra, A. (2022). The Darners of Najibabad . *ISSN-0973-0087, XXIII* (Deptt of Philosophy, Rabindra Bharti University), 04, 2022.

### **Seminar/Conference Presentations**

Dr. Rimsy Chopra presented a paper entitled, ‘A Paradigm shift in Teaching Art’ during the National Seminar on Art and Context as portrayed in contemporary perception organized by Pandit Lakhmi Chand State University of Performing and Visual Arts, Rohtak on 18-19 November 2022.

### **Other Inter-Institutional Collaboration**

College has academic collaboration with National Gallery of Modern Art (NGMA) and Indira Gandhi National Centre for the Arts (IGNCA)

#### **Number and percentage of students placed**

Number of students placed: 55

Percentage of students placed: 50%

#### **Number of Companies visited for campus recruitment**

Number of companies which visited college campus: 15

#### **Extension and Outreach Activities**

Dr. Rimsy Chopra presented a session on 'Pahari School of Painting' which was organized by Central Institute of Educational Technology NCERT on 30 April 2022.

#### **Library Development**

Total Library Budget for the year Rs. 4.6 lakhs

Number of books purchased during the year: 94

College subscribed to 11 Journals

#### **Faculty Strength**

Number of Professors: 1, Associate Professors: 3, Assistant Professors: 16, Part time faculty (appointed as Assistant Professors): 29.

#### **Financial Allocation and Utilization**

Grants Allocated: Rs. 154900000/-

Grants Utilized: Rs. 61158226/-

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### **COLLEGE OF NURSING , ARMY HOSPITAL (R&R)**

#### **Brief history of the College**

School of Nursing Army Hospital Delhi Cantt was established on 15 June 1950 and shifted to present location at level III of Army hospital (R&R) on 12 Mar 2004. The College has an extension at CTVS building since 2015. The school of Nursing was upgraded to College of Nursing in 2014 and affiliated to Delhi University. The first batch of BSc (H) Nursing commenced from 14 July 2014. As on date 1125 students after completion of GNM course and 116 students after completion of BSc (H) Nursing course have been commissioned into Military Nursing Service. At present College of Nursing, Army Hospital(R&R) is the only institution in AFMS awarding BSc Nursing (Honours) Degree. The college also runs PB diploma courses in eight specialties for the Nursing Officers.

## Major Activities and Achievements

May 2022: Nurses Day celebration - A nursing symposium was organized on the theme-” Nurses - A voice to lead” Interest in Nursing and respect rights to secure global health.

DNC Inspection for continuation of affiliation was conducted on 17-18 May 2022. University final practical examination for II, III and IV year was conducted in May 2022 & final theory exam for I year was conducted. University final theory exam for I year conducted in June 2022.

Breast feeding week was celebrated in August 2022 and conducted various events like poster competition, Quiz competition and workshop on benefits of breast feeding.

Nursing symposium on following topics were conducted in August 2022:-

Pre and post care of cardiac patients

Nursing perspective in renal transplant

Nursing audit on hand washing

Independence day was celebrated with flag hoisting ceremony followed by national anthem, patriotic dance drama. Walk marathon by sports committee was also conducted.

SNA Committee competitions (Inter house) - Debate committee competitions including Hindi essay, English essay, Hindi poem and English poem writing was conducted in August 2022. Entertainment committee competitions including Song competition and card making by Hobby committee was conducted.

Annual General body meeting -SNA was conducted in August 2022.

Nutrifest - Workshop on balanced nutrition was conducted in Aug on the theme “Sehat mand gaza”.

Suicide prevention day was celebrated in September 2022 - psychodrama on suicide prevention was organized during the event.

Commissioning ceremony of 25 students of V batch B.Sc. (Hons) Nursing was conducted on 22 September 2022.

Mass health education on the topic “Antenatal care” was conducted on 18 September 2022 at PHC Palam.

World heart day was celebrated on 29 September 2022 on the theme “Use heart for every heart”.

Mass health education on the topic life style disorder and their prevention was done on 7 October 2022.

World mental health day was organized on 23-24 October 2022 and various activities including psychodrama was conducted during the event.

NRP workshop was organized on 17 November 2022 in collaboration with Dept Paediatrics.

Students attended CME on oncovision on 3 November 2022, Advanced therapeutic endoscopy on 11 November 2022 and Newborn advocacy in November 2022.

Students participated in Perfect health mela and won various prizes during the event. Christmas was celebrated in Cadet mess on 25 December 2022.

Lamp lighting ceremony of IX batch was conducted on 16 February 2023.

School health Programme was conducted by III yr students at Model Public school Palam on 22 February 2022.

Annual sports meet “Umang” was conducted on 4 March 2023.

### **Honours/Distinctions**

NATIONAL LEVEL- DGAFMS rolling trophy for best UG research among six AFMS Colleges of Nursing. - N/ Cadet Shreya Kushwaha won second and N/ Cadet Kavia N Panicker received third prize in virtual speech competitions held by ANEI for nursing students on 04 April 2023 - b)STATE LEVEL - Nil c)MTNL PERFECT HEALTH MELA (Inter college SNA Competitions) -Yoga N/Cadet Bhumika & team- Third prize - Painting N/ Cadet Divyanshi - Second Prize -Reel making N/ Cadet Divyanshi & Jyotismita - Second Prize.

### **Students with Distinctions**

Anjali Ashok of Medical Surgical Nursing 3, semester IV was awarded with distinction.

Anshu of Medical Surgical Nursing 3, semester IV was awarded with distinction.

Bhumika Dalal of Computers and communication, semester IV was awarded with distinction.

Jasmine of Medical Surgical Nursing 3, semester IV was awarded with distinction.

Nancy of Medical Surgical Nursing 3, semester IV was awarded with distinction.

### **Research Projects**

Self-funded project entitled, “A Cross-sectional epidemiological study to assess the knowledge & practice of Dengue prevention among families residing near quaternary care Hospital of south Delhi with a view to make educational booklet”. Sanctioned amount Nil. PI: Lt Col Sunita

Self-funded project entitled, “Study to assess effectiveness of selected practices on HAP”. Sanctioned amount Nil. PI: Lt Col Bindu

Self-funded project entitled, “Study to assess the level of anxiety among care givers of patients undergoing cardiac interventions at selected cardiothoracic centre at Delhi.Sanctioned amount Nil. PI: Lt Col Manjulekshmy

Self-funded project entitled, “A study to assess the effectiveness of STP on knowledge and practice of BSE”. Sanctioned amount Nil. PI: Lt Col Sajila

Self-funded project entitled, “study to assess the effectiveness of structure teaching programme on knowledge and reported practices of mother of under five children regarding the home management of respiratory tract infection in a selected tertiary care Hospital”. Sanctioned amount Nil. PI: Lt Col Meena KK

### **Seminars Organized**

Seminar entitled, ‘Pre & post care of cardiac patients’ by Lt Col Bindu Sara Mathew on World Heart Day organized on 17 September 2022.

Seminar entitled, ‘Nursing perspectives in renal transplant, Organ donation’ by Lt Col Manjulekshmy organized on 08 August 2022.

Seminar entitled, ‘Nursing Audit on hand washing, Asepsis protocols’ by Lt Col Sreekala organized on 23 August 2022.

Seminar entitled, ‘Challenges in chemotherapy, Oncovision’ by Maj Porselvi organized on 12 November 2022.

Seminar entitled, ‘Resuscitation - Role of nurse, BLS- ACLS’ by Lt Col Preeti Bhatt, Tutor organized on 23 November 2022.

### **Conferences Organized**

Organized a one day conference on ‘Breast Feeding’ on 20 August 2022 at AH(R&R).

Organized a one day conference on ‘Nutrifest’ on 17 August 2022 at AH(R&R).

Organized a one day conference on ‘World heart Day’ on 10 September 2022 at AH(R&R).

Organized a one day conference on ‘Nurse patient relationship’ on 22 November 2022 at AH(R&R).

Organized a one day conference on ‘World mental health day’ on 10 October 2022 at AH(R&R).

### **Seminar/Conference Presentations**

5 N/Cadet Nayantara Birjania and N/Cadet Manisha Rautela along with Lt Col Ramhlunmawi (Faculty) attended 77th TNAI National Conference on 30-31 Jan 2023 held at Guwahati.

### **Other Inter-Institutional Collaboration**

BHDC & ACMS are affiliated institutions for academic & clinical experience

### **Number and percentage of students placed**

Total 25 students were placed during the year 2022-23.

### **Extension and Outreach Activities**

Mass health education on the topic antenatal care was conducted on 18 Sep at PHC Palam. Mass health education on the topic life style disorder and their prevention was done on 7 October 22.



School health Programme was conducted by III yr students at Model Public school Palam on 22.02.2022.

Suicide prevention day was celebrated in September 2022 by IV year nursing students and psychodrama on suicide prevention was organized during the event for the patients admitted in Psychology ward.

On the occasion of World mental health day, a psychodrama was conducted for the families and patients of BHDC.

Workshop on stress management was conducted for patients and families of BHDC. Addiction prevention programme for patients of BHDC was organized.

On the occasion of Breast feeding week a health education on Breast feeding was organized by IV Yr B.Sc.(Hons) Nursing students and KMC procedure was taught to the mothers admitted in NICU and the OBG Wards.

On the occasion of World heart day a health talk was organized for the OPD patients by III year students.

### **Library Development**

Total No of Books in College of Nursing: 5050

Total number of books in Army Hospital (R&R) library: 10100

### **Faculty Strength**

Total Faculty: 25

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 0.70 Crore

Grants Utilized: Rs. 0.7077 Crore

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## **COLLEGE OF VOCATIONAL STUDIES**

### **Brief history of the College**

College of Vocational Studies was founded in 1972 with emphasis on vocational courses. It is a co-educational college which offers the traditional courses and vocational courses under the same roof. The courses offered in College of Vocational Studies, popularly known as CVS, include vocational courses as MMI-Management and Marketing of Insurance, MMRB-Marketing Management and Retail Business, Tourism Management, OMSP-Office Management and Secretarial Practice, SME-Small and Medium Enterprises, HRM-Human Resource Management and MM-Material Management.

Alongside, traditional courses offered by the college are B.Com (Hons.), B.A.(Hons)History, B.A.(Hons) Economics, B.Sc (Hons) Computer Science, B.A.(Hons) Business Economics, B.A.(Hons) English, B.A. (Hons) Hindi and Bachelor of Management Studies (BMS), along with courses in French and German Language and Post-Graduate diploma in Tourism and Post-Graduate diploma in Book Publishing.

### **Major Activities and Achievements**

College has received Letter of Appreciation from Dr. Ankita Chakravarty, Deputy Commissioner, MCD, South Zone for conducting the Indian Swachata League on 17 September 2022 at Qutub Minar. On the auspicious occasion of the golden jubilee year celebration, a Kavi Shamelan was meticulously organised on 17 November 2023. Zest Streets: The western and street dance society achieved 2nd position in IIT BHU and IIM Calcutta.

The Green Brigade actively participated in the Aravalli Bachao program. Demonstrating a commitment to environmental conservation, members of the Green Brigade are engaging in ongoing silent protests as part of the Aravalli Bachao initiative. Their dedication is focused on safeguarding 74,000 acres of forest land threatened by destruction under the guise of development. Beyond environmental endeavours, the society also lent its support to the Clean Yamuna Campaign, organised by the Khushiyaan Foundation. In aligning with this cause, members of the society contributed their efforts to raise awareness and campaign for the preservation of the Yamuna River.

### **Publications**

Dr. Gauri Mishra. (2023). Transcreation of a Classic: A reading of Charulata by Satyajit Ray . *Epitome: International Journal of Multidisciplinary reasearch*, 9(2), 16-26.

Dr. Anu Satyal. (December 2022). Innovation & Learning Ecosystems in Developing Countries with reference to India . *A Journal of Kolkata Centre for Contemporary Studies*, 2(22), 18-31.

### **Seminars Organised**

Seminar entitled, "Global Crude Oil Prices Impact and Policy" by Mr. Bhaskar J. Kashyap, Assistant Director, NITI Ayog, held on 13th October 2022.

Seminar entitled, "Evidence-Based Policy Making" by Mr. Paramjyoti Chattopadhyay, M&M Specialist (Director Equivalent), Niti Aayog, held on 14th October 2022.

### **Conferences Organised**

Commerce Society of the college organised the "Risk management conference" on 05 January, 2023. Mr. Puneet Malhotra, Co-founder and Director of the Global Risk Management Institute (GRMI) was invited as the guest speaker.

### **Seminar/Conference Presentations**

A webinar titled "Leading with Emotional Intelligence" was conducted on 8th October 2023, featuring Ms. Aditi Pandey as the esteemed speaker.

### **National/International MoUs Signed**

Memorandum of Understanding signed with the Scientific Research Institute for the Study of the Problems of Cultural Heritage and Tourism Development, under the Ministry of Tourism and Cultural Heritage of the Republic of Uzbekistan.

Department of Tourism signed Memorandum of Understanding signed with University of Macerata, Macerata Italy. The purpose of this MoU is to develop cooperation in the field of education and scientific research between UniMC and CVS

### **Number and percentage of students placed**

Total 600 students were placed during the year 2022-23.

### **Number of Companies visited for campus recruitment**

400 companies visited the campus in the year 2022-23, representing various industries in the field of finance, marketing, electronics, automobile etc.

### **Extension and Outreach Activities**

The National Service Scheme of the College did a number of outreach activities through the year. Apart from observing and sensitising students to various days like the International Yoga Day, Har Ghar Tiranga, Swachh Amrit Mahotsav, among others, an awareness Drive for Ban on single-use plastic was conducted on 11 July 2022. Also, a free health camp was organised on 29 September 2022 to mark the NSS day.

### **Library Development**

KOHA, full-featured ILS automates Library operations was this year. The library has 61168 as the total number of books and 36 journals.

### **Faculty Strength**

Permanent Teachers: 33, Ad hoc: 66, Guest: 30

### **Financial Allocation and Utilisation**

Grants Allocated: Rs. 434074288

Grants Utilised: Rs. 422971896

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## DAULAT RAM COLLEGE

### Brief history of the College

The College founded in 1960 by Shri Daulat Ram Gupta with a vision to provide holistic education to young women with a motto of “Rittae Gyannan Mukti” implying “Salvation Through Knowledge” continues to guide till date. College has nearly 5000 girls including 46 foreign students coming from all over world for its 26 Under-graduate programmes in Science, Commerce and Humanities. In addition, we have a centre for foreign language in which six foreign languages are taught to 800 students. National Accreditation and Assessment Council (NAAC) has awarded ‘A’ Grade (3.36) in 2017, NIRF, GOI ranked us 29th in India and DBT has given ‘Star Status’ to the College. 188 teaching faculties and 150 non-teaching staff form the backbone of this institution. The college has beautiful green campus, Centre for Sports, Art and Culture (Sadbhavana Bhawan), state-of-the-art Conference Hall, open-air Amphitheatre (Rangshala), Hostel with capacity of 200 girls, multipurpose sports complex cum fitness Centre, Computerized and well stocked Library with Braille section, well equipped Laboratories and computer labs.

### Major Activities and Achievements

Hon’ble Vice Chancellor, Prof Yogesh Singh laid Foundation for three story Centenary Academic Block on Block on 29th August 2022. DRC becomes Nodal College for the knowledge network of North cluster colleges of the University. Collaboration with Government Colleges of Chouhantan and Magra Punjala in Barmer and Jodhpur respectively in Rajasthan under the Vidya Vistar Scheme continued for mutual benefit. In-house Skill Development Program entered in its sixth year in College. Mentorship Program introduced with an aim to provide academic and psycho-social support to the students. Psychology Resource Centre organized second Capacity Building Program on “Values for enhancing Happiness and Productivity” for 25 non-teaching staff in March 2023 for a week by its Value Engagement centre. The A (Awareness) D (De-stigmatization) and S (Seeking-help) III program for promoting, enhancing and maintaining health was held on 7, 8 and 9 February 2023 for nearly 150 students. Positive Conversations 3.0: Igniting the H.E.R.O within’ was organized by its Centre for Well-being and Flourishing. Centre for Legal Literacy, Awareness & Aid was inaugurated on 17 October 2022. Zebrafish Lab Facility and Drosophila Resource Centres continued to attract students and faculty for training and internship from other universities as well.

### Honours/Distinctions

Prof. Meetu Khosla, Professor, Department of Psychology was awarded with the Excellence Award for Teachers in Service in Colleges 2023 from University of Delhi.

Prof. Priti Malhotra, Professor, Department of Chemistry was felicitated as ‘Institute of Eminence (IoE) Fellow’ by the Hon’ble Vice Chancellor of University of Delhi.

Dr Anita Garg Mangla, Dr. Neeru Dhamija, Dr. Meenakshi Sharma were awarded Third Best presentation in the international conference on “Emerging Trends in Higher Education” jointly organized by NTPC group of Colleges and UK awards, United Kingdom and Guru Angad Dev teaching learning centre, SGTB Khalsa College, University of Delhi under the Pt. Madan Mohan Malviya National Mission on Teaching and Training, Ministry of Education, Govt. of India 28-29 March 2023.

Dr. Meenam Bhatia (Department of Botany) was awarded the Gold Medal by Indian Fern Society for Pteridological Research on 27 November 2022.

Dr. Deepshikha Mahanta Bortamuly (Department of English) was awarded with Dr. Sarvepalli Radhakrishnan Best Teacher Award in English Language and Literature from Centre for Professional Advancement on 5 September 2022.

Dr. Kusum Lata (Department of Hindi) was awarded the National Innovative Teacher Award from the Bal Rakshak Pratishthan, Maharashtra for Excellent innovative Education work on 19 May 2022.

### **Students with Distinctions**

Shramana Guchhait of B.Sc. Life Science III years students was awarded quad fellowship from India.

Cadet LCPL Sezer of III year was awarded Additional Director General Commendation Card in PM Rally.

Kanchan Bharti of B.Sc Hons (Maths) was awarded Vice Chancellor Internship Scheme as part-time Intern assigned to NCWEB Office.

Shivangi Upadhyay of B.Sc I Year Biochemistry student was university topper.

### **Publications**

Meetu K. et. al.(2023).The Psychological Science Accelerator's COVID -19 rapid-response dataset.*Springer Nature, Scientific Data*.1(10 ): 87.

Minakshi P. et. al.(2023). Adoption of ICTs as an emergent business strategy during and following COVID-19 crisis: evidence from Indian MSMEs. *Benchmarking:An International Journal*, 30(6): 1850-1883.

Shagun D. S. & Pandey, A.K.(2022).The systematic significance of Pod morphological and anatomical variations in Indian Crotalaria L. (Leguminosae). *Flora, 2090* (152029): 1-2.

Deepak N. (2022). (Re) reading Chivu Stone Inscriptions: Colonial archives, national histories and commemorations in North-eastern India. *Indian Historical Review (IHR), The Sage Journals*, 49(2): 249-272.

Meenakshi Sharm, et. al.(2023). Respiratory Quinone Switches from Menaquinone to Polyketide Quinone during the Development Cycle in *Streptomyces* sp. Strain MNU77. *Microbiology Spectrum ASM*, 1(11): 1-14.

Darshan S. et. al.(2022). Photocatalytic properties of biologically synthesized uncoated and calcium coated ZnO nanoparticles using cucumber juice. *Rasayan journal of chemistry*, 1(Special issue): 95-102.

Darshan S. et. al. . (2022). Application Of Photosensitizer-Incorporated Indium Oxide Nanoparticles In Photodynamic Therapy. *Rasayan journal of chemistry*, 15(4): 3806-3813.

Jyoti T. et. al. (2022). Magnitude and associated factors of menstrual irregularity among young girls: A cross-sectional study during COVID-19 second wave in India. *Journal of Family, Medicine and Primary Care*, 11(12): 7769-7775.

### **Research Projects**

Exploring Cognitive, Affective and Psycho-social indices during corona pandemic: Mental health issues, interventions, & implications for wellbeing, No grant was received for the project. PI: Prof. Meetu Khosla (Department of Psychology)

Cross cultural research with Tilburg University, Netherlands.No grant was received for the project. Collaborator: Prof. Meetu Khosla (Department of Psychology)

Cross cultural research with Ashland University, Ohio, USA.No grant was received for the project. Collaborator: Prof. Meetu Khosla (Department of Psychology)

The Impact, perceptions and experiences of Covid-19 among young people in a multidimensional and international perspective, University of Stockholm STRAEQ Research with University of Grenoble Alpes,France.No grant was received for the project. Collaborator: Prof. Meetu Khosla (Department of Psychology)

Cross cultural research with Institute of Ethnology, Academia Sinica, Nankang, Republic of China & IP, USA.No grant was received for the project. Collaborator: Prof. Meetu Khosla (Department of Psychology)

### **Patents Filed/Granted**

Patent holder: Dr. Meenakshi Sharma (Department of Botany); Patent applied and still awaited. (National & Collaborative Patents, Reg 202321002960, U/S 11 A)Title: "A Method of preparing light sequence from microscopy to Transcriptomic".

### **Seminars Organized**

Seminar entitled, 'How to crack UPSC and How to live a better life, How to crack UPSC and How to live a better life' by Mr. Surendra Bhagat Dr. Vivek Dixit, IPS Former DG, RPF Senior Scientist Department of Orthopedic, AIIMS- New Delhi organised by Department of Physics on 20 March 2023.

Seminar entitled, 'The philosophy of Advaita Vedanta, To make students aware of Vedanta Philosophy' by Prof. Swami Sarvapriyananda, Professor at New York Vedanta Society USA organised by department of Philosophy on 19 October 2022.

Seminar entitled, 'Completeness of Properties of Real Number' by Prof. Ajay Kumar organised by Department of Mathematics on 20 March 2023.

Seminar entitled, 'A corruption free India- A developed India' byMr. Ajay Kanoujia, Additional Secretary of the Central Vigilance Commission,Republica- The Political Science Association organised by Department of Political Science on 4 October 2022.

Seminar entitled, 'Bhartiya Shiksha Vyavastha me Guru-Shishya Prampara' by Prof. Ranjan Tripathi, Jt Dean ( Colleges) University of Delhi organised by B.A.(P) in collaboration with Bhartiya Shikshan Mandal on 22 July 2022.

### **Conferences Organized**

Organised a one day seminar on 'Digit All: Innovation and technology for Gender Equality' on 24 March 2023 under the aegis of Pragati the Women's Development Cell.

Organised a one day seminar on 'National Education Policy: Foundation Stone for Multidisciplinary Skill' on 7 July 2022.

### **Seminar/Conference Presentations**

Dr. Shagun Danda presented a paper in Botany Biodiversity National, Delhi university on 6 September 2022.

Dr. Shashi Sharma presented a paper titled, "Sanskrit Valmike Ramayana se Itar Ramayanano Ka Paricaya" in the International Global Sanskrit Forum Delhi 16 May 2022.

Dr. Deepti Bansal presented a paper at International Music Sharnam Vyas samaroh, Sanskrit Department, CCS University, Meerut on 27 October 2022.

Dr. Richa Dawar presented a paper titled "Reading the Cultural politics of Transnational Anti- Colonialism in sultan Samjee's Bead Bai" in the International Comparative Literature association organized by Tblisi, Georgia Tblisi State University on 24-29 July 2022.

Dr. Shikha Singh presented a paper titled "A Theoretical Model of Directed Lending Policy National" at IIT Tirupati and Institute for New Economic Thinking on 12 August 2022.

Dr. Sharda Gautam presented a paper titled "Jatak mala mein Parasthitiki Chintan ki vartman mein Prasangikta" at International conference organised at Bharti College on 4 December 2022.

Prof. Padmshree Mudgal presented a paper titled "Water Pollution and its Health Impact National" organised by Department of Biochemistry, DRC in collaboration with Delhi School of Public Health, University of Delhi on 17 January 2023.

Prof. Meetu Khosla presented a paper titled "Contribution of Indian Knowledge systems in Health around the globe" in the 5th ICCP International conference on counselling, psychotherapy and wellness held at Christ University from 3-7 January 2023.

Dr. Shikha Singh presented a paper titled "A Theoretical Model of Directed Lending Policy National" at IIT Tirupati and Institute for New Economic Thinking on 12 August 2023.

Dr. Neetu Gupta presented a paper titled "Bhasha ka prashn aur cinema International" at Vishva Hindi Sahitya Parishad on 21 January 2023.

## National/International MoUs Signed

**MoU with Government College, Chouhatan, Jodhpur (National):** Government College, Chouhatan, affiliated to Jai Narayan Vyas University, Jodhpur and Daulat Ram College joined together under the Vidya Vistar Scheme in 2021 which is valid for 3 years.

**MoU with Government Girls College, Magra Punjala, Jodhpur (National):** Government Girls College, Magra Punjala, Jodhpur affiliated to Jai Narayan Vyas University, Jodhpur and Daulat Ram College joined together in 2021 which is valid for 3 years.

**MoU with Inclusive Divyangjan Entrepreneur Association (National):** An MoU with (Inclusive Divyangjan Entrepreneur Association) IDEA-Saksham was signed in August 2022.

**MoU with Sanskriti Foundation (National):** An MoU between Sansriti Foundation, Delhi and Daulat Ram College was signed in April 2022.

**MoU with School of Open Learning and Bhaoraos Deoras Sewa Nyas (Samarth Bharat):** School of Open Learning (Campus of Open Learning), Bhaoraos Deoras Sewa Nyas (Samarth Bharat), and Daulat Ram College joined together in February 2023.

**MoU with Lakshaya (National):** Lakshaay, a Society for Social and Environmental Development, Delhi and Daulat Ram College signed an agreement on 15 July 2022.

**MoU with Sahayata (National):** Nutrition, Health, Education and research Foundation, Murshidabad, West Bengal and Daulat Ram College signed an agreement on January 2022 which is valid till 2027.

**MoU with Satraranga:** Daulat Ram College and Satraranga joined together for collaboration and organizing festival Rasa Kirti 2022 in September 2022.

**MoU with Choreographer:** Zenith, the Western Dance Society of Daulat Ram College signed an agreement with Mr. Kunal Srivastav on 12 October 2022.

## Other Inter-Institutional Collaboration

**Vidya Vistar Scheme (V2 Scheme):** The University of Delhi has initiated the Vidya Vistar Scheme (V2 Scheme) to partner with Colleges and Departments of Universities which are situated in remote areas of the country so that the Colleges and Departments of the University collaborate with them to enhance the capacity as well as development of these institutions in particular and the country in general. The Vidya Vistar Scheme is based on the principle of mutual respect, cooperation and sharing between two Colleges/Departments of both the universities as equal partners. In the light of the objectives of the Vidya Vistar Scheme, Daulat Ram College has entered into an academic collaboration with Government college, Chouhtan and Government Girls College, Magra Punjala, Jodhpur, Rajasthan. The partnership aim to facilitate sharing of resources and expertise amongst the partnering institutions to enhance the academic capital of the students and the faculty.

**Department of Geology and Pedology:** Forestry and Wood Technology, Mendel University in Brno, Brno Czech Republic. 2017-Till date



### **Student under Exchange Program (Inbound/Outbound)**

Ms. Lisa Aerts from Netherlands studied Nutritional Biochemistry; Hormones Biochemistry and function; Environmental Biotechnology and Ethnobotany at Daulat Ram College for 1 Semester.

### **Number and percentage of students placed**

Total 123 students were placed during the year 2022-23.

### **Number of Companies visited for campus recruitment**

Over 100 companies visited the college during 2022-23.

### **Extension and Outreach Activities**

Career Opportunity Workshop: A workshop on "Career Opportunity" was organised on 12 September 2022 to impart employment-related information to the disabled girl students, covering various career prospects for disabled students in diverse fields.

Additionally, on 13 July 2022, a webinar was conducted on "Draft National Policy for Persons with Disabilities" wherein the past, present and future policies regarding the rights and empowerment of disabled individuals were discussed.

National Social Service projects: Brief outlines of the numerous projects undertaken by an active NSS team: Project Itminaan: Project Itminaan, a hunger alleviation programme, has the motto 'Bread for Every Breath' which reflects the unit's commitment to the cause of making tireless efforts till the dream of a world where no one goes to sleep on an empty stomach is realised. Activities conducted under its aegis include several Food Collection and Donation Drives and the Daily Stray Feeding Programme, along with an Orientation Session to familiarise new volunteers with the working of the project.

Project Avni: Project Avni is a sustainability initiative devoted to spreading awareness about alternative and eco-friendly ways of living which do not harm the planet and sustain it for aeons to come. Through this Project, the unit aims to encourage volunteers to take steps at the individual and community levels to preserve the environment, be it through eco-friendly activities, plantation drives, recycling old clothes or spreading awareness about conserving resources. Activities conducted under Project Avni include the Cloth Donation Drive, insightful webinars, Poster Making Competition and Tote Bag Making Activity, along with an Orientation Session to familiarise new volunteers with the working of the project. A webinar on the topic 'Technology and Environmental Justice' was organised under the aegis of Project Avni on 23 September 2022, with the speaker Ms. Heeta Lakhani, who is the founder of the ClimAct initiative and the co-founder of Youth Negotiators Academy.

Road Safety Awareness Week: The National Service Scheme unit of Daulat Ram College, University of Delhi, collaborated with the Delhi Traffic Police on 14 January 2023 for the celebration of Road Safety Awareness Week which was observed from 11-17 January 2023 as per the guidelines of the Ministry of Transport, Government of India. 10 officials from Delhi Traffic Police, including Ms. Seema Sharma, Incharge of Road and Safety Cell at Delhi Police, as well as employees of Hero MotoCorp were also present to educate young adults about staying safe when on the road. It was followed by a Nukkad Natak by the Ashmita Theatre group. Through a light-hearted satire, the event explored various themes

around road safety, including road rage, the complicity of common people in violation of traffic rules, and how they make roads unsafe for all.

**Webinar on Sexual Abuse Towards Children:** National Service Scheme unit of Daulat Ram College organised a webinar on the topic 'Sexual Abuse Towards Children: How Can We Protect Them?' on 22 August 2022. Organised in collaboration with Sakshi NGO, an NGO that has been working towards achieving gender equality since 1992, under their initiative called The Rakshin Project. The Rakshin Project is focused on spreading awareness regarding the Protection of Children against Sexual Offences (POCSO) Act and how one can prevent child sexual abuse. The speaker of the day was Dr. Ramya Nisal, Team Lead at The Rakshin Project.

**NSS Day Celebration:** The National Service Scheme unit of Daulat Ram College, University of Delhi, celebrated the 53rd NSS Day on 24 September 2022 observed annually to commemorate the launch of the National Service Scheme (NSS) in 1969. The unit celebrated this day by dedicating it to the entire Cleaning and Maintenance Staff of the college, who work tirelessly to provide an adequate college environment. A total of 37 members of the staff attended the event.

**The 74<sup>th</sup> Republic Day Celebrations:** The National Service Scheme unit of Daulat Ram College organised the 74<sup>th</sup> Republic Day celebrations in the college premises on 24 January 2023. The theme for the day was, "Patriotism in the Shades of Green," to represent fertility, growth and auspiciousness of our Mother Nature. The celebrations encompassed a plethora of delightful, enriching and cultural events including a Plantation Drive followed by a host of competitions including the Face Painting Competition, Monologue Competition, and Poetry Competition.

**Webinar on "How Will the Ed-Tech Model Fit in with Braille":** On 13 January 2023, a webinar was organised in collaboration with Dr. Shakti Aggarwal. Visually impaired, Dr. Aggarwal is not only currently employed as a lecturer at the Faculty of Law, University of Delhi, but is also himself one of its notable alumni.

**Group Discussion on Air Pollution:** On 16 January, 2023, the National Service Scheme unit of Daulat Ram College organised an online Group Discussion session on Air Pollution, under the aegis of Project Avni, its sustainability initiative.

**Project Pakhi:** Project Paakhi is a newly launched child welfare initiative started by the National Service Scheme unit of Daulat Ram College. The Project stems from the innocence of the children like Neha and Shivam, children of construction workers of the college, who are being taught and nurtured by the members of the unit for over a year. This project has been successful in making a tangible difference through its efforts in various activities organised by the unit under its aegis. These include a Stationery and Toy Donation Drive and a Student Mela organised in collaboration with Virmani School. The received toys and stationery were later donated to an NGO named the Asha Bhawan Trust of India and Nostro Destino Foundation, an organisation working for the welfare and dignified living of prisoners in Delhi along with their children.

**Cloth Donation Drive:** In October 2022, The Cloth Donation Drive was conducted with the aim of distributing sufficient clothing items to lesser privileged individuals, and hence, upholding the unit's ultimate motto of 'Not Me, But You'. The drive marked its first donation on 25 November 2022 when the entire collected clothing items were donated to an NGO named the Asha Bhawan Trust of India.

Fit India and Clean India Drive 2022: The National Service Scheme unit of Daulat Ram College, University of Delhi, organized two simultaneous campaigns of Fit India Drive and Clean India Drive under the aegis of NSS DRC Wellness Month. The tagline of the campaign, 'Clean Around, Clean Inside Out,' sought to emphasize these joint values. The month-long campaign saw volunteers contribute to a cleaner tomorrow, by taking the responsibility of cleaning their immediate surroundings, including their homes, neighbourhood areas and surrounding parks. The volunteers regularly demonstrated their participation in these initiatives through daily updates, supplemented by pictures and videos.

## **Library Development**

The college library has a rich collection of books including rare books and other documents. Library is a growing organism and with the passing of times various developments have been done and continuing to achieve its goal. Library has been designed in a user centric way where needs and preferences of the users are understood and accordingly services are rendered. Library has been developing by understanding all the requirements and needs of the faculty members, students and special students of the college. Library holds around 1 lakhs books, subscription to 20 magazines and 11 newspapers.

Technology Integration: The college library is equipped with computers and high speed internet facilities. Moreover, the library is using the most advanced library management and automation software KOHA. Web OPAC (Online Public Service Catalogue) through which students can get any information related to the books from anywhere and any moment of time.

Accessibility and Inclusivity: The college library believes in inclusiveness and accessibility. Library uses assistive technologies for Divyang students. Further, Library offers to access Online Braille Library to its Divyang library users where thousands of books and other reading materials for the Divyang students are available to be used. Daisy players are provided to the Divyang students for recording purpose.

Collection Development: Collection of library is developed keeping in view the holistic approach where all type of literature is considered to be purchased. At present 1 lakh books of different disciplines, culture, languages are shelved in the library.

Digital Resources: Library provides access to various digital resources through Delhi University Library System. Additionally, library has the membership of National Library & Information Services Infrastructure for Scholarly Content (N-LIST), INFLIBNET and Developing Library Network (DELNET). Library also offers various Open Access digital resources having a significant reach among the research scholars.

Institutional Repository (KOSH): Library is preparing an institutional repository of research works. Remote access to KOSH is available.

Library has created its webpage offering the advanced interface to its users. All the rules and regulations, services, access to digital resources, various links to the services given by the Govt. of India, information and tools of cybercrime, research tools etc. are given to the webpage.

Most important development of the library is, library is remained in function for all week days (Monday to Sunday). Normal working hours of the library has also been increased. The working hours of the library are 8.30 AM to 6.30 PM. Earlier it was 8.30 AM to 5.00 PM.

Library has translated Shrimad Bhagwat Geeta into Braille script to the Divyaang Students of the college. The college library is only library among the Delhi University's libraries to have Shrimad Bhagwat Geeta into Braille Script.

Total No. of Books in library: 101741

Total No. of Magazine and Journals subscribed: 22

### **Faculty Strength**

Total Faculty Strength: 188

### **Financial Allocation and Utilization**

Grants Allotted: Rs 63.95 Crore

Grants Utilized: Rs. 57.4 Crore

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## **DELHI COLLEGE OF ARTS & COMMERCE**

### **Brief history of the College**

DCAC is located in the quiet and peaceful enclave of Netaji Nagar in South Delhi. We offer six undergraduate courses leading to a Bachelor with ans B.Com Programme and B.A. Programme with twelve discipline combinations, under the NEP and CBCS-LOCF mode and various add-on courses. We provide an exciting learning experience to our students, faculty members and non-teaching staff. The learning process includes lectures, seminars, workshops, power-point presentations and conferences which expose students to new currents of thought and endow them with valuable life-skills enabling them to creatively negotiate between traditional values and the possibilities offered by the contemporary world. The College boasts of a state-of-the-art Multi-Purpose Hall. We have a dynamic Placement Cell which secures excellent positions and attractive packages in leading Multinational Corporations. Apart from excelling in academics, we motivate students to fulfil their social responsibilities. Through Project TanZeal, they provide holistic education to underprivileged children in the neighbourhood. The College is Wi-Fi enabled, has a fully equipped computer lab with over 120 computers, a well-stocked library with an e-resource centre. Our Sports, NSS and NCC units have brought us many laurels. We have vibrant student societies - Photography, Debating, Fashion, Street Play, Dance & Music, ENACTUS, Prakriti.

### **Major Activities and Achievements**

College made 58 permanent faculty appointments across departments. Permanent position of the Librarian was filled. IQAC and G20 Committee organized events to raise awareness on India's G20 presidency. College hosted the Foreign and European Affairs Minister of the Republic of Croatia, Mr. Gordan Grlic Radman in March 2023. College entered into an MOU with DU to set up a Career Development Centre to inculcate entrepreneurial values among students. College has built state of art Seminar Halls with smart projection facility. Department of Commerce organised a webinar on the topic Why choose UPSC CSE as Career and Strategy in July 2022. Department of Economics organised a Workshop with Dr. Seema Gupta

on the topic Art of Being Happy: Building Newer Perspectives on January 2023. The EVS Department initiated the procurement of storage water tanks to save water from RO machines on campus. English Department organized a Book Talk session with Ms Janice Pariat on her novel, Everything the Light Touches in April 2023. Journalism Department organized a workshop on “Fact Verification” in February 2023 by Mr. Nimish Kapoor. NSS organized innumerable competitive events. NCC has brought many laurels to college and 4 of our cadets were recommended for the Defence Forces.

### **Honours/Distinctions**

Prof. Bijaya Thakur from the Department of Commerce, Prof. Smita Banerjee from the Department of English, Prof. K.L. Dhingra from the Department of Hindi, Prof. Vivek Mohan from the Department of History, Prof. Tarjeet Sabharwal from the Department of Journalism, Prof. Anuradha Gupta from the Department of Mathematics and Prof. Srikant Pandey from the Department of Political Science received Professorship.

Five promotions of the non-teaching staff took place in the Administration.

Five faculty members were awarded their PhDs: Prof. Srikant Pandey from the Department of Political Science, Dr. Meera Malhan from the Department of Economics, Dr Aakriti Kohli from the Department of Journalism, Dr. Chandan Kumar Singh from the Department of Commerce and Dr. Enami Chopra from the Department of English.

### **Students with Distinctions**

Devanshi Aneja of BA(H) Economics III year scored a CGPA of 9.27 and was awarded rank 1 in the college. Nishtha Laddha of B.Com (Hons) III year scored a CGPA of 9.041 and was awarded rank 1 in the college. Ram Pat Singhania of BA(Prog) III year scored a CGPA of 8.939 and was awarded rank 1 in the college. Himanshi Aggarwal of BA(H) Journalism III year scored a CGPA of 8.284 and was awarded rank 1 in the college. Janvi Sachdeva of BA(H) Political Science III year scored a CGPA of 8.176 and was awarded rank 1 in the college.

### **Publications**

Chandra K.K., Omesh V., Bhadouria R. (2022). Guru Ghasidas University Campus Greenery for offsetting Carbon Dioxide and Improving Students’ Academic Performance. *Current World Environment*. 1(17): 213-225.

Shome, A., Phartyal, S. S., Maharana, P., & Verma, A. (2023). Mapping Peer-Reviewed Scientific Studies on Plant Trait–Service Linkages Across Ecosystems: A Bibliometric Analysis. *Anthropocene Science*. 4(2): 1-12.

Banerjee, S. (2022). Reconstructing History-A study of Carlos Fuentes’s Terra Nostra (1975) and The Campaign (1990). *IIS University Journal of Arts*. 1(12): NA.

Ailawadi, N. (2022). Reading Women Performers Lives Gauhar Jaan and Jaddan Bai : In a Spirit of Reinvention of their Image and Personas. *Wisdom Speaks*. 1(7): 37-43.

Kohli, A. (2022). Medium is the Sensation: OTT Platforms on the Smartphone Screen. *Akados*. NA(16): 17-46.

Jingala, N. & Bhardwaj, D. (2022). Reflection on Climate Change Awareness and Social Media: A Study among Youth in India. *Bhava Veena, Journal of Arts, Literary, Culture & Language Society*. 12(19): 122-132.

Gupta A. (2022). Complex symmetric weighted composition operators on the weighted Hardy space'. *Advances in Pure and Applied Mathematics*. 1(13): 39-49.

Dr Anuradha Gupta. (2022). Complex symmetry and normality of Toeplitz composition operators on the Hardy space. *Filomat*. 7(36): 2281-2291.

Sharma, A., Maharana, P., Sahoo, S and Sharma, P. (2022). Environmental change and groundwater variability in South Bihar, India. *Groundwater for Sustainable Development*. NA(19): 1-13.

Dr Bhupinder, L., & Singh, R.. (2022). Study to examine the impacts of spiritual leadership style on organizational performance based on individual-level performance: a meta-analysis. *Sachetas*. 2(1): 22-35.

## **Journals**

Prof. Rajiv Chopra (Editor-in-chief), Prof. Smita Banerjee .(2022). Intellectual Resonance DCAC Journal of Interdisciplinary Studies. *Annual*. NA(5): 01-179.

## **Seminars Organized**

Seminar entitled, 'How to handle interview for placement' by Kumar Abhishek, Co-Founder of TathaGat, Expert Mentor organised by Department of Commerce on 31 March 2023.

Seminar entitled, 'Behavioural Health Economics- Insights from Prospect Theory' by Dr. Indrani Roy Chowdhury, Centre for the Study of Regional Development, JNU organised by Department of Economics on 5 September 2022.

Seminar entitled, 'Postgraduate Academic Opportunities at IIT Madras' by Dr Jyotirmaya Tripathy, Head of the Department of Humanities & Social Sciences, IIT Madras organised by Department of English on 23 September 2022.

Seminar entitled, 'Dilli to Delhi: A century of Urban Change' by Dinesh Kataria, Assistant Professor Ram Lal Anand College, University of Delhi organised by Department of History on 2 February 2023.

Seminar entitled, 'The vital role of a well-informed eyewitness (The role of a war reporter) & Careers in Journalism' by Prof. KS Dakshina Murthy and Prof. Kanchan Kaur, Professor, Indian Institute of New Media and Journalism, Bengaluru organised by Department of Journalism on 10 November 2022.

### **Seminar/Conference Presentations**

Anita presented a research paper titled “Impact of Mergers and Acquisitions: A Critical Review of Literature” in the 10th International Conference on Advances in Business and Management organized by Department of Commerce, Shaheed Bhagat Singh College, University of Delhi on 10-11 November 2022.

Kishor Kumar presented a paper titled “Impact of Covid-19 Pandemic on Small Scale Industries (SSIs)” in XXIV Annual International Seminar on Institutions, Governance and Justice Topic organized by Delhi School of Professional Studies and Research (DSPSR) on 4-5 June 2022.

Bir Singh presented a paper “Industrial Structure, Ownership pattern, and Contractualisation in Organised manufacturing Sector: A Firm Level Analysis” at 63rd Annual Conference of the Indian Society of Labour Economics held during 1-3 March 2023 at Rajiv Gandhi University, Itanagar, Arunachal Pradesh, India.

Akanksha Aggarwal presented a paper titled “Effect of Teacher Transfers Policy on Student Learning: Evidence from India” at 4th Annual Economics and Finance Conference, Ahmedabad University during 6-7 Jan 2023.

Vinita Gupta Chaturvedi presented a paper titled “Privileging the Personal over Political: Virginia Woolf’s Strategic Feminist Resistance in Mrs. Dalloway” at the International Conference on 100 years of The Wasteland, Ulysses and Jacob’s Room organised by Aligarh Muslim University on 26 February 2023.

Smita Banerji Wounded presented a paper titled “Imagination: World War I and the Hemingway’s Hero’s Angst, World War I; Modernism(s); and Time Binding” in International Conference organised by Department of English University of Rajasthan and FCT Baroda from 27-28 January 2023.

Animesh Mohapatra presented a paper titled “Translation as an Agent of Transformation in the History of Odia Literature” at an online symposium on “Translation as Reception” organized by Central Sahitya Akademi on 12 January 2023.

Prof. Amrit Kaur Basra presented a paper titled “Punjab after Annexation: Polity and Society” at International conference on “Bhai Vir Singh: Times, Writings and Legacy” organized by SGTB Khalsa College, University of Delhi on 1-2 December 2022.

Neha Jingala Presented a paper titled “Media as a Tool of Peace Building & Conflict Transformation: An Analytical Study” at an ICSSR sponsored International Conference on India as a Global Leader in Peacebuilding organised by Aditi Mahavidyalaya, University of Delhi in collaboration with Media Adhyayan Kendra, New Delhi on 27 June 2022.

Aakriti Kohli presented a paper titled “OTT Consumption of Transnational Television Reruns and Fan Practices in India: A Case Study” in the National Hybrid Seminar on Borderless Communication: Reimagining Global Mediascapes, university of Mizoram, India on 17-18 November 2022.

### **National/International MoUs Signed**

**MoU with university of Delhi (National):** The Career Development Centre, DCAC and the University of Delhi joined together to provide support to entrepreneurship endeavours of students

## **Number and percentage of students placed**

Total 175 students were placed during the year 2022-23.

## **Number of Companies visited for campus recruitment**

60 companies visited the campus in the year 2022-23. Companies visiting the campus were KPMG, EY GDS, Wipro, Bechtel, Lloyd, Larsen and Toubro, Infinite Locus in a plethora of job profiles: finance, accounting, sales, content writing, research, Analyst, Consulting and audit among others.

## **Extension and Outreach Activities**

Staying true to the core philosophy of uplifting the marginalized communities through the power of social entrepreneurship, Enactus DCAC worked on 2 projects this past year, namely Project Taaleem and Project Zaraat.01. Project Taaleem aims to revolutionize the lives of the refugee children by imparting primary education through a community driven model where the teachers are identified from within the community itself.

Project Zaraat: With an active team of 83 members aims to minimize post-harvest losses by providing an affordable, portable, and eco-friendly storage solution to small and marginal farmers. Post-Harvest losses amounting to 93,000 crores per year, refer to the losses taking place after harvesting but before final consumption, the primary cause of which is lack of proper storage and transportation facilities. This forces the farmers to practice distress selling and leads to a loss of bargaining power. Small and marginal farmers, who constitute close to 86% of the farmer base, bear the brunt of this problem. We have set up 6 Storage Solutions in our farming communities in the states of Delhi, Haryana, and Uttar Pradesh. We aim to uplift the farming communities by our sustainable business model and we have reduced post-harvest losses by a whopping 60%, and minimized energy consumption by 20%. Generating a revenue of more than 2 lakhs and directly impacting the lives of more than 250 farmers, Zaraat has now become a harbinger of hope for farming communities across 3 states.

We have collaborated with Indian Agricultural Research Institute and the agricultural Department of Michigan State University; they are our educational partners.

Media Publications: The college has been featured in various social media publications like Hindustan Times, Krishi Jagran, The Morning Standard, The Logical Indian, etc. and we have been honoured to receive Letters of Appreciation from civil servants and political personalities.

Pratibha: As a social initiative, Enactus DCAC launched ‘Pratibha: Changing lives through Education’ wherein we conducted book donation drives in collaboration with NGOs like Deepalaya and Goonj and donated over 1500 primary level books in education centers across Delhi.

SMiles Project: The Mental Health Committee, under the aegis of IQAC, in collaboration with the Institute of Liver and Biliary Sciences as part of their SMiles Project(Stronger India through a Million Health Educated Students), organized a Health Awareness Session on Fatty Liver on March 29, 2023. Dr. Poornima Singh, Project Officer, SMiles, presided over the session and her team created an awareness among the students and faculty on early intervention and primary prevention of the chronic liver diseases



such as cirrhosis and hepatocellular carcinoma and are risk factors for cardiovascular, diabetes, stroke, and chronic kidney ailments.

Digital Safety: The ICC & GSE function in association with the Women Development Cell of the college. A talk on Digital Safety: Combating Internet - Enabled Child Sexual Abuse and Trafficking was organized on 19th September 2022. The speaker was Brooke Istook, a Digital Safety Expert.

### **Library Development**

The college library has a rich collection of more than 61,819 books, 13 newspapers, 23 periodicals and magazines, and approximately 529 CDs which provide the latest information and knowledge of various disciplines. During the academic year 2022-2023, about 1133 books were added to strengthen the library collection. The library is well equipped with all facilities and resources (print and electronic), such as books, journals, newspapers, online databases, question papers, a syllabus, a journalism project, UPSC service material, and book bank collections.

E- Resources facility: It is provided through DULS & N-LIST to its users to access the world's best databases, e-journals, e-books etc. Remote access to e-resources of DULS provides access to millions of e-books, e-journals, and e-articles.

The college library has renewed its membership in the N-LIST programme to access 6,000+ e-journals and 164300+ e-books. Library also provides online user ID and password to students and faculty members for having access to the N-List database.

KOHA Software: The library has added following new facilities /features in the year 2022-2023. The library is fully computerised and uses the library management software Koha on a cloud server. The library is introducing KOHA software to manage the housekeeping operation, acquisition, circulation, stock verification, and so on. It also provides a web-based OPAC facility that is remotely accessible 24 hours a day and provides a simple and clear interface for library users to perform tasks such as searching for and reserving items and suggesting new items. The KOHA software facilitates remote access to data regarding college library holdings, including their locations, book status, and user membership transactions. The entire library is under CCTV surveillance.

Radio Frequency Identification (RFID) in the library is at the final stage, and the self-circulation services through RFID will be started very shortly. RFID-based library management systems can automate shelf management. It is a more efficient way of identifying misplaced books in stock. It helps reduce the time taken for the stock verification process and also reduces the cost of inventory. It is faster than barcodes, and multiple books can be issued at a time. Borrowing and returning books can be fully automated with the help of self-check-in and check-out systems.

The college library is introduced to DSpace (open-source software), which is used as an institutional repository. DSpace provides a way to manage research materials and publications in a professionally maintained repository to give them greater visibility and accessibility over time. DSpace is a platform that allows you to capture items in any format, including text, video, audio, and data.

QR Code Facility: The library has implemented a QR code facility for their patrons / users to pay the fine online for overdue books.

The library added 24 chairs and four long study tables for students to increase the seating capacity in the library. The library also added five new computer systems (ACER) and one printer for the e-resource room. A photocopy machine and two Almirah for library staff have also been added.

Total No. of Books in library: 61,819

Total No. of Magazine and Journals subscribed: 23

### **Faculty Strength**

Total Faculty Strength: 102

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 31.91 Crore

Grants Utilized: Rs. 34.18 Crore

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## **DEEN DAYAL UPADHYAYA COLLEGE**

### **Brief history of the College**

Deen Dayal Upadhyaya College is a constituent college of the University of Delhi, established in the year 1990 and 100% funded by the Government of National Capital Territory of Delhi. The college relocated at Sector 3, Dwarka in July, 2016. The new campus comprises a multi-storeyed green building sprawling across 7.7 acres fully equipped with solar power generation, water recycling plant, full power backup, hostels for both girls and boys, and an airconditioned guest house. The campus is centrally airconditioned and replete with an auditorium that can host 330 participants at a time, a huge ICT Centre, a 3- storeyed library with nearly 48,000 book titles, and numerous science labs. Nine Undergraduate Honours courses including Computer Science, Electronics, Physics, Chemistry, Botany, Zoology, Mathematics, English, Commerce and Bachelor of Management Studies. Further, and B.Sc Program in Physical Science (Computers), Physical Science (Chemistry), Life Science, Mathematical Science and B.A. Program. We also offer foreign language courses in German, French, Spanish, Korean, Japanese and Russian. We constantly strive to transform lives and change the world for the better by nurturing confident, dedicated, honest and upright individuals who become an asset to the society.

### **Major Activities and Achievements**

College achieved the distinction of being ranked 11<sup>th</sup> in Science Colleges, 17<sup>th</sup> amongst Commerce Colleges, 17<sup>th</sup> amongst Management Colleges and 41<sup>st</sup> amongst Arts Colleges in India by the India Today-MDRA Best Colleges Ranking 2023.

College has been ranked 24<sup>th</sup> out of 2,746 participating colleges in the NIRF India Rankings 2023 conducted by the Ministry of Education.

The college has been selected under DBT Star College Status Program (for a period of three years i.e. 2022 – 2025) and has been sanctioned Rs.1,61,87,340/-.

### **Honours/Distinctions**

Prof. Manoj Saxena received ‘Excellence Award for Teachers-in-Service in Colleges (Age 45 years and below)’ by University of Delhi on the occasion of Annual Award Ceremony held on 22 March 2023. The award recognizes the outstanding contribution to Research and Academic Activities made by the awardee.

Dr Sudhir Verma received the International Society for Eye Research (ISER) and Knight Templar Foundation Travel Fellowship Award to present the research work entitled “Mapping of Label-retaining Cells and Hyaluronan in the Mouse and Human Cornea”, at the XXV Biennial Meeting of the International Society for Eye Research in Gold Coast, Australia in February 2023.

### **Students with Distinctions**

Talib Hussain of B.A. (Prog.), Iyear was the winner of first prize in the 30<sup>th</sup> Junior National Baseball Championship.

Satvik Srivastava (BMS IIIyear), Archita Jain (BMS IIIyear), Akanshi Sharma (B.Com (Hons.) IIIyear) were jointly winners of the first prize in a Public Policy Competition organised by MDI Gurgaon.

Satvik Srivastava (BMS IIIyear), Archita Jain (BMS IIIyear), Akanshi Sharma of B.Com (Hons.) IIIyear were jointly winners of the second prize in a mega Public Policy Case Challenge organised by Global Trade Observer IMPACT and bagged a cash prize of Rs 75,000/-.

Satvik Srivastava (BMS IIIyear), Archita Jain (BMS IIIyear), Akanshi Sharma of B.Com (Hons.) IIIyear finished third at the ‘Strategy storm – A Global Case Competition’ organised by Consulting and Analytics Club, IIT Guwahati.

Dev Shokeen of B.A. (Prog.), Iyear was the winner of the second prize in Archery at Delhi State Archery Championship.

Robin Ahuja of B Com (Hons.) IIIyear and Lavanya Puri of BMS IIIyear were awarded first prize in the Arun Jaitley Memorial Debate organised by SRCC, University of Delhi. They were felicitated by the Vice-President of India with a cash prize of Rs. 1.5 lakh.

### **Publications**

Mishra, R., Kavita, Rajpal, A., Bhatia, V., Rajpal, S., Agarwal, M., Kumar, N. (2023). I-LDD: An Interpretable Leaf Disease Detector. *Soft Computing*.

Singh, J., Dawra, D., Verma, N., Jha, K.S., Kumar, P., Dimri, M., Mohan, M. (2023). Study of electron impact excitation of H-like Si<sup>13+</sup> ion in dense plasma environment. *New Astronomy*, 101(102001).

James, A., Yadav, D. (2022). Bioaerogels, the emerging technology for cleaner, sustainable wastewater remediation: A comprehensive review on synthesis, properties and applications. *Environmental Research*, 112963(210).

Solanki, R., Anand, S., Anand, M., Kumar, P., Kumar, M., Khanna, Kapur, M. (2022). Antibiotic Resistance: A Global Health Crisis. *Microsphere*.

Arora, V., Mehra, Y.S., Tandon, D. (2023). Start-up Financing: Multi-decadal Bibliometric Analysis of Venture Capital, Angel Investing and Equity Crowdfunding. *South Asian Journal Management*.

Agasti, N., Gautam, V., Priyanka., Manju., Pandey, N., Genwa, M., Meena, P.L., Tandon, S., Samantaray, R., (2022). Carbon nanotube based magnetic composites for decontamination of organic chemical pollutants in water : A review. *Applied Surface Science Advances*, 100270(10).

Kumar, R. (2022). India-China: Changing bilateral trade and its effect on economic growth. *Singapore Economic Review (World Scientific Publication, Singapore)*, 2(67), 567-586.

Puri, S., Moreno, I.Y., Sun, M., Verma, S., Lin, X., Gesteira, T.F., Thomas, C.V.J. (2022). Hyaluronan supports the limbal stem cell phenotype during ex vivo culture. *Stem Cell Res Ther.*, 13(1)(30), 384.

Kumar, V., Suri, R., Mittal, S. (2023). Review on new ionophore species for membrane ion selective electrodes. *Journal of the Iranian Chemical Society*, 20(3), 509-540.

Kumari, N., Gupta, V., Saxena, M. (2022). TCAD-Based Optimization of Field Plate Length & Passivation Layer of AlGaIn/GaN HEMT for Higher Cut-Off Frequency & Breakdown Voltage. *IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)*, 1(39), 63-71.

## Research Projects

Project entitled 'Device Simulation for Advanced GaN HEMT Architectures for Ku band Application' and funded by Solid State Physics Laboratory (SSPL) Defence Research Development Organization for the year 2022-23 and sanctioned amount of Rs. 30.48 lakhs.

Project entitled 'Development of Thermoelectric Energy Harvester using Indium Selenide thin films' and funded by SERB- Department of Science and Technology and sanctioned amount of Rs. 31.84 lakhs.

Project entitled 'I-V and C-V characterization of sub-micron Design, Optimization and Fabrication of Radiation Hardened Sub 0.15-micron gate length InAlN/GaN HEMT for Ku band application' and funded by SERB-POWER Grant of the Science and Engineering Research Board (SERB) for the period 2022-25 and sanctioned amount of Rs. 58.83 lakhs.

Project entitled 'Hyaluronan as a potential diagnostic marker for corneal stem cell quality and preservation medium supplement for improving transplantation success' and funded by Lions Foundation for Sight, Texas, USA for 12 months and sanctioned amount of USD 10,000.

Project entitled 'Role of illiteracy in Tribals and its Impact on various government policies' and funded by ICSSR for 24 months and sanctioned amount of Rs 5 lakhs.

## **Seminars Organized**

Seminar entitled 'Emerging trends in North-East Politics' was delivered by Mr. Sunil Deodhar, BJP National Secretary and Co-in charge of Andhra Pradesh, State Assembly Elections in North East-2023, on 15 February 2023.

Seminar entitled 'Discussion on Modi@20: Dreams meet Delivery, Book review' was presented by Shri Uday Mahurkar, Information Commissioner, Government of India, and presided over by Prof Yogesh Singh, the honorable Vice Chancellor of University of Delhi, on 22 July 2022.

Seminar entitled 'Intellectual Property Rights, IPR' was presented by Ms. Neetu, Assistant Manager, Cell for IPR Promotion (CIPAM) on 23 February 2023.

## **Conferences Organized**

7th International Conference of National Soil Contamination and Research (INSCR 2022) Modulating the Environment with Microbes was organized by Deen Dayal Upadhyaya College, in collaboration with Acharya Narendra Dev College, Gargi College, Kirori Mal College, Department of Zoology, Magadh University, Ramjas College, Sri Venkateswara College, Sri Guru Tegh Bahadur Khalsa College, C.M.P. College, Bhaskaracharya College of Applied Sciences, Shivaji College, Miranda House, KIIT Bhubaneswar, Devbhoomi Uttarakhand, Kolhan University, Jharkhand, PhiXgen Pvt. Ltd., Gurugram and College of Commerce, Arts & Science, Patna on 7 November 2022.

24<sup>th</sup> Annual International Conference, on 'Nationalism, Globalization and Development' was organised by the college in association with Delhi School of Professional Studies & Research on 07 January 2023.

International Conference on 'Bharat @ 2047: Role of Commerce and Business' sponsored by ICSSR was organized on 11 January 2023.

## **Seminar/Conference Presentations**

Dr Varnika Bhatia presented a paper entitled 'NEP 2020 and Science Education – A review cum survey-based study' in ICSSR sponsored International Seminar on 'Technology for Environmental Sustainability, Socio-Economic Responsibility and Associated Entrepreneurial Opportunities in Society and Rural Environment' organized by Sri Aurobindo College, University of Delhi on 16-17 March 2023.

Dr Sudhir Verma presented a paper entitled 'Mapping of Label-retaining Cells and Hyaluronan in the Mouse and Human Cornea', at the XXV Biennial Meeting of the International Society for Eye Research held at Gold Coast, Australia on 19 February 2023.

Dr. Poonam Garg presented a paper entitled 'Linear Codes for Repeated Burst Error Correction in Different Sub-Blocks' in an International Conference on 'Analysis and Its Applications' ICAA-23 organized by Department of Mathematics, Shivaji College on 27-28 February 2023.

Dr Priya Goel presented a paper entitled 'Monitoring of Pesticide Pollution- what have we achieved and what lies ahead' in an International Conference on Environment, Water, Agriculture, Sustainability and Health (Ewash-2022): Strategizing A Greener Future organized by Save the Environment (STE), Hindu

College (University of Delhi) in association with CSIR, Delhi and The Royal Society of Chemistry, North India on 13 January 2023.

Dr Rakesh Kumar presented a paper entitled 'Digital Identity and target social welfare distribution amid Covid-19 disruption' in an International Conference on Advances in IoT, Security with Artificial Intelligence 2023, organized by Department of Electronics, Deen Dayal Upadhyaya College, University of Delhi, New Delhi, on 24-25 March 2023.

Dr Rakesh Kumar presented a paper entitled 'India-ASEAN engagement: Challenges and Opportunities for economic cooperation' in the 8<sup>th</sup> International Commerce Conference, organized by Department of Commerce, University of Delhi, New Delhi, on 11-12 January 2023.

### **National/International MoUs Signed**

Memorandum of Understanding (MoU) for Institutional collaboration between Deen Dayal Upadhyaya College (University of Delhi) and CSIR–Central Engineering Electronics Research Institute (CSIR-CEERI) was signed on 8 September 2020 to encourage the development of the exchange programs based on their respective academic and educational needs.

PhiXgen Pvt. Ltd signed a MoU with college on 3 May 2019 for strengthening Bioinformatic skills.

### **Number and percentage of students placed**

Total number of students placed: 58

Percentage of students placed: 38.18%

### **Number of Companies visited for campus recruitment**

Number of companies visited for campus recruitment: 29

### **Extension and Outreach Activities**

Department of Social Sciences and Humanities, organized a heritage walk to the Red Fort on 1 October 2022. A group of 30 students explored various parts of the fort, including the Diwan-e-Aam, Diwan-e-Khaas, Rang Mahal, and a museum. The architectural fusion of Persian, Hindu, and Mughal styles was evident throughout.

Computer Science Society, Sanganika, organized a day long excursion to "Gandhi Darshan & Smriti Museum" at Raj Ghat on 29 November 2022. Over 160 students from the Computer Science Department explored the museum, gaining insights into Gandhi's life and vision for India.

Department of Social Sciences and Humanities orchestrated a memorable heritage walk for the B.A. Programme students at Mehrauli, New Delhi on 14 January 2023. Led by passionate student guide Mr. Aryan Sharma, the journey unfolded at the historic Qutub Complex, radiating India's cultural legacy.

Under the Project Mehsoos of Enactus DDUC, a mental health activity was organised in collaboration with Niveda Foundation, located in Noida where activities were conducted with children aged between 4-9 years on 13 May 2022. The role of schools in the development and safety of children was discussed with a focus on learning new things.

Social Responsibility Cell at the Department of Management Studies in collaboration with Bhumi NGO and a few other DU College Cells organised a River Clean Up drive on 29 January 2023. This was joined by around 30 Volunteers. This drive helped the volunteers to learn about the hazards environmental waste and how small efforts can make a big difference. They also collaborated with Blood Connect to organise a blood donation camp on 16 February 2023. The camp was conducted in the college premises and more than 100 units of blood were collected.

To build sensitivity of the students towards the environment day long excursions were organised for the students of first year throughout the year to the city forest Sanjay Van, South-Central Ridge, New Delhi. It is an excellent amalgam of heritage and nature. It is a part of Aravali range filled with giant rocks and hilly terrain. A visit was organised to the Sonipat Start-up Summit and Incubation Centre' where students interacted with budding entrepreneurs and got encouraged with their innovative ideas.

Hands on workshop was conducted by Ms. Shweta Dua, Technical Advisor, German International Cooperation and Ms. Priyanka Parwal, Project Head, Frametrics Consulting Pvt. Ltd. on the topic "Solid Waste Management and Composting. An activity-based workshop on the theme Design Thinking-A new Paradigm for Problem Solving was organised by Prof. Ravinder Kaur, under the aegis IIC-DDUC Chapter.

Inaugural event of the Covalence Society was graced by the guests, Prof. S. K. Awasthi, Sr. Professor, Department of Chemistry, University of Delhi and Prof. Ram Mohan, Department of Chemistry, Illinois Wesleyan University, Bloomington, USA on 5 August 2022. Their discourse around the themes "Design, Synthesis, and Applications of Natural Molecules" and "Better Living through Green Chemistry" were well appreciated.

## **Library Development**

College has an excellent fully air-conditioned central library facility spread over three floors with a total floor area of 2,550 sq. meters. It has a provision for a separate reading section for the faculty and spacious reading hall to accommodate students with total seating capacity for 300 persons.

To facilitate e-learning, it has a dedicated Computer Hub comprising of 20 computer systems including a network printer to access e-resources available through internet and other resource sharing network.

Library has been successfully undertaking automated operation since last 20 years using professional database software through network of client-server systems. The library has recently opted for the web-based open-source application software KOHA. It has up-to-date bibliographic database of books and journals.

Library has added 440 volumes of books this year, making its total collection as 49,589 volumes of books. The library subscribes to 63 journals & magazines of national and international repute in the relevant subject areas. Besides this, the library subscribed to 15 national newspapers. It has 613 bound volumes of journals/

periodicals and 850 CDs in its collection. The entire collection is heavily used by the students and faculty with a total footfall of approximately 60,000 visitors resulting into closed to 60,000 transactions.

Interested students of the weaker sections are also issued books under book-bank facility comprising of 1287 volumes of books, benefitting around 82 students in the preceding year. In addition to the printed books, the library also provides internet-based access to e-resources and print-out services.

As many as 53 databases, 30,000 e-journals and more than 1 lakh e-books can be retrieved electronically through various resource sharing networks namely DULS, e-ShodhSindhu and N-LIST. Library held its User Orientation Program on 21 November 2022, for the new batches in two sessions along with the common orientation program of the college organized in the auditorium.

Library compiled one comprehensive issue of Bibliography comprising of new titles acquired during the FY April2022- March 2023. It also compiled three issues of Table of Contents comprising of content pages of all the issues of magazines & journals subscribed in the library July, 2022 -June, 2023. The library prepared and compiled two Documentation Lists namely, G20 and Uniform Civil Code. It added institutional membership of resource sharing network DELNET which augments of its print and e-collection as well as services. The library is also a member of Sugamya Pustakalya whereby reading materials in the form of audio books etc. are made accessible to students belonging to PwBD Category.

### **Faculty Strength**

Total number of Permanent Faculty: 85

Total number of Ad-hoc Faculty: 16

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 43,91,67,579.99/-

Grants Utilized: Rs.43,91,67,376.12/-

### **Other Significant Information**

As a part of the Induction program, the trip to National Science Centre and Sunder Nursery in Delhi was organised on 4 December 2022. The aim was to impart a wonderful panorama of science nature to students

Scientific Social Responsibility Cell (under the aegis of DBT Star College Program and Science Foundation, IEEE Electron Device Society (EDS) –Delhi Chapter, The National Academy of Sciences, India (NASI) - Delhi Chapter jointly organized School Outreach Program for Class XII Students of Bal Bharati Public School, Sector- 12, Dwarka, Delhi on 17 March 2023.

A plantation drive along with the pond revival event was organised in collaboration with Mr. Ramveer Tanwar: The Pond - Man of India at Sakalpura pond and Mehmoodpur pond, located at Block Loni, Ghaziabad on 24 March 2023. The drive aimed at supporting the model where local people are motivated to make efforts towards regenerating and reviving water sources



A workshop on India film making on 29 September 2022 was conducted by Mr. Utkarsh Chaturvedi, an independent filmmaker and award-winning documentary journalist whose films won in national and international film festivals. It aimed at providing a platform to students to interact with an experienced filmmaker and clarify their queries.

Department of Chemistry organised an industrial Trip to Yakult (Sonapat), Haryana on 2 March 2023. The manifestation of the theoretical knowledge of the subject was attained with this trip.

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## **DESHBANDHU COLLEGE**

### **Brief history of the College**

Deshbandhu College was inaugurated on 3 August 1952 by Maulana Abul Kalam Azad, the first Education Minister of India. The college was initially established by the Ministry of Rehabilitation, in memory of Lala Deshbandhu Gupta, a veteran freedom fighter and MP, and was the first college outside the University campus. Under the leadership of Dr. Harish Chandra Kathpalia, the founder Principal, and Dr. Shanti Swarup Bhatnagar, the first Chairman of the Board of Administration of the college, the college began to rise and shine. In 1955, the Education Ministry took over the College and later in the year 1958, the college became an integral part of University of Delhi as its Constituent College. College made a humble beginning with just 72 students and courses like Prep (Arts), Prep (Science) and Pre-medical. The growing demand for enrolment in the College led to the opening of an evening shift at Deshbandhu College. In 2010, Deshbandhu (Evening) was converted into a separate college. From 72 students in 1952 to 600 in 1958, we now have more than 5500 students. The number of teaching faculty rose from an initial 18 to 104 in 1979 to 225 teachers in 2023.

### **Honours/Distinctions**

Prof. (Dr.) Mahesh Chandra was felicitated for the GLOBAL EDUCATOR EXCELLENCE AWARD 2022. Dr. Surabhi Dhingra was awarded "Women With Substance" by Law Colloquy and Women Impressario. Dr. Bajrang Bihari Tiwari was felicitated with Swatantrata Senani Ramchandra Nandwana Smriti Samman' conferred by Sambhawna Sansthan, Chittaurgarh, Rajasthan for his book entitled, 'Kerala Me Samajik Andolan aur Dalit Sahitya'.

Dr. Jitendra Kumar was felicitated with a travel award for an international conference from EMBO (European Molecular Biology Organisation) to participate in India EMBO lecture course on 'Complement and kidney Diseases' 31 January – 3 February 2023, Pune, India.

Dr. Jigyasa H Sondhi was felicitated for Fellowship by the Ministry of Information and Broadcasting.

Dr. Naveeta Negi was awarded with INSC Young Researcher Award 2023.

### **Students with Distinctions**

Chetan of B.Sc. (Hons) Mathematics. I year was the winner for the 2<sup>nd</sup> cash prize in the event "Falcon Films" conducted by the Filmmaking Society of Shyam Lal College on 19 April 2023.

Himani Sisodia of B.A. Prog. (Pol. Science and History) was the winner for the 3<sup>rd</sup> prize with a bronze medal in the event “3 km run for self” conducted by the Department of Physical Education, Aryabhatta College and NCC on 17 February 2023.

Divyanshu Uikey of B.A. (Hons) History II year was the winner for the 2<sup>nd</sup> prize in the event “Picture O Mania” conducted by Picfie, The Photography Society of Acharya Narendra Dev College on 28 March 2023

Yogeshwar Budhwar of B.Com (Hons) III year was the winner for the 1<sup>st</sup> prize in the event “Ebullience: On the spot photography competition-Dark room” conducted by IRIS: Photography Club of PGDAV College on 14 February 2023

Saniya Tarique of B.A. (Hons) English II year was the winner for the 3<sup>rd</sup> cash prize in the event “The Minute” conducted by Indraprastha College for Women on 28 March 2023

## **Publications**

Asique, M. C., Alhowaity, A., Aggarwal, R., Suraj, M.S., Hamam, H. (2022). On the Dynamics of Non-Spherical Test Particle in the Spatial Collinear Restricted Four-Body Problem. *Chaos, Solitons & Fractals*.p.i-xiv

Asique, M. C. (2022). The study of Newton’s “Raphson basins of convergence in the three-dipole problem. *Non-linear Dynamics*, 107, 829–854.

Gangwar, L. K., Sharma, V., Choudhary, A., Suman, G., Pandey, S. S., Tanaka, H., Biradar, A.M., Rajesh. (2023). Optical and dielectric realisation of biomolecular detection using gold nanoparticles bio-conjugate with liquid crystal. *Journal of Molecular Liquids*, 380(121754).

Gangwar, L. K., Choudhary, A., Rewri, S., Singh, G., Biradar, A.M., Suman, G., Rajesh. (2023). Evidence of cholesterol crystallization along with smectic layers in ferroelectric liquid crystal. *Journal of Molecular Liquids*, 369(120830).

Kumar, S., Ahmadi, N., Rastogi, R. (2023). Multi-label learning with missing labels using sparse global structure for label-specific features. *Applied Intelligence*, 53, 18155–18170.

Kumar, S., Rastogi, R. (2022). Low rank label subspace transformation for multi-label learning with missing labels. *Information Sciences*, 596, 53-72.

Lamba, P., Singh, P., Singh, P., Singh, P., Bharti., Kumar, A., Gupta, M., Kumar, Y. (2022). Recent advancements in supercapacitors based on different electrode materials: Classifications, synthesis methods and comparative performance. *Journal of Energy Storage*, 48(103871).

Sanakr, T.V., Saharay, M., Santhosh, D., Vishwakarma, A., Padmasree, K. (2022). Structural and Biophysical characterization of purified recombinant Arabidopsis thaliana alternative oxidase 1A (rAtAOX1A): Interaction with inhibitor(s) and activator. *Frontiers in Plant Science*, 13.

Sharma, M. (2022). Effect of Annealing Temperature on Structural, Optical, Magnetic and Electrical Properties of CrFeO<sub>3</sub> Multiferroic Nanoparticles: A validation to first-principle calculations . *Journal of Alloys and Compounds*, 929(167338).

## **Journals**

Deshbandhu Journal of Social Sciences. *Bi-annual*, 1(1), 159

## **Research Projects**

Project entitled, ‘Exploration of earth abundant metal(s) [Ni, Co and Fe] based MOFs as electrocatalysts for water splitting and Oxygen reduction reactions(# TAR/2020/000232)’ funded by SERB- Department of Science and Technology for 3 years and Rs. 8.5 lakhs.

Project entitled, ‘Identification of the molecular mechanism of mechano-transduction pathways that act upstream of Hippo Pathway for treatment of breast cancer’ funded by Indian Council of Medical Research for 3 years and a grant of Rs. 41.26 lakhs.

Project entitled, ‘Design, synthesis and biological evaluation of novel lead compounds for the treatment of Fibrodysplasia Ossificans Progressiva (FOP)’ funded by Indian Council of Medical Research for 3 years and a grant of Rs. 53 lakhs.

Project entitled, ‘DBT Star College Scheme’ funded by Department of Biotechnology, Govt of India for fourth year and Rs. 104 lakhs.

## **Patents Filed/Granted**

National Patents entitled, ‘Device to detect power consumption for renewable energy solar powered air pollution indicator’.

## **Seminars Organized**

Seminar entitled ‘Gender Sensitivity Roles and Responsibilities’ delivered by Dr. Surabhi Dhingra, Associate Professor, Internal Complaints Cell on 2 July 2022.

Seminar entitled ‘Data Visualization with Tableau’ delivered by Mr. Varun Kumar Anguralia, Data Analyst on 30 July 2022.

Seminar entitled ‘Understanding and overcoming our stress and emotion’ delivered by Dr. Puneet Jain, Clinical Psychologist, Fortis Escorts Hospital, New Delhi on 4 August 2022.

The national seminar entitled ‘Mode@20 Dreams Meet Delivery’ by Shri Kiran Rijiju, Minister of Law & Justice, Government of India on 12 September 2022.

Seminar entitled ‘Molecular Biology of Carcinogenesis Challenges & Opportunities’ by Prof. Alok Bharti, Department of Zoology, University of Delhi on 19 September 2022.

## Conferences Organized

2<sup>nd</sup> International Conference on ‘Natural Products and Human Health’ was sponsored by UGC, INSA, DBT and CSIR and organized on 4 June 2022.

Two days International E-Conference on ‘Recent Advancements In Chemical Sciences: Health, Environment and Society’, sponsored by ICSSR and was organized on 8 April 2022.

National Conference on ‘National Education Policy: Implementation, Challenges, Opportunities and Probable Outcomes’, sponsored by ICSSR and was organized on 14 May 2022.

## Seminar/Conference Presentation

Prof. Indrakant Kumar Singh presented a paper entitled ‘Assessment of plant-derived compounds as a treatment option against neuroblastoma tumor’ at the 2<sup>nd</sup> International conference on “Natural Products and Human Health-2022” organized by the college on 4 - 6 November 2022.

Prof. Indrakant Kumar Singh presented a paper entitled ‘BCL2A1/BFL1: Targeting the Untargeted’, in the 2<sup>nd</sup> International Conference on “Natural Products and Human Health-2022” organized by the college on 4 - 6 November 2022.

Dr. Umesh Kumar presented a paper entitled ‘A novel Ni(II)-thiocyanate complex with functionalized carbon nanotube as efficient catalytic activator for oxygen evolution reaction’, during the ‘27<sup>th</sup> ISCBC International Conference (ISCBC-2022)’ jointly organized by Indian Society of Chemists and Biologists (ISCBC) and Department of Chemistry, Birla Institute of Technology, Mesra, Ranchi from 16 – 19 November 2022.

Dr. Monika Sharma presented a paper entitled, ‘Investigation of static and dynamic magnetization in Ni<sub>2</sub>FeAl full Heusler alloy nanomaterials’, at the International Conference on Nanotechnology: Opportunities & Challenges (ICNOC-2022) organized by the Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi on 28 – 30 November 2022.

Dr. Kakoli Bera presented a paper entitled, ‘Influence of Ni-Fe co-doped ZnO nanoparticles on structural, optical and magnetic properties’ at the International Conference on Nanotechnology: Opportunities and Challenges (ICNOC-2022) organized by the Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi on 28 – 30 November 2022.

Dr. Reeta presented a paper entitled, ‘Investigation of efficient perovskite CQD tandem solar cell for low-cost applications through device simulations’ at an International Conference on Nanotechnologies Opportunities and Challenges (ICNOC 2022) organized by Jamia Millia Islamia, New Delhi from 28 – 30 November 2022

Dr. Umesh Kumar presented a paper entitled, ‘Nickel(II) complexes bearing ONS donor ligands and their anticancer activities’, during the 2<sup>nd</sup> International Conference on Integrative Chemistry, Biology & Translational Medicine (ICBTM-2022) jointly organized by Hansraj College, University of Delhi; Institute of Nuclear Medicine & Allied Sciences, DRDO, Delhi; Miranda House, University of Delhi; Mayo Clinic,

Jacksonville Florida, USA, University of Debrecen, Hungary; SGT University, Gurugram from 6 – 8 December 2022.

Dr. Ashwani Kumar Singh presented a paper entitled, ‘Vanadium doped few-layer ultrathin MoS<sub>2</sub> nanosheets on reduced graphene oxide for high-performance hydrogen evolution reaction’, in an International Conference on Nanomaterials for Electro-Catalytic Technologies (iCONNECT 2023) organized by Indian Institute of Technology, Delhi from 20 – 22 March 2023.

### **National/International MoUs Signed**

International MoU signed with Arontier Co. Seoul Korea.

International MoU signed with Centro Escolar University, Manila, Philippines.

International MoU signed with Palacky University Olomouc, Czech Republic.

National MoU signed with Pettigrew College of the Manipur University.

National MoU signed with University of Delhi and School of Open Learning and Bhaorao Deoras Sewa Nyas.

National MoU signed with the Tourism & Hospitality Skill Council (THSC)

National MoU signed with the Movie and Entertainment Skill Council (MESC).

National MoU signed with the Healthcare Sector Skill Council (HSSC).

National MoU signed with the Retailers Association’s Skill Council of India (RASCI).

National MoU signed with JAAGRUTI Waste Paper Recycling Services

### **Number and percentage of students placed**

Number of students placed: 30

### **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment: 65

### **Extension and Outreach Activities**

Following Outreach activities were organized during the year 2022-23. Students of the college were also benefitted by these activities: NukkadNatak, The Dream of our Children, Chahat, Magazine Launch Event, MobileBookExhibition, Young India Unity Run and Pledge, Donation Drive and The Art of Being Happy.

### **Library Development**

Library has added the following new facilities/features in the year 2022-2023:

Library added 2497 books during 2022 - 2023 to strengthen the library collection.

DELNET: The library subscribed to the DELNET Annual Institutional Membership for the period 18 January 2022 to 17 January 2023

NLIST: The library also subscribed to the NLIST for the academic year 2022-2023 to access e-journals and e-books.

SMS Facility: The library introduced SMS services for library users of the college.

With this service, library users may know about the transaction log (Checkout/Check-in) of library books

New Furniture: The library added new wooden stacks and wooden periodical display racks.

User Orientation Programme: The College library organized a library orientation program for first-year students at the beginning of the academic session

### **Faculty Strength**

Total number of faculty: 220

### **Financial Allocation and Utilization**

Fund allocated: Rs. 79,65,44,000/-

Fund utilized: Rs. 79,09,76,424/-

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## **DR. BHIM RAO AMBEDKAR COLLEGE**

### **Brief history of the College**

Dr. Bhim Rao Ambedkar College came into existence in the year 1991 during the birth centenary year of Bharat Ratna Baba Saheb Dr. Bhim Rao Ramji Ambedkar and celebrated its Silver Jubilee in the year 2016. It is a constituent co-educational college of the University of Delhi and is 100 % funded by Delhi Government. Since its inception, it has maintained its incessant momentum on the path of progress, both in academics and extra-curricular fields. The Principal, teaching & non-teaching Staff have dedicated themselves to build an environment of holistic and inclusive learning, inspiring the youth to create a fruitful and responsible future. The college motto, 'Atto Deepo Bhava' which means 'Be your own light', motivates all to work hard with dedication and integrity, to enlighten ourselves and contribute to the society's welfare while driving strength from the teachings of Baba Saheb who saw education as a potent tool which could equally empower every citizen. The prominent academic programmes include B.Com & B.Com (Hons.), B.A. (Hons.) Geography, B.A. (Hons.) History and B.A. (Programme). The college holds the unique distinction of being the forerunner in launching four professional courses of the University namely B.A. (Hons.) Hindi Journalism and Mass Communication, B.A. (Hons.) Social Work, B.A. (Hons.) Business Economics and B.A. (Hons.) Applied Psychology.

### **Major Activities and Achievements**

The College established Dr. B.R. Ambedkar Study Centre on 2022, the study centre organises lectures and seminars to promote ideas of Dr. Ambedkar. In order to promote the research activities, The College started an International Journal 'Academia' and published, Monographs. Further, the college has formed various centers to enhance innovation, skills and multidisciplinary research for the faculty and students namely The Centre for Skill Development and Innovation", "Centre for Students' Exchange & Faculty Development Program Implementation" "Publication and Documentation Centre"and "Centre for Multi-Disciplinary Research". The college has introduced three internships for students of the college with a grant of Rs.1.5 lakh. These are (i) Administrative Task-based; (ii) Accounts task-based and (iii) Management of college Campus. Ten students will be given an honorarium of Rs.1,000/- per month for a maximum of six months duration. The college has also signed Four MoU.

## Students with Distinctions

Following students secured first position in the college in the below mentioned courses

Satvik Sethi, B.A. (Hons.) Business Economics III Year,  
Manu Khokar, B.A. (Hons.) Geography III Year  
Cerena Gogoi Bhatia, B.A. (Hons.) Applied Psychology III Year  
Mohd. Hamza Barkati, B.A.(Hons.) Social Work III Year  
Tanu Mishra, B.A. (Hons. HJ & MC) III Year

## Publications

Dr. Avtar Singh. (2022). Leveraging Technology for Inclusive and Sustainable Development”. *International Journal of Interdisciplinary Research and Innovations (IJIRI)*”, 10: 17-26.

Dr. Deepali Jain. (2022). A Study on Evaluation of a Decision Tree Model For Educational Institutes ( Digital Marketing Strategy - Artificial Intelligence) . *International Journal of Research in Commerce & Management (IJRCM)*. 13: 25-35.

Dr. Deepshikha Chowdhary. (2022). ICDS Nutrition Programme and Responsibilities of Self-Help Groups in Delhi-NCR . *The Social Ion, An International Refereed Peer Reviewed Indexed Journal*. 11: 4-26.

Prof. Richa Chowdhary & Dr. Deepshikha Chowdhary. (2022). Situations of Drug Offending Responses: A Glimpse. . *Research Journal of Social and Life Sciences*. 36:16-21.

Dr. R. P. Dwivedi. (2022). ‘उत्तर-उत्तर आधुनिकता वाद: सांस्कृतिक नृत्य परदृश्य, तकनीकी एवं ज्ञानाचारकी. Global culturzInternational Journal of Culture & Global Studies, 03(May-August 2022), 12-23.

Dr. Naveen Kumar . (2022). Empowering leadership and Organizational culture: Collective influence on Employee Flourishing . *International Journal of Health Science*, 1: 2983-2993.

Prof. Tushti Bhardwaj. (2022). Risk Factors Associated with Lifestyle Cancers in India: A Systematic Review of Existing Evidences from Varied Geographical Locations. . *Clinical Case Reports International*. 6: 1378.

## Seminars Organized

Seminar entitled ‘Social Work Profession in India@2030’ by Prof. Sanjai Bhatt, Prof. Sanjoy Roy, Prof. Neera Agnimitra, Prof. Neena Pandey and Prof. Sushma Batra during 3rd NATIONAL SOCIAL WORK WEEK program on 17 August 2022

## Conferences Organized

International Conference entitled ‘निन्दीकीस्थित’ organized by the department of Hindi has organised the Conference and invited on 10 March 2022.

National Conference entitled 'Psychology and its Role in Human and Societal Development' organized by the department of Psychology on 18-19 April 2022.

International conference entitled '3rd World Environment Summit 2022', Organised by Environment and Social Development Association (ESDA) Delhi in collaboration with a group of eminent institutions comprising the Center for the Study of Regional Development, Jawaharlal Nehru University (JNU), New Delhi, Dr. Bhim Rao Ambedkar College, University of Delhi, Amity University Haryana, GD Goenka University Gurugram, GRC India, Global Foundation, RCCGV College Ghaziabad and in foreign partnership of Villa College Maldives & Tribhuvan University, Kathmandu, Nepal organized on 15-16 October 2022.

### **Seminar/Conference Presentations**

Dr. Anil Kumar has Presented a paper titled 'A comprehensive study of personal financial pros for employees working from home', in an 73rd ICA conference organized by the All India Commerce Association held in Aurangabad from 22-24 December 2022.

Dr. Deepali Jain presented a paper in an International Conference entitled 'Disruptive Innovation and Digital Transformation in Business and Management' organized by Zakir Hussain Delhi College (Evening), University of Delhi and G. L. Institute of Management and Research PGDM Institute on 5-6 May 2022 and Got Best Paper Award

Mr. Kumar Satyam has Presented a paper titled 'स्वराज एवं स्वतंत्रता आंदोलन में जनजातियों का नवनिष्ठ योगदान: झारखंड के संदर्भ में' in a National Conference organized jointly by Indraprasth Adhyayan Kendra, Delhi, School of Sanskrit and Indic Studies, JNU and Chaudhary Charan Singh, University, Meerut on 19 June 2022

Dr. Nishi Sharma presented a paper entitled 'Inter-linkages of Indian Sectoral Indices with Global Markets: An Empirical Study during Covid-19 and Russian Ukraine Conflict' at the 10th International Conference on Advances in Business and Management on Business Practices in the Era of Sustainable Development Goals (SDGs) 2030 and new age Technologies held on 10-11 November 2022 and received the Best Paper Award

Dr. Poonam Mittal has presented a paper on 'An Analysis of Customer Behaviour in Traditional Vs. Online Shopping' in an International Journal of Research and Analytical Reviews in May 2022

Dr. Rakesh Sahani presented his research paper on "Dynamic Interaction between Food and Fuel Markets in India: Has India Joined the Global Race' in 3<sup>rd</sup> Capital Market Conference NISM Maharashtra on 15-16 December 2022.

### **National/International MoUs Signed**

MoU with Hall Party for a smart Identity card for students that can be used as an ATM, Metro/DTC card along Identity card of the College.



MoU has been signed with the Indian Pollution Control Association (IPCA) for BIO Waste Management in the campus.

MoU with Kings College, London Cicely Saunders Institute, and Can Support NGO for promoting Research opportunities in the three institutes on 22 December 2022

MoU with Idea Saksham NGO to promote job-related opportunities and skill-based training to PWD students in the college.

**Number and percentage of students placed:** 52 Students; 56%

#### **Number of Companies visited for campus recruitment**

The college successfully placed its 46 students in renowned companies with an average pay package of 4.3 Lakh (Min 2.5 Lakh, Max 6.4 lakh). The reputed companies that hired our students are Aditya Birla Sunlife Insurance, Bonami Software, ICICI prudential, IIFM, ISA Global, Natwest, TopHire, TPM consultants, Travclan, PlanetSpark etc. On 25th August 2022, The Placement Cell in coordination with the Equal Opportunity Cell of the College organised INCLUSIVE MEGA JOB FAIR, with support from Samarthan Trust for the Disabled and B K Welfare Foundation in the College premises. A total of 40 companies were present on the campus which included Concentrix, My Money Mantra, Global Talent Training, Devyani International, RAP Info System, Muthoot Fincorp, SBI Credit Card, McDonald's, ICCS Callings, Byjus, and many more. The event witnessed an impressive registration of around 500 candidates. A total of 238 candidates were shortlisted, 11 candidates were given offer letters on the spot. Another 114 candidates were given offer letters during the one-month follow-up process with companies.

#### **Extension and Outreach Activities**

The Volunteers of NSS BRAC participated in the Swachhata Drive organized By MoYAS (Ministry of Youth Affairs and Sports) on 9-15 September 2022. A distribution drive was conducted on 25 September 2022 in the nearby colonies that include books and stationary materials to the needy children. Ms. Anubha Kumari, NSS volunteer participated in the National Adventure Camp held from 12-21 September 2022 at ABVIMAS, Manali, organised by the Ministry of Youth Affairs and Sports, Regional Directorate of NSS at Himachal Pradesh

#### **Library Development**

Library is computerized and uses Libsys software and now migrated to KOHA software in the month of December 2022. OPAC (Online Public Access Catalogue) facility is provided to every reader.

Total Books available as on 3 February 2023: 45565

Books purchased from 18 January 2021- 3 February 2023: 4190

Periodicals available in the library: 54

Periodicals in English Language:17

Periodicals in Hindi Language:14

Newspaper in the English Language: 08

Newspaper in Hindi Language:14

Newspaper in Urdu: 01

## **Faculty Strength**

Total Faculty Strength: 103

## **Financial Allocation and Utilization**

Grant Allocated: ₹ 44.52 Crore

Grant Utilized: ₹ 40.42 Crore

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## **DURGABAI DESHMUKH COLLEGE OF SPECIAL EDUCATION (VISUAL IMPAIRMENT)**

### **Brief history of the College**

Founded in 2006 under the auspices of the Blind Relief Association, the college is affiliated with the University of Delhi and provides a Bachelor of Education program with a specialization in Special Education (Visual Impairment). The institution holds permanent recognition from the University of Delhi, the University Grants Commission (UGC), and the Rehabilitation Council of India (RCI).

The college receives partial funding from the National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan) under the Ministry of Social Justice and Empowerment, Government of India, along with developmental grants from the University Grants Commission. Since the academic year 2015-2016, the B.Ed. Special Education program has extended to a two-year duration. The College has now successfully marked 17 years of existence.

### **Major Activities and Achievements**

An inclusive football game was organized by the College on 29 April, 2022. The sighted and visually impaired students of the college played together blindfolded.

Three faculty members and 37 trainees of first year B.Ed. Special Education (ID) course of Lady Irwin College visited the college on 6 June 2022 and learnt English Braille from our trainees.

The college extended special assistance to the Helen Keller Trust and The Relief Association in commemorating Helen Keller Day on 27 June, 2022. First-year teacher trainees from the college actively participated by presenting a skit portraying the life of Helen Keller and engaging in simulation activities to mark this significant occasion.

On the 6 July 2022, a group of students explored the National Museum located on Janpath Road. Specifically, visually impaired students had the unique opportunity to visit a dedicated tactile gallery, specially crafted and designed to focus on the Indus Valley civilization.

The college arranged an event commemorating 'World White Cane Day' on 15 October 2022. Additionally, the college hosted an observance for 'World Down Syndrome Day' on 21 March 2023 in the Seminar Hall.

## **Students with Distinctions**

Ms. Anjali of (2020-22) stood first in university B.Ed Spl. Education examination from her college. She secured 1520 marks out of 2000.

Mr. Akashdeep Bhandari of second year received Certificate of Appreciation by Govt. Sarvodaya Bal Vidyalaya, Rouse Avenue, Dean Dayal Upadhy Marg, New Delhi for his excellent work in drafting and editing of school magazines.

Ankita Sahadev, a trainee, had a chance to interact with the Under-Secretary-General for UN Peacekeeping Operations Mr. Lacroix about the role of persons with disability in maintaining world peace in the month of October 2022. She was one of the speakers at the Smart Solutions Challenge and Inclusive Cities Awards Ceremony held on 01 September 2022 and was among the panelists at Voice of Youth Panel, a conference organized on 11 October 2022 by SRF Capgemini on Democratizing Digital.

## **Publications**

Jha, N., & Sanyal, S. . (2022). Barriers and Opportunities for Visually Impaired Children in Inclusive Education- Beneficiary Perspectives . *EDUTRACK*, 21(9 ), 25-38.

## **Seminars Organized**

Seminar entitled, "Awareness on Down syndrome" by Dr. Swati Sanyal, Former Course Director, on Down Syndrome Day, on 21 March 2023.

## **Seminar/Conference Presentations**

Dr. Swati Sanyal acted as resource person in 3 day Orientation programme on 'Inclusive Pedagogy for Children with Visual Impairment' in Pratapnagar, Rajasthan, organized by Sight savers on 10-11 February, 2023.

Dr. Swati Sanyal was the keynote speaker in 'Communication disorder series' organized by the University of Dhaka, Bangladesh on 18 March 2023.

Dr. Sudeep Kumar Dubey acted as resource person in a CRE webinar on "Increasing Visual Efficiency among Low Vision" on 5 September 2022, organized by CRC Gorakhpur (U.P.).

Dr. Sudeep Kumar Dubey acted as resource person in a CRE webinar on Community Based Rehabilitation on 28 June 2022 organised by MEDHA special Teachers training Institution, Khushi Nagar (U.P.)

Dr. Sudeep Kumar Dubey acted as resource person in a CRE webinar on Braille TLM on 30 June 2022, organised by K S Memorial Institute Raibareilly (U.P.)

Dr. Sudeep Kumar Dubey acted as resource person in a CRE webinar on Curriculum Adaptation Process on 27 September 2022, organized by SRIJAN Vishesh Shikshak Prashikshan Sansthan, Khushi Nagar (U.P.)

Dr. Sudeep Kumar Dubey was invited as Resource Person at CRC Patna on 1-2 March 2023 for training Resource Teachers under Bihar State Education Project (SSA).

Narendra Kumar Jha acted as resource person in a three day Continuing Rehabilitation Education (CRE) webinar (online) of Rehabilitation Council of India (RCI) on the topic 'Language & communication for Children with Hearing Impairment (meaning and types of literacy skills (reading, writing, numeracy, digital, financial, health and civic)' on 29 October 2022 at Vijay Singh Pal Balika Degree College, Mohan Road, Post- Kakori, Lucknow (U.P.)

Narendra Kumar Jha acted as resource person in a three day Continuing Rehabilitation Education (CRE) programme (online) of Rehabilitation Council of India (RCI) on the topic 'Effect of congenital and adventitious blindness and low vision on motor, cognitive language and social emotional development' on 19 October 2022 at Medha Vishesh Shikshak prashikshan Sansthan, Gauri Bazar, Deoria (U.P.)

Narendra Kumar Jha acted as resource person in a three day Continuing Rehabilitation Education (CRE) programme (online) of Rehabilitation Council of India (RCI) on the topic 'Use of residual vision for educational purposes' on 17 October 2022 at Medha Vishesh Shikshak prashikshan Sansthan, Gauri Bazar, Deoria (U.P.)

Narendra Kumar Jha acted as resource person in a three day Continuing Rehabilitation Education (CRE) programme (online) of Rehabilitation Council of India (RCI) on the topic 'Strategies of Curricular Adaption for CwVI' on 28 September 2022 by SRIJAN Vishesh Shikshak Prashikshan Sansthan, Khalilabad, Dist- Sant Kabir Nagar (U.P.)

Narendra Kumar Jha delivered lecture in three day Continuing Rehabilitation Education (CRE) programme (online) of Rehabilitation Council of India (RCI) on the topic 'Who are the stakeholders for Community Based Rehabilitation and describe the roles of stakeholders for CBR' on 28 June, 2022 organized by Medha Special Teacher Training Institutions (UP106) Purana Fazil Nagar Road, Kasia Kushinagar (U.P.)

Narendra Kumar Jha delivered lecture online in Continuing Rehabilitation Education (CRE) programme of Rehabilitation Council of India (RCI) on the topic 'Concept of Social Security Different Aspects' on 24 May, 2022 organized by Kalyanam Karoti, Mathura (U.P.)

### **Other Inter-Institutional Collaboration**

The institute has an active faculty exchange programme with Jamia Millia Islamia. We also share various exchange programme in the form of workshop in our respective areas in special education with Lady Irwin College.

The college share admission process, annual examination (question papers settings & evaluation) under the supervision and control of Department of Education (CIE), University of Delhi. We share regular school visit programmes with Amar Jyoti Charitable Trust.

Rehabilitation Council of India (RCI) is the monitoring body in the field of special education and rehabilitation of Persons with Disability (PwD). Therefore, we also follow the guidelines of RCI and

conduct Continuing Rehabilitation Education (CRE) Programme and also our faculty members act as a visiting experts of RCI and member of RCI expert committee.

### **Student under Exchange Program (Inbound/Outbound)**

37 students of B.Ed. Special Education-ID of Lady Irwin College participated in the Braille Learning Interaction Program. The workshop held in Gandhi hall in the college campus on 07-08 June 2022.

### **Number and percentage of students placed**

Total of 22 students were placed during the year 2022-23.

### **Extension and Outreach Activities**

“Improving Accessibility to Cultural Heritage for the Persons with Print Disabilities” held on 18 March 2023 at IGNCA, Janpath, New Delhi, jointly organized by the IGNCA in collaboration with IFLA Committee on Libraries for the Persons with Print Disabilities and Saksham Trust, New Delhi.

### **Library Development**

The library boasts a collection of 4599 books encompassing both print and Braille formats, featuring a diverse range of 2344 titles. Among these, 11 print journals dedicated to Special Education and Education are available. Throughout the academic year 2021-2022, 38 new books were added to the inventory.

Additionally, the library houses 134 talking books in both DAISY and MP3 formats, contributing to accessible learning resources. A specialized focus on inclusivity is evident with 396 Braille books and 5 Braille magazines in the collection, further enriching the educational resources available for students.

### **Faculty Strength: 04**

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## **DYAL SINGH COLLEGE**

### **Brief history of the College**

Dyal Singh College (Morning) was started by Sardar Dyal Singh Majithia who is the founder of ‘The Tribune’ and ‘Punjab National Bank’, and who transferred his vast wealth in 1895 in order to establish an Education Trust for a secular college. Consequently, Dyal Singh College was established at Lahore in 1910. Post partition the Educational Trust started with a camp college in Delhi which was later handed over to the Dyal Singh College Trust on 31 March 1959. The college started functioning in the capital at Rouse Avenue as a constituent college of the University of Delhi from 5 August 1959. The college has been contributing to the solemn task of nation-building since its very inception. The present college campus is located at Lodhi Road in South Delhi and covers an area of over 11 acres. Currently college is imparting education to over 6379 students in 24 programmes (including 17 Honours, 5 Programme & 2 Post-Graduate courses) through

19 Departments (Arts, Commerce, Social Sciences, Mathematical Sciences, Computers and Sciences) including students from foreign countries like Afghanistan, Mangolia and USA.

### **Major Activities and Achievements**

Dyal Singh College (Morning) was ranked 35<sup>th</sup> in the NIRF ranking under college category in 2022. The college secured a CGPA of 3.15 on four-point scale and NAAC accreditation of Grade A. All the faculty members, staff members, students put in their efforts and hard work for the NAAC peer team visit.

### **Honours/Distinctions**

Dr. P. Chitrlekha was awarded ‘Anil Sadgopal Award’ for popularizing science, and contribution to science outreach, conferred by Homi Bhabha Centre for Science Education, TIFR, Mumbai, 2022.

Prof. Jasleen Kaur Kalia was felicitated with the best oral presentation award for her presentation entitled “Impending threat to plants that heal” during the National Conference on Medicinal Plants: Frontier Areas of Research and Development organized on 16-17 March 2022.

Prof. Anil Kumar Nain ranked in the world’s top 2% Scientists 2022 released on basis of Scopus data of research analysis by Stanford University, USA with Global Rank of 203 out of 53,348 researchers in Chemical Engineering Category and held 2<sup>nd</sup> position out of 22 University of Delhi researchers.

Dr. Shweta Rani received “GC Memorial Best Research Author Award” for excellence in research publication by CTEF, Delhi-NCR Chapter in collaboration with SDRF.

Dr. Rajesh Kumar Abhay was awarded Associateship at the Indian Institute of Advanced Study, Shimla under the UGC Inter-University Centre for Humanities and Social Sciences.

### **Students with Distinctions**

Muskan of B.A (Pass) II year, won Bronze Medal in All India Inter-University Boxing Championship (January 2023) and won Gold Medal in UP state competition (December 2022).

Chance Tushir of B.A (Pass) won Gold Medal in Inter-University Selection Trial (2022), won Silver medal in North West Zone Boxing Tournament (March 2023) and won bronze medal in Delhi State Boxing Tournament (December 2022).

Vibhor Ranjan of B.Sc (Hons) Computer Science Iyear, won bronze medal in Inter College Chess Competition (2023), won Gold Medal in North Zone Chess Competition (2023) and 5<sup>th</sup> position in All India Inter-University Tournament (2023).

Lakshay of B.A (H) Economics Iyear, won Silver Medal in Javelin throw in Annual Delhi State Athletics Championship (2022), won Gold Medal in National Javelin Day Event (August 2022), won Bronze Medal in North Zone Junior Athletics Championship (September 2022), won Bronze Medal in Open Delhi State Athletics Championship.

Pushpender Rathi of B. Com (Pass) won Bronze Medal in 36<sup>th</sup> National Games (2022) and participated in 6<sup>th</sup> Elite Men's National Boxing Championship (2022).

## Publications

Chikkara, A., Roayapalley, P.K., Sakagami, H., Amano, S., Satoh, K., Uesawa, Y., Das, U., Das, S. (2022). Novel Unsymmetric 3,5-Bis(benzylidene)-4-piperidones That Display Tumor-Selective Toxicity. *Molecules*, 9(27), 6718.

Garg, M., Goel, A. (2023). Preserving integrity in online assessment using feature engineering and machine learning. *Expert Systems with Applications*, (225)

Gupta, S., Sood, N., Rath R., Saxena, R. (2022). Crop residue burning in Northern India: Environmental challenges and strategies for mitigating the Environmental impact of biomass burning . *Journal of Experimental Biology*, 2(25), 2047-2057.

Laisram, N., Rahman, Z., Singh, V.P. (2023). Antagonistic activity of *Pseudomonas fluorescens* strain X1 against different *Fusaria* and its *in vivo* analysis against *Fusarium udum* infected Pigeon pea. *Current Microbiology*, 98(80), 0343-8651.

Mehan, N. (2023). Effects of optic axis rotation on the sensing properties of nematic liquid crystal based surface plasmon resonance (SPR) sensor. *Optical Materials*, 113472(136), 1873-1252.

Prasad, A.S., Pandey, B. W., Thakur, S., Ojha, A., Choudhary, S. (2022). Risk Assessment of Industrial Hazard, Resilience and Disaster Risk Reduction for Sustainability: A case study of Industrial Areas in Ghaziabad District, NCR Delhi. *Disaster and Development*, 2(11), 125-146.

Rajpal, S., Rajpal, A., Kumar, S. (2022). ROSEmark: Robust Semi-blind ECG Watermarking Scheme using SWT-DCT Framework. *Digital Signal Processing*, 103648(129), 1051-2004.

Riyazuddin, R, Singh, K., Iqbal, N, Rani, A., Kumar, M., Khatri, N., Siddiqui, M.H., Yasheshwar, Kim, S. T., Attila, F., Gupta, R. (2022). Iodine: an emerging biostimulant of growth and stress responses in plants. *Plant and Soil*, 655(486), 119-133.

Saini, Kumar, K., Rani, R., Muskan, Khanna, N., Mehta, B., Kumar, R. (2023). An overview of recent advances in Hantzsch's multicomponent synthesis of 1,4-dihydropyridines: A class of prominent calcium channel blockers . *Current Organic Chemistry*, 2(27), 119-129.

Upadhyay, R. K., Sain, K. K., Deswal, N., Singh, T., Tripathi, K. P., Kaushik, P., Shakil, N. A., Bharti, A.C., Kumar, R. (2022). Synthesis of benzothiazole-appended bis-triazole-based structural isomers with promising antifungal activity against *Rhizoctonia solani*. *RSC Advances*, 12: 24412–24426.

## Research Projects

Project entitled, 'Physicochemical Studies of Homoeopathic Drug Formulations by using Volumetric, Acoustic, Viscometric, Optical and Conductometric Measurements' and funded by Central Council for Research In Homoeopathy for the year 2022 and sanctioned amount Rs 44.768 lakhs.

Project entitled, 'Bhojpuri Lokgeet' and funded by Indira Gandhi national Centre for the Arts (IGNCA) for the year 2022 and sanctioned amount Rs. 8 lakhs.

Project entitled, 'Atmnirbhar Orissa and Jharkhand' and funded by Indian Council of Social Science research (ICSSR) for the year 2022 and sanctioned amount Rs. 7 lakhs.

Project entitled, 'Extrapolation in some Labesgue type space' and funded by Science and Engineering Research Board (SERB)-DST for the year 2023 and sanctioned amount Rs. 6.6 lakhs.

### **Patents Filed/Granted**

National Patentsentitled:

The Effect of Human Resource Management Practices on Total Quality Management Implementation.

The IoT and Cloud Computing-based identification of Cyberthreats using Machine Learning.

Artificial Intelligence based System along with IoT Alert Mechanism to Predict the Occurrence of Earthquake and Safeguard the Buildings from its Disastrous Effects.

The Role of Tourism Investment in Supporting Economic Development in India.

Deep Learning based approach to conduct Epidemiology Study on Covid-19 affected Geographical Location of a Country.

### **Seminars Organized**

Seminar entitled, 'Know Your Rights, Empowerment' was presented by Mr. Karuna Nundy, Lawyer, Supreme Court of India on 16 July 2022.

Seminar entitled, 'How can we make our world Sujalaam Sufalam' was presented by Dr Bhakti, Jalsmruti on Water Day 18 February 2023.

Seminar entitled, 'Art of Research writing' was presented by Shobhana Jha, NITI Aayog, on 11 February 2023.

Seminar entitled, 'Finding Hope in Adversity, Well-being' was presented by Brahma Kumar Piyush, Brahma Kumaris 5January 2023.

### **Conferences Organized**

Organized a Conference on 'Posco Act' on 24 September 2022.

Organized a Conference on 'Managing the Developments in Business and Management: The Era of Sustainable Development Goals' on 09 September 2022.



### **Seminar/Conference Presentations**

Prof. Alka Gupta presented a paper entitled, 'Development of Citronella essential oil-based Nanoemulsion and its larvicidal effects against *Spodoptera litura* (Fab.) (Lepidoptera: Noctuidae)' during the 4<sup>th</sup> International Conference on Materials, Manufacturing and Modelling (ICMMM2023) organized on 10-12 March 2023.

Prof. Anita Goel presented a paper entitled, 'Current Challenges and Strategies for preserving Integrity in e-assessments' during an International e-Assessment Association Conference & Awards organized at The Tower Hotel, St. Katharine's Way, London.

Dr Rajesh Kumar Abhay presented a paper entitled, 'Appraisal of Urban Growth and Status of Housing Quality in NCT-Delhi' during an International Conference on Geoinformatics for Biodiversity Conservation Planning organized on 14 October 2022.

Mr. Santanu Kumar Das presented a paper entitled, 'Famine Survival Strategy and Migration: A Study of Colonial Orissa' at an International Conference on Indian Culture in South East Asia: Past and Present organized on 23-24 September 2022.

Dr Uma Shanker Singh presented a paper entitled, 'Lokmanya Bal Gangadhar Tilak: The Pioneer of Indian National Movement, during the National Seminar on The Rise of Indian Nationalism and the role of Tilak organized on 11-12 November 2022.

Prof. Arun Pal Singh presented a paper entitled, 'Rubio de Francia Theory of Extrapolation' during the National Conference on Harmonic Analysis and Applications (NCHAA) organized on 2 December 2022.

Dr. Rajeev Kumar presented a paper entitled, 'Design of Efficient Code-Based Cryptographic Schemes Resistant to Quantum Attacks' in an International Conference on Graphs, Networks and Combinatorics (ICGNC 2023) organized on 10-12 January 2023.

Prof. Rita Rath presented a paper entitled, 'Asola Bhatti wildlife Sanctuary- a case study of Ecological Restoration: its success and Present status' in the Equinox-2022: The Annual International Conference organized on 12 August 2022.

Prof. Neerja Sood presented a paper entitled, 'HPV Vaccine- The crusader against cervical cancer' at the 7<sup>th</sup> Annual International Conference of Indian network on soil contamination research (INSCR) organized on 11 November 2022.

### **National/International MoUs Signed**

MoU with National Institute of Immunology, for the Science Setu Program

MoU with Shri Ram Institute of Industrial Research, Delhi

### **Other Inter-Institutional Collaboration**

CCRH, Ministry of Ayush

### **Number and percentage of students placed**

Number of student Placed: 210

Percentage of student placed: 35%

### **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment: 112

### **Extension and Outreach Activities**

Dyal Singh College has various which work for the holistic development of students and sensitizing students towards social issues. Social activities, talks, discussions and webinars were organized on Tree Plantation, Swachh Bharat Abhiyan, Blood donation camp, Yoga Day celebrations, Climate action, Rethink Plastic, Cloth donation drive, Cyber crime and security, Gender Neutralization, Tiranga Yatra, Cleanliness drive, Water Conservation, Constitutional Day, Fit India 3.0, Clean India 2.0, Azadi ka Amrit Mahotsav, Animal Feeding, E-waste management, Van Mahotsav and many more.

As a part of Mission Life “Jan Andolan” an awareness trip to National Institute of Solar Energy, Gurugram was organized to inform about National Solar Mission, International Solar Alliance and PM-KUSUM scheme. One Day Training cum Awareness Program on "Fire Hazard and Life Safety Measures" was carried out on 16 February 2023, in collaboration with Delhi Fire Services (DFS), Central Delhi. The students of NSS have worked in collaboration with various NGOs like Shiksha, Shakti, Mission Life etc. The students of NCC participated in number of camps and rallies.

### **Library Development**

The Library has a rich collection of books on different subjects and the total collection of the library is 111557 books. The library subscribes to 40 periodicals/ magazines and 20 Newspapers. The library has spent Rs. 8,37,761/- on the purchase of books and Rs. 121326/- on subscriptions to Periodicals/Magazines/Newspapers.

The number of books added in 2022-2023:

Number of Titles: 937

Total number of Books: 1282

The college library has subscribed 4 periodicals/Magazines for visually impaired users. The library has renewed its membership of the N-List Programme for the year 2022-23 to access 6000+ Journals and 1,99,500+ eBooks. The college library provides access to e-resources subscribed by the Delhi University Library System through Delhi University Network System.

### **Faculty Strength**

Total Number of faculty: 246

Total number of Permanent Faculty: 178, Ad-hoc Faculty: 68

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 87,33,02,000/-

Grants Utilized: Rs. 84,52,59,070/-

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## **DYAL SINGH EVENING COLLEGE**

### **Brief History of the College**

Standing like a beacon in the heart of the city, Dyal Singh Evening College represents a synthesis of tradition and modernity and it is this characteristic feature of the college that is also encapsulated in its motto. The rich legacy of the institution can be traced back to the vision of its founder Sardar Dyal Singh Majithia, remembered as the founder of 'The Tribune' and 'Punjab National Bank'. Hailing from Punjab, one of the great sons of India, he wanted to infuse a scientific outlook in the minds of the people ridden with blind faith and superstition. For this purpose Sardar Dyal Singh willed his estate for the establishment of an educational trust for a secular college, and in the year 1910 Dyal Singh College Lahore was established.

Post-partition, the Trust set up by him kept his vision alive in India as well. An eminent educationist, late Dewan Anand Kumar, the former Vice-Chancellor of Punjab University, immortalized Dyal Singh Majithia, by establishing two academic colleges in his name: one at Karnal and the other at Delhi. College of Delhi started functioning in the capital as constituent college of the University of Delhi in the year 1958 and established itself as university maintained institution in 1978.

The infrastructure has witnessed expansion owing to the increasing student strength. In addition to the construction of a New Academic Block which has several class rooms, a new computer lab, a state-of-the-art Seminar Hall, and an aesthetically designed Auditorium have also been built. College offers six undergraduate courses in disciplines ranging from languages, history, political science, economics, commerce to all the major branches of arts and commerce. Presently there are around 3000 students enrolled in the college. The College provides meaningful, value-based education to students.

### **Major Activities and Achievements**

Over 100 articles and books were published and presented by teachers in international and national journals.

In the year 2022-23 the Placement Cell hosted 309 companies, out of which, 176 were for Internship opportunities and 133 were for Placement opportunities. The cell achieved an astounding 300% increase in the total number of companies hosted from last year. In addition, 153 students got selected for various internships and Placement opportunities. The highest offered Cost to the Company (CTC) was 23 LPA by D.E. Shaw and the highest stipend offered was 30,000 INR per month by The Leading Solutions.

The National Service Scheme (NSS) Unit of Dyal Singh Evening College organized and participated in a series of Ministry of Education (MoE) Programs like the Azadi ka Amrit Mahotsav, Har Ghar Tiranga, Swachh Bharat, etc.

The department of environmental studies organized Plantation drives, field visits to Yamuna Biodiversity Park. Comhub the commerce society conducted 3 field visits namely the National Cooperative Union of India, NCUI: Cooperative Fair 22, and the Constitutional Club of India. Spandan, Annual fest of Arts and Culture Association, Comfiesta of Commerce Society, Litfest of English Department and Internship Fair organized by placement cell got a footfall of over 1000 students. Over 50 prizes were received by college teams by participating in events organized by other colleges and universities.

## **Publications**

Dharmendra Kumar Jigyasu, Amit Kumar, Aftab A Shabnam, Raisa Begum, Subadas Singh, Sandeep Kumar Malyan, Kartik Neog, KM Vijayakumari . (2023). Air pollution tolerance index of *Persea bombycina*: Primary food plant of endemic muga silkworm (*Antheraea assamensis*) . *Heliyon*, 9(11), e21184 .

A Kumar, S Ponmani, GK Sharma, P Sangavi, AK Chaturvedi, A Singh, SK Malyan, SA Khan, Aftab A Shabnam, DK Jigyasu, A Gull . (2023). Plummeting toxic contaminates from water through phycoremediation: Mechanism, influencing factors and future outlook to enhance the capacity of living and non-living algae . *Environmental Research*, 239 (2), 117381 .

Sandeep Singh, Sandeep K Malyan, Chinmay Maithani, Sujata Kashyap, Vinay Kumar Tyagi, Rajesh Singh, Sarthak Malhotra, Manish Sharma, Amit Kumar, Bijay K Panday, RP Pandey . (2023). Microplastics in landfill leachate: Occurrence, health concerns, and removal strategies . *Journal of Environmental Management*, 342 (-), 118220 .

Sandeep Singh, Sandeep K Malyan, Rajesh Singh, Vinay Kumar Tyagi, Sujata Kashyap . (2023). Aerobic and anaerobic methods of landfill leachate treatment: limitations and advantages . *LANDFILL LEACHATE MANAGEMENT*, -( -), -.

Sandeep Singh, Sandeep K Malyan, Chinmay Maithani, Sujata Kashyap, Vinay Kumar Tyagi, Rajesh Singh, Sarthak Malhotra, Manish Sharma, Amit Kumar, Bijay K Panday, RP Pandey . (2023). Microplastics in landfill leachate: Occurrence, health concerns, and removal strategies . *Journal of Environmental Management*, 342 (1), 411 .

Shweta Yadav, Jhalesh Kumar, Sandeep Kumar Malyan, Rajesh Singh, Omkar Singh, Vikas Chandra Goyal, Jyoti Singh, Ritika Negi . (2023). Evaluating Pilot-Scale Floating Wetland for Municipal Wastewater Treatment Using *Canna indica* and *Phragmites australis* as Plant Species . *Sustainability*, 15(18), 13601.

Saurabh Singh, Chinmay Maithani, Sandeep K Malyan, Abhishek Soti, Niha Mohan Kulshreshtha, Rajesh Singh, Urmila Brighu, Akhilendra Bhushan Gupta, Jhalesh Kumar, Shweta Yadav, Omkar Singh, VC Goyal . (2023). Comparative performance and 16S amplicon sequencing analysis of deep and shallow cells of a

full scale HFCW having sequentially decreasing depths reveals vast enhancement potential . *Bioresource Technology Reports*, 22(-), 101404 .

Sandeep Singh, Meenakshi Rawat, Sandeep K Malyan, Rajesh Singh, Vinay Kumar Tyagi, Kaptan Singh, Sujata Kashyap, Sumant Kumar, Manish Sharma, BK Panday, RP Pandey . (2023). Global distribution of pesticides in freshwater resources and their remediation approaches . *Environmental Research*, 255 (-), 115605 .

Greenhouse gas emissions from hydroelectric reservoirs: mechanistic understanding of influencing factors and future prospect. (2023). Greenhouse gas emissions from hydroelectric reservoirs: mechanistic understanding of influencing factors and future prospect . *Environmental Science and Pollution Research*, in press (-), -.

Dr. Sukriti Deswal. (2022). Reimagining the Nation: A Critical Study of Anandamath . *IIS University Journal of Arts*, 11(1), 69-79.

### **Seminars Organized**

Seminar entitled, "Recent Trends in Capital Market" by Mr. Mukesh Chauhan, Senior Manager, held on 24 February 2023.

Seminar entitled, "Opportunities in the Social Sector" by Ms. Deepti Dwivedi, Senior Programme Manager at Sweccha, held on 27 October 2022.

Seminar entitled, "Goal Setting and Leadership Excellence" by Prof. Dr. Subhash Kakkar, academician and a management guru par excellence, held on 24 February 2023.

Seminar entitled, "Environment Awareness through Art and Culture" featuring Amit Kalla, artist, and poet, Dr. Reela Hota, Odissi danseuse and scholar, Dr. Ajeet Kumar, Dept. of Sanskrit, held on 18 January 2023.

Seminar entitled, "National Security in the Digital Age: Cyber Crimes and Security" by Mr. Amit Dubey, a National Security Expert, held on 8 October 2022.

### **Other Inter-Institutional Collaboration**

The IQAC of the college and IAEER's Pune Institute of Business Management (PIBM), in collaboration with the National Skill Development Corporation (NSDC), orchestrated a four-day Faculty Development Program (FDP). This initiative focused on enhancing the skills of faculty members in the domain of "Data Analysis using SPSS." Upon successful completion of the program and an accompanying online test, participants were honored with certificates from the National Skill Development Corporation (NSDC).

The Placement Cell and IQAC of the college collaborated with IAEER's Pune Institute of Business Management (PIBM) and the National Skill Development Corporation (NSDC) to organize a three-day Skill Development Program (SDP). Focused on Digital Marketing, the SDP encompassed various facets such as personality development, soft skills, logical reasoning, social media marketing, and content marketing. Students who successfully completed the program received certificates from the National Skill Development Corporation (NSDC), acknowledging their participation and achievement in the training.

**Number and percentage of students placed**

161 students were placed during the year 2022-23.

**Number of Companies visited for campus recruitment**

102 companies visited the campus in the year 2022-23

**Library Development**

The college library has consistently played a pivotal role in fostering academic excellence for both teachers and students across diverse domains. With a vast collection of 72,142 books, including 1204 additions during the academic year 2022–2023, the library remains a valuable resource hub.

Additionally, users benefit from access to 13 newspapers and 22 periodicals. Further enhancing the learning experience, the library extends electronic resources to teachers and students by virtue of its affiliations with N-list, INFLIBNET, UGC, and the Delhi University Library System.

**Faculty Strength:** 112

**Financial Allocation and Utilization**

Grants Allocated: Rs. 2939 Lakhs

Grants Utilized: Rs. 2730 Lakhs

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**FLORENCE NIGHTINGALE COLLEGE OF NURSING****Brief history of the College**

Florence Nightingale College of Nursing (under GTBH) was established in the year 2019 for providing B.Sc. Nursing Program, which is affiliated to Indian Nursing Council, Delhi Nursing Council and University of Delhi. The basic aim of B.Sc. Nursing Degree program is to prepare nurses with standardized educational training program in nursing to enable them to perform functions of nurse as first level position in all kinds of health care setting.

**Major Activities and Achievements**

College is in process of starting a study center for Post Basic B.Sc. Nursing Program from IGNOU.

College implemented and monitored academics of all the subjects and later conducted examinations in conformity by the bye-laws of the institute and the affiliating University.

College constantly monitors student's performance and arrange for regular faculty development programs. A format was developed for performance appraisal of Nursing faculty.

College conducted sports and various other competitions throughout the year and distributed medals and prizes to the students.

### **Students with Distinctions**

Following students were the toppers at College level semester examination conducted by Delhi University: Ms. Himanshi Mathur of VIII semester, Ms. Kanishka Purohit of VIII semester, Ms. Komal Kumari of VIII semester, Ms. Mansi of VIII semester, Ms. Megha of VIII semester, Ms. Muskan Khan of VIII semester, Ms. Muskan of VIII semester, Ms. Neethu Rose Lawrance of VIII semester, Ms. Nidhi of VIII semester, Ms. Prerna of VIII semester, Ms. Ritika Sharma of VIII semester, Ms. Sonakshi of VIII semester, Ms. Kanika Solanki of V & VI semester, Ms. Mahi Tomar of V & VI semester, Ms. Megha of V & VI semester, Ms. Sanju of V & VI semester and Ms. Vidushi of V & VI semester

### **Extension and Outreach Activities**

Assisted in Health Camps in the Urban Community.

Participated in Health Mela under Ayushman Bharat.

Participated in the Rashtriya Poshan Maah in the month of September 2023

Students and Faculty participated in Intensified Indradhanush Program

Actively participated in the breast feeding week.

### **Library Development**

Two hundred and six new books and nine journals were purchased during the academic year 2022-23.

### **Faculty Strength**

Total number of faculty members is 23.

### **Financial Allocation and Utilization**

All financial requirements are met by GTB Hospital, Govt. of NCT of Delhi.

As per requirement

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## **GARGI COLLEGE**

### **Brief history of the College**

Gargi College has been delivering exceptional education to women since 1967. Named after Vidushi Gargi, a renowned figure in the Brihadaranyaka Upanishad, known for her fearless questioning, the college began with 200 students, two courses, and 16 faculty members but has since thrived. Today, it boasts over 5,000 students, and 200+ faculty members, and offers 21 undergraduate and three postgraduate courses, including Liberal Arts, Sciences, and Commerce disciplines—a unique feature among Delhi University colleges.

Gargi College is renowned for academic excellence and vibrant campus life, nurturing diversity as an asset. Committed to holistic development, it received a 'College with a Potential for Excellence' grant in 2004-2005, one of just two Delhi colleges to do so, for its holistic teaching approach and strong overall performance. It also earned an 'A+' grade in its second cycle of NAAC assessment in 2022.

The college's commitment to holistic development shines through its extracurricular activities and societies, consistently excelling in national and international competitions. Gargi places a strong emphasis on women's empowerment, fostering critical thinking, leadership, and social awareness. Its graduates have made significant contributions in diverse domains, reflecting its legacy of educating and empowering women.

### **Major Activities and Achievements**

Gargi College recently hosted the "International Multidimensional Conference on Revisiting Wellbeing: Perspectives, Challenges, and the Road Ahead," drawing over 1000 participants.

In response to the growing emphasis on student welfare, the college has taken proactive measures, establishing a dedicated WellBeing Centre and appointing a dedicated counsellor for the Gargi Fraternity. Furthermore, Gargi College has solidified its commitment to academic and collaborative excellence through multidisciplinary partnerships and Memoranda of Understanding (MoUs) with esteemed organisations such as ICT Academy, DEEP-C, IBHAS, K.R. Mangalam University, Govt Model College, and Zanskar.

The college has garnered noteworthy accolades, including the prestigious Spiritual and Value Education Award for 2023 from the International Association of Education for World Peace and other esteemed associations. Additionally, Gargi College has achieved a commendable NAAC Accreditation with a CGPA of 3.43, earning a Grade A+.

Highlighting its prowess in sports, the college boasts an impressive roster of achievements, with 29 and 19 sports persons representing Gargi College at the national and state levels, respectively. Notably, Ms. Jyoti Tokas secured a Gold Medal in Women's Judo National League (Junior and Senior category), while Ms. Akansha Chaudhary clinched the Gold Medal in Khelo India Women's Judo North Zone League.

### **Honours/Distinctions**

Prof. Shashi Chawla was awarded "Dr. APJ Abdul Kalam Inspiring Professor & Researcher Award 2022" by Centre for Professional Advancement Continuous Education (CPACE), A unit of IMRF registered with Govt of India, NITI Aayog, NGO Darpan, Vijayawada, Andhra Pradesh, India.

Prof. Vandna Luthra won the 2nd Prize in National Essay Writing in Physics on the topic "Physics of Climate Change"(NEWP) 2022 under the Teacher Category, organised by the Indian Association of Physics Teachers.

Dr. Sabeen H. Rizvi submitted a Major Research Project report to the Ministry of Home Affairs, Government of India towards National Policy Recommendations for preventing and managing radicalization and terrorism in India (Classified Project, 2021-2023).



Dr. Neha Sharma received Best Performer Award in the event "21 days 21 Yogasanas" organised by ARSD College.

Dr. Tripti Kumari received the Third Prize at an International Conference on the "Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter." Additionally, she secured the First Prize in an International Conference on the "Contributions of Acharya Jagdish Chandra Bose - A Satyagrahi Scientist," organised by Vijnana Bharati (VIBHA) and the Ministry of Culture, Government of India.

Mr. Amit Rohilla received the Best Paper Award in the Second International Conference on Contemporary Issues in Business Innovation, Technology and & Social Sciences (ICBITSS 2-2022) organised by the School of Management, Gautam Buddha University, Greater NOIDA.

### **Students with Distinctions**

Simran Katoch of B.A. (H) Applied Psychology Batch 2019-2022 was conferred a University Gold medal for outstanding academic excellence by the University of Delhi.

Madhurya Ray of B.Sc. (H) Zoology Batch 2019-2022 was conferred the Dr. Neelam Sachdeva Award for securing the highest CGPA of 9.55 at Gargi College, University of Delhi.

Shivani Yadav of B.Sc. (Programme) Life Science Batch 2019-2022 was conferred the Smt. Shanti Mukherjee Memorial Award for securing the highest CGPA of 9.591 at Gargi College, University of Delhi.

Payal Makhija of B.Sc.(H) Mathematics Batch 2019-2022 was conferred the Gargi College Award for Excellence for securing the highest CGPA of 9.649 at Gargi College, University of Delhi.

Aditi Sharma of B.Sc. (Programme) Physical Science Batch 2019-2022 ranked 6th in the University of Delhi and 2nd in South Campus.

### **Publications**

Shekhar, S., Mahajan, A., Pandey, P. Raina M., Rustagi A., Prasad, R., & Kumar, D. (2023). Salicylic Acid and Methyl Jasmonate Synergistically Ameliorate Salinity Induced Damage by Maintaining Redox Balance and Stomatal Movement in Potato . *Journal of Plant Growth Regulation*, 42(NA), 4652-4672.

Panwar, R., Chaudhary, B., Kumar, D., Prakash, G., Khan, M., Pandey, A., Hamurcu, M., & Rustagi, A. . (2022). Harnessing Stress-tolerant Wild Bananas for Crop Improvement . *Crop and Pasture Science*, online(online), <https://doi.org/10.1071/CP22294>.

Srivastava, S., Mishra, A., Mishra, R., & Mohanty, A. . (2022). Biopesticidal potential of cyclotides: an insight. *Phytochemistry Reviews* . *Phytochemistry Reviews*, 21(6 ), 2027-2047.

Dhankhar, R., Kawatra, A., Gupta, V., Mohanty, A., & Gulati, P. (2022). In silico and in vitro analysis of arginine deiminase from *Pseudomonas furukawaii* as a potential anticancer enzyme . *3 Biotech*, 12(9), 220-233.

Agarwal, P., Soni, R., Kaur, P., Madan, A., Mishra, R., Pandey, J., & Singh, G. . (2022). Cyanobacteria as a promising alternative for sustainable environment: Synthesis of biofuel and biodegradable plastics . *Frontiers in Microbiology*, 13(NA), 939347.

Kumar, S., Shrivastava, V., Thakur, O. P., & Luthra, V. . (2022). Cumulative effect of yttrium. and tin co-doping on the structural and ferroelectric properties of sol-gel derived barium. titanate . *Journal of Sol-Gel Science and Technology*, 105(1), 304-314.

Luísa Campos, Pedro Dias, Marisa Costa, Laura Rabin, Rona Miles, Sumi Lestari, Rania Feraihan, Neera Pant, Natthaphansan Sriwichai, Waraporn Boonchieng & Luxi Yu . (2022). Mental health literacy questionnaire-short version for adults (MHLq- SVA): Validation Study in China, India, Indonesia, Portugal, Thailand, and the United States . *BMC Psychiatry*, 22(NA), 713.

Arora, S., & Bhatia, S. (2022). Gender differences in factors that facilitate successful therapeutic progress and outcome: A pilot study . *Counselling and Psychotherapy Research*, 22(4), 1030-1040.

Kumari, R., Singhvi, N., Sharma, P., Choudhury, C., and Shakya, R. (2023). Virtual screening of gut microbiome bacteriocins as potential inhibitors of stearoyl-CoA desaturase 1 to regulate adipocyte differentiation and thermogenesis to combat obesity . *Journal of Biomolecular Structure Dynamics*, NA(NA), 10.1080/07391102.2023.2167121.

Varma, A., Warghane, A., Dhiman, N. K., Paserkar, N., Upadhye, V., Modi, A., & and Saini R. (2023). The role of nanocomposites against biofilm infections in humans. . *Frontiers in Cellular and Infection Microbiology*, 13(NA), 1104615.

## **Research Projects**

Project Title: “Proposal for Workshop /Training in Bioinformatics” Sanctioned by Department of Biotechnology, Ministry of Science and Technology, 2021-23, Rs.17,49,920/- PI: Prof. Aparajita Mohanty; Co.PI: Dr. Reema Mishra

## **Patents Filed/Granted**

Patent Granted: "Flexible Mice Restainer for Hind Limb Tumour Radiation Exposure"; Patent Holder: Dr. Rashmi Saini; Patent granted in 2023; Patent No.: 427549; Indian Patent Office, Intellectual Property Agency, New Delhi, INDIA; Patent Application No.: 2634/DEL/2013; Patent File No: 255713; Patent Publication: 13 March 2015; Patent Granted: 31 March 2023.

USA Patent; Patent Holder: Dr. Rashmi Saini; Patent Filed; Title: "PCR Primer for Sensitive and Rapid Identification of Pathogen Candidatus Liberibacter asiaticus (CLas) based on multicopy nrdB gene" (Patent Application No. TEMP/E1/21936/2023-DEL, Dt. March 19, 2023. Patent File No - 202311018671).

## **Seminars Organised**

Seminar entitled, "Socratic Dialogue and Ethical Practice" by Dr. Frisbee C. Sheffield, University of Cambridge, UK, on Ethics, held on 24th February 2023.

Seminar titled "Finding Motivation to Lead a Purposeful Life" by Dr. Kiran Bedi, Ex-Commissioner of Police and Founder, India Vision Foundation, New Delhi, India, at the N.S.S. Closing Ceremony on 28th April, 2023.

Seminar entitled, 'Millets: Need of The Day' by Ms. Pallavi Upadhyaya, Co-Founder & Managing Director at Millets for Health, India, in commemoration of the International Year of Millets, held on 15th February 2023.

Seminar entitled, "Optics, Evolution, and Demo on the Assembly of Telescopes: Delivering Sciences to the Masses" by Prof. Anurag Sharma, Emeritus Professor, IITD, and Chairman NASI, Delhi Chapter, India, held on 17 October 2022.

Seminar entitled, "Experiments with Mohandas Karamchand Gandhi and Gandhian Values" by Prof. Avijit Pathak, Professor at the Centre for Study of Social Systems, Jawaharlal Nehru University, New Delhi, India, held on 22nd September 2022.

### **Conferences Organised**

Organised the "International Multidimensional Conference on Revisiting Wellbeing: Perspectives, Challenges, and the Road Ahead" on 2nd January, 2023, under the auspices of ICSSR.

### **Seminar/Conference Presentations**

Amit Rohilla presented a paper titled "Does Investor Sentiment Affect Indian Stock Market Volatility" at the Second International Conference on Contemporary Issues in Business Innovation, Technology, and Social Sciences (ICBITSS 2-2022) organised by the School of Management, Gautam Buddha University, Greater Noida, India, on 24-25 May, 2022. The paper was awarded the Best Paper Award during the conference.

Poonam Phogat presented a paper titled "Assessing Addictive Personality Traits and Psychosocial Barriers to Drug Abuse in Lower-Middle SES Individuals: A Qualitative Study Exploring Experiences at Rehabilitation Facility" at the National Conference on Reconnaissance of Resilience, Re-Emerging, Strengthening, Re-Building of The Nation (sponsored by ICCSR) hosted by Aditi Mahavidyalaya, University of Delhi, India. The presentation took place on 19-20 January, 2023, and was honoured with the Best Paper Presentation award.

Tripti Kumari presented a paper titled "Acharya Prafulla Chandra Ray - the one who led by example: Reflections of his life and its influence on the contemporary education system NEP 2020" at the International Conference on the Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter, organised by Vijnana Bharati (VIBHA) and Ministry of Culture, Government of India, in association with Indraprastha Vigyan Bharati and the Department of Chemistry, University of Delhi, held on 2-3 August, 2022. The presentation earned her the Third Prize in recognition of her contribution.

Tripti Kumari presented a paper titled "Plant Autographs: Contemporary Relevance and Reflections of the Works of Acharya J C Bose for a Kinder and Gentler Outlook Towards Trees and Plants" at an International

Conference on the Contributions of Acharya Jagdish Chandra Bose - A Satyagrahi Scientist. The conference was organised by Vijnana Bharati (VIBHA) and the Ministry of Culture, Government of India, in association with Indraprastha Vigyan Bharati and IUAC, Delhi, held from November 30 to 01 December, 2022. The presentation was awarded the First Prize.

Neha Sharma presented on "Biochemistry of stress and its management through meditation" at the International Conference on Natural Products and Human Health organised by Deshbandhu College on 4-6 November, 2022. Her presentation was awarded the Best Oral Presentation.

Rupal Arora presented a paper titled "Corporate Governance and Family-owned Businesses: A Systematic Review" at the 2022 ICGV Conference: Governance in its institutional context held in Melbourne, Australia, on 15-16 December, 2022.

Poonam Phogat presented a paper titled "Efficacy of Mental Health Apps: A Review of Systematic Researches" at the International Conference on Psychosocial Implications in Health & Well-being: Looking Beyond the Boundaries hosted by University Technology, Malaysia, & SGT University, Gurugram, India, held on 2-3 November, 2022.

Anjali Siwal presented a paper on the "Evolution of Digital Marketing over time: A Bibliometric Analysis on Scopus Database" at the International Conference on Emerging Business & Economic Challenges (ICEBEC 2022) held at Ajay Kumar Garg Institute of Management, Ghaziabad, on 15-16 November, 2022.

Sumant Meena presented a paper titled "CSR, Environment, and Firm's Financial Performance" at the 2nd International Conference on A Paradigm Shift in Managerial Practices and Innovations: Leading through Technology and Business Models on 06 December, 2022.

Professor Alka Michael presented a paper titled "Corporate Social Responsibility, Environment and Firm's Financial Performance: A Literature Review" during the Online International Conference on Research Methodology (ICRM-2022). The conference was jointly organised by Dr. Shakuntala Misra National Rehabilitation University and Science Tech Institute, Lucknow, UP, India, and took place from 28-30 October 2022.

### **National/International MoUs Signed**

MoU between Gargi College and the Institute of Human Behavior and Allied Sciences (IHBAS) to collaborate on organizing workshops, lectures, and other mental health events and promote awareness and understanding of mental health among students, faculty, and the wider community. The partnership will facilitate knowledge exchange and joint program development to address mental health needs.

Gargi College and Delhi Effective Education and Pedagogical Cluster (DEEP-C) to provide collaborative cooperation through Teachers' training programs and academic activities in specific fields of interests.

MoU between Gargi College and K.R. Mangalam University to aid in the collaboration of academic exchange, research projects, add-on courses, summer internships/projects, and other academic programs.

Gargi College and Government Model Degree College, Zanskar, will collaborate to promote knowledge exchange, research collaborations, and joint academic programs. This will provide students and faculty members with opportunities to engage in cross-cultural learning experiences and work together on research projects.

Gargi College and ICT Academy to offer a comprehensive range of services to faculty members in Information and Communication Technology. This partnership aims to provide a platform for sharing knowledge, skills, and resources related to ICT, and to equip faculty members with the latest tools and techniques to enhance their teaching and research.

Gargi College and Indian Pollution Control Association (IPCA) have collaborated to promote environmental conservation and adopt best practices in waste and air quality management. The partnership aims to advance academic and research activities in various fields such as sustainable development, recycling technologies, and resource management.

### **Other Inter-Institutional Collaboration**

The college conducted a collaborative 'Food Donation Drive' with Sewa Bharti, an NGO.

A Hands-on Workshop on the Importance of Millets was organized by Pallavi Upadhyaya, Co-Founder & Managing Director at Millets for Health.

The college hosted a Speaker Session on India-Brazil Relations titled "Combating Climate Change through Biofuels," presided over by Prof. Plinio Nastari, Founder-President of Datagro Consulting, in coordination with the Brazil Embassy.

To celebrate International Microorganism Day, a streak art competition was organised on 16 September 2022, in association with NASI (National Academy of Sciences, India). Additionally, a 'Self-Defense Workshop' in collaboration with Delhi Police Women's Cell was held from 10-17 February 2023, catering to all college students.

### **Student under Exchange Program**

563 students participated in the Exchange Program, both inbound and outbound. A total of 236 companies were visited during this initiative.

### **Number and percentage of students placed**

Total 234 students were placed during the year 2022-23.

### **Number of Companies visited for campus recruitment**

192 companies visited the campus in the year 2022-23, representing various industries. Among them, 8 were from the Marketing sector, 4 from Manufacturing, 5 related to AI-based Platforms/Coding, 10 in Transport, Logistics, and Supply Chain Technology, 4 in Audit and Accounting, 8 in Analyst roles, 10 in

Consulting, 3 from the Banking Sector, 14 in Business Services, 2 in the Cosmetic and Beauty sector, 46 in Education, 3 in Human Resources Services, 9 in Healthcare, 14 in IT Services and Consulting, 2 in Insurance, and 50 fell into the category of Others.

### **Extension and Outreach Activities**

Enactus Gargi runs four projects- Rachna, Aagah, Neev, and Vikas, working to achieve the UN's Sustainable Development Goals through different entrepreneurial models. Project Rachna collaborated with PAN-Indian communities and supported the lives of underprivileged women. The Gargi College Botanical Society- TARU arranged a food donation drive to commemorate World Food Day on 18 October, 2022.

NSS Volunteers of Gargi college visited Tamana Special School at Vasant Vihar to celebrate Happiness Day with the school children.

The Department of Psychology organised exploratory field visits to orphanages, corporates, research institutes, and publishing houses to help students connect classroom education with practical application.

NSS Gargi launched its project Har Ghar Shiksha where NSS volunteers took the initiative of teaching children of construction site workers during ECA breaks.

### **Library Development**

Gargi's Library website <http://gargicollege.saraswatilib.com/> and online use of e-resources increased during the year, for easy understanding and online access to Library resources and facilities. Electronic Resource Management package for e-resources: User control provided by NLIST. The library subscribes to a large number of Electronics Resources through UGC-Infonet which includes e-resources (6000 + e-journals and 199500+ e-books under N-LIST & 600000 e-Books through NDLI) and University of Delhi connectivity which includes Delhi University Library System which includes the Reference Sources, Bibliographic Sources, Statistical Sources, and Full Text Sources.

452 books were added till 31st March, 2023 making a total of 76946 accessioned Books in all. At present, the library has an asset of 381 CDs/videos and has access to 42 periodicals and 10 newspapers. Approximately 222117 Books were consulted and loaned by users, including consultation of ref. sec. and excludes the use of loose issues of periodicals.

### **Faculty Strength**

Total number of teaching faculty: 224

### **Financial Allocation and Utilisation**

Grants Allocated: Rs. 8182.70 Lakhs

Grants Utilised: Rs. 8174.76 Lakhs

## HANSRAJ COLLEGE

### Brief History of the College

Hansraj College is one of the largest constituent colleges of the University of Delhi. The college was founded by the D.A.V. College Managing Committee on 26 July 1948 in the sacred memories of Maharshi Dayanand Saraswati and Mahatma Hansraj who spent their magnificent lives emphasizing the importance of knowledge. It is one of the leading lights in the D.A.V. family of over 700 institutions.

Hansraj College is a premier institution dedicated to teaching and research. It has highly qualified academicians who impart education in Science, Commerce, and Arts at undergraduate and graduate levels to more than 5000 students. The college has consistently demonstrated outstanding performance in academics, sports, and extracurricular activities. The college has completed 75 years in the realm of imparting higher education. It has made significant and unparalleled contributions in terms of producing scholars, bureaucrats, intellectuals, and sportsperson serving in different domains not only in our own country but even at international levels.

Over the years, the college has built up an impressive infrastructure. It includes a well- stocked Central Library, Departmental Libraries for science subjects and a Book Bank for needy students. The college has six Computer and eighteen Science Laboratories. Its sports facilities include a vast sports field which includes a football field and a basketball court, an indoor sports complex and the only Electronic Shooting Range in the entire University. The college has a modern air-conditioned Auditorium fitted with the latest sound & light systems, and a seating capacity of 400-500 persons along with a designated balcony on the first floor to host dignitaries and guests. Besides, the air-conditioned Seminar Rooms have a seating capacity of 120 people and are fitted with state-of-the- art sound and projection systems. The college has hostel facilities for both boys and girls accommodating more than 200 undergraduate students and is equipped with all functional amenities such as solar geysers and 24-hour power back-up. The quiet, serene ambiance of a lovely campus surrounded by lush green fields and a gorgeous edifice touches your soul as you reach the doors of this institution. The college offers a number of scholarships to deserving students. Hansraj College stands at the cusp between the past and the future today. While it retains inspiring facets of its proud history, with an equally sharp gaze it looks ahead, assimilating the exciting world of new knowledge as it unfolds in front of it, holding the promise of an experience seeped with exhilarating learning and holistic growth for all those who enter its portals.

### Major Activities and Achievements

Hansraj College was awarded an impressive A++ grade by NAAC in cycle 2. It stood at number 12 in NIRF rankings. The College organised a National Education Conclave in March 2023 at the prestigious 'Vigyan Bhawan' in New Delhi and the occasion was graced by several dignitaries such as speaker of Lok Sabha Mr. Om Birla and the Vice-Chancellor of the University of Delhi, Prof. Yogesh Singh. The College is also proud of its unique initiative called "Mitti Cafe" which is being run and managed entirely by persons with disability. The College also had impressive placements in 2022 with close to 259 companies visiting the campus and almost 459 students being offered positions with a placement percentage of 98. The College also started a new incubation centre called Mahatma Hansraj Centre for Innovation Incubation and Entrepreneurship (MHCIIE). The College has setup a Research and Development Cell which encourages

faculty members and students. There are two research centres under the RDC namely Har Gobind Khurana Centre for Chemical Biology and Jagdish Chandra Bose Centre for Plant Genomics.

### **Honours/Distinctions**

Dr. Archana Singh awarded with 'Outstanding Woman Researcher in Plant Molecular Biology in 2022 the 7th Venus International Women Awards – VIWA 2022 by Ministry of Science & Technology, Govt. of India. Invited and joined Editorial Board Member as Review editor, Frontiers of Plant Science (section-Plant-pathogen Interaction) 2022.

Dr. Brijesh Rathi, Snigdha Singh, Neha Sharma, Poonam, Agam P Singh, Ravi Durvasula, Prakasha Kempaiah awarded with 'Mahatma Hansraj Research Excellence Award' by Hansraj College, University of Delhi. Recently Dr. Rathi was appointed as 'Institute of Eminence (IoE) Fellow' by University of Delhi.

Dr. Ashish Kumar Singh Listed as top 2% researcher of India (Under Energy Sector) provided by Stanford University- November 2022.

Dr. Gagandeep received Council of Scientific and Industrial Research (CSIR) Fellowships, New Delhi, India. Period: August 2017- February 2022.

### **Students with Distinctions**

Neha Gupta of M.Sc. (F) Physics was awarded with Gold Medal 2022.

Divyansha Khajuria of M.Sc. (F) Anthropology was awarded with Gold Medal 2022.

Ruchi Yadav of M.Sc. (F) Geology was awarded with Gold Medal 2022.

Raktim Das of B.Sc. (Hons) Anthropology III year was awarded with Gold Medal 2022.

Jay Kumar Singh Chauhan of B.Sc. (Hons) Geology III year was awarded with Gold Medal 2022.

### **Publications**

Rajpal, V. R., Sharma, S., Kumar, A., Chand, S., Joshi, S., Chandra, A., Babbar, S., Goel, S., Raina, S. N. & Shiran, B. (2022). Is Omicron mild? Testing this narrative with the mutational landscape of its three lineages and response to existing vaccines and. *Journal of Medical Virology*. 8(94): 3521-3539.

Jiang, X., Sharma, P.P., Rathi, B., Xiangkai Ji, Hu, L., Gao, Z., Kang, D., Wang, Z., Xie, M., Shujing Xu, Zhang, X., Clercq, E. D., Cocklin, S., Pannecouque, C., Dick, A., Liu, X. & Zhan, P. (2022). Discovery of novel 1,2,4-triazole phenylalanine derivatives targeting an unexplored region within the interprotomer pocket of the HIV capsid protein. *Journal of Medical Virology*. 94(12): 5975-5986.

Kumar, S., Yadav, D., Singh, D., Shakya, K., Rathi, B., & Poonam. (2023). Recent developments on Junin virus, a causative agent for Argentine haemorrhagic fever. *Reviews in Medical Virology*. 33(2): e2419.

Sharma, H., Kumar, M., Sethi, A., Rathi, B. (2023). Metal-free construction of aminated isoquinoline frameworks from 2-(2-oxo-2-arylethyl) benzonitrile in an aqueous medium. *Green Chemistry*. 25(1): 167.



Rajpal, S., Rajpal, A., Saggar, A., Vaid, A. K., Kumar, V., Agarwal, M. & Kumar, N. (2023). XAI-MethylMarker: Explainable AI Approach for Biomarker Discovery for Breast Cancer Subtype Classification using Methylation Data. *Expert Systems with Applications*. 225(1): 120130.

Kaur, B., Rathi, B. & Agrawal, R. K. (2022). Enhanced depression detection from speech using Quantum Whale Optimization Algorithm for feature selectio. *Computers in Biology and Medicine*. 150(1): 106122.

Dwivedi, K., Rajpal, A., Rajpal, S., Agarwal, M., Kumar, V. & Kumar, N. (2023). An Explainable AI-driven Biomarker Discovery Framework for Non-Small Cell Lung Cancer Classification. *Computers in Biology and Medicine*. 153(1): 106544.

Naidu, S., Pandey, J., Mishra, L. C., Chakraborty, A., Roy, A., Singh, I. K., & Singh, A. (2023). Silicon nanoparticles: Synthesis, uptake and their role in mitigation of biotic stress. *Ecotoxicology and Environmental Safety*. 255(1): 114783.

Singh, V., Hada, R. S., Jain, R., Vashistha, M., Kumari, G., Singh, S., Sharma, N., Bansal, M., Poonam, Zoltner, M., Caffrey, C. R., Rathi, B. & Singh, S. (2022). Designing and development of phthalimides as potent anti-tubulin hybrid molecules against malaria. *European Journal of Medicinal Chemistry*. 239(1): 114534.

Rajpal, V. R., Singh, A., Kathpalia, R., Thakur, R. K., Khan, M. K., Pandey, A., Hamurcu, M. & Raina, S. N. (2023). The prospects of gene introgression from crop wild relatives into cultivated Lentil for climate change mitigation. *Frontiers in Plant Science*. 14(1): 1127239.

## Journals

Dr Apoorva Gupta. (2023). HRC Journal of Economics and Finance. *Quarterly*. 1(1): NA.

Prof. Namrata Dewan Soni. (2022). Hans Shodh Sudha. *Quarterly*. 2(4): 109.

Prof. Namrata Dewan Soni.(2022). Hans Shodh Sudha. *Quarterly*. 3(1): 42.

Prof. Namrata Dewan Soni.(2022). Hans Shodh Sudha. *Quarterly*. 3(2): 38.

Prof. Namrata Dewan Soni.(2022). Hans Shodh Sudha. *Quarterly*. 3(3): 64.

## Research Projects

ICMR-DHR funded project entitled, “Young Scientist Project”. Sanctioned amount of Rs.50 lakhs. PI: Dr. Tejveer Singh (Department of Zoology)

DRDO funded project entitled, “Molecular theranostic probes based on optically active amines for targeting SARS-CoV-2”. Sanctioned amount of Rs.49.05 lakhs. PI: Dr. Brijesh Rathi (Department of Chemistry)

DST (BRICS Countries Joint Project) funded project entitled, “Repurposing of Drugs and Validation of Lead Compounds Against Main Protease and RNA Dependent RNA Polymerase of SARS-CoV-2”. Sanctioned amount of Rs.42.87 lakhs. PI: Dr. Brijesh Rathi (Department of Chemistry)

DBT funded project entitled, “Network Programme for Enrichment and Update of Database on Genome Related Information for Indian Spermatophyta and Archegoniatae Taxa- Phase II”. Sanctioned amount of Rs.35.46 lakhs. PI: DR. Vijay Rani Rajpal (Department of Botany)

SERB funded project entitled, “Deciphering the MAPK Pathway in Glycine max during Spodoptera litura – infestation”. Sanctioned amount of Rs.30 lakhs. PI: Dr. Archana Singh (Department of Botany)

### **Patents Filed/Granted**

Patent holder: Steven Bradfute, Brijesh Rathi, Yash Gupta, Poonam, Ravi Durvasula, Prakasha Kempaiah'; Patent granted in 2022 (PCT/US22/26943/29 April 2022) Title: “Calxinin Compositions and Method for Treating Viral Infections”.

### **Seminars Organized**

Seminar entitled, ‘Senior Scientist, GSI Gamma-Ray Spectroscopy Group Planckstraße 1 D-64291 Darmstadt, Germany’ by Dr. habil Hans-Jürgen Wollersheim, International accelerator facility FAIR – the Universe in the Lab organized by Department of Physics and Electronics on 9 December 2022.

Seminar entitled, ‘Horizons of High-Energy Physics’ by Dr "Prof. Abdel Nasser Tawfik", Research Director at "ICSC-World Laboratory", Erice, Italy organized by Department of Physics and Electronics on 7 January 2023.

Seminar entitled, ‘Significance of Chromosomes in Basic and Medical Research’ by Dr. Sen Pathak, Professor Emeritus, University of Texas MD Anderson Cancer Center, USA organized by Life Sciences Society, Hansraj College on 21 January 2023.

Seminar entitled, ‘Darwin’s Question Revisited: How and why Species multiply’ by Dr. B. Rosemary Grant, Senior Research Biologist, Emeritus Princeton University, New Jersey, USA organized by Department of Zoology on 1 February 2023.

Seminar entitled, ‘Human Genomes, Health and Society’ by Dr. Anil Shanker, Senior Vice President Research and Innovation Meharry Medical College, Nashville, Tennessee, USA organized by Department of Zoology on 11 February 2023.

### **Conferences Organized**

Organized a one day 2nd International Conference on 'Integrative Chemistry' on 6 December 2022 in collaboration with SERB, DST, DRDO.

Organized a one day conference on ‘INSIGHTS INTO THE LATEST DEVELOPMENTS IN FUNGAL BIOLOGY ILDFB -2022’ on 3 September 2022.

Organized an International Symposium on ‘Nuclear Energy Solutions and Future Aspects 2023’ on 16 March 2023.

Organized a National Conference on ‘Medicinal Plants: Frontier Areas of Research and Development’ on 16 March 2023 in collaboration with National Medicinal Plant Board, Ministry of Ayush, Government of India.

Organized a one day conference on ‘Advances in Plant Biology’ on 9 December 2022.

### **Seminar/Conference Presentations**

Dr. Harmeet Kaur presented a paper titled “Effect of Distance Measures on K-Nearest Neighbour Classifier” at 2<sup>nd</sup> International Conference on Computer Science, Engineering and Applications ICCSEA-2022 in 2022.

Prof. (Dr.) Baljeet Kaur presented a paper titled “Bi-stage QWOA-Based Efficient Feature Selection for Enhanced Depression Detection Based on Facial Cues at International Conference on Soft Computing and Pattern Recognition” (SoCPaR 2022) in 2023.

Suyash Kumar presented a paper titled “AN ENSEMBLE METHOD FOR CATEGORIZING CARDIOVASCULAR DISEAS” at International conference on Advances in IOT, Security with AI (ICASIA-2023) in 2023.

Prof. Vijay Rani Rajpal presented a paper titled “THE CODE BLACK: Covid 19 associated Mucormycosis” at ILDFB in 2022.

Prof. Monika Koul presented a paper titled “Substantial changes in selected VOCs and associations with health risk assessments in Industrial Areas during COVID 19 pandemic” at International Conference on climate change, Sustainable Development and Smart Agriculture, Department of Zoology, Kalinga University, Naya Raipur, Chattisgarh in 2023.

Prof Reetika Jain presented a paper titled “DO ENVIRONMENTAL CONCERN TRANSFORMS INTO GREEN BEHAVIOR OF CONSUMERS IN INDIA?” at 7th International Conference on Advances in Global Business, Economics, Finance & Social Sciences (ICAGBEFSS-2022) from 11-12 November 2022.

### **National/International MoUs Signed**

**MoU between Kavyanjali (National):** The Poetry Society of Hansraj College (DU) and StockPe for sponsorship exchanges and event promotion on 25 January 2023.

**MoU between 180 Degrees Consulting (National):** Hans Raj College and Elearnmarkets Registrations on the course STOCK MARKETS MADE EASY on 3 February 2023.

**MoU between 180 Degrees Consulting (National):** Hansraj College and Top One Percent for Social Media handles on 3 February 2023.

**MoU between 180 Degrees Consulting (National):** Hansraj College and Competitions generator for Media Partnership on 25 January 2023.

**MoU between Equal Opportunity Cell and Samdristhi Kshamta Vikas Evam Anusandhan Mandal (Saksham Indraprastha)(National):** To providing quality of research, intellectual awareness etc. in respect of persons with disabilities on 13 May 2022.

**MoU between VANGATI, The Commerce Association, Delhi College of Arts and Commerce And Green Warriors Club (National):** Hansraj College collaborated with DCAC College on 21 November 2022.

**MoU between Competitions Generator and S.P.A.R.C. Society Hansraj College (National):** Hansraj collaborated for Social Media Partners in 2022.

MoU between The Finance and investment cell of Sri Guru Gobind Singh College of Commerce and S.P.A.R.C. Society Hansraj College, Delhi University for Social Media handles in 2022.

Memorandum of Understanding BETWEEN ENACTUS NSUT AND 180 Degrees Consulting Hansraj for cementing a Delegation Exchange program on 30 January 2023.

### **Other Inter-Institutional Collaboration**

Collaboration between Hansraj College and Swami Shraddhanand College, DU for Intercollege-Interdisciplinary project on Organic Solid Waste for the Synthesis of Nanomaterials and their Applications.

Collaboration between Hansraj College and Ram Lal Anand College, University of Delhi for FDP on "WE TOO WERE THERE: Recapitulating The Role Of Women In India's Freedom Struggle".

Collaboration between Hansraj College and SGT University for FDP on "Chemistry and Biology Interface for Scientific Transformations".

Collaboration between Hansraj College and Delhi Effective Education & Pedagogy Cluster (DEEP-C) for FDP on "Introduction to Python Programming".

Collaboration between Hansraj College and SGND Khalsa College, University of Delhi for FDP on "Indic-Centric Research in Higher Education and the New Education Policy".

Collaboration between Hansraj College and Shiksha Sanskriti Utthan Nyas for FDP on "National Education Policy- 2020 : Scenario & Path Ahead For Research In India".

Collaboration between Hansraj College and Shivaji College, University of Delhi for FDP on "Statistical Tools, MOOCs, and E-Content Development".

Collaboration between Hansraj College and Aryabhatta College, University of Delhi and Shiksha Sanskriti Utthan Nyas for FDP on "Significance of Vedic Mathematics in Modern Era".

Collaboration between Hansraj College and Kamkus College of Law on "Modern Teaching Techniques in Social Sciences".

Collaboration between Hansraj College and CENTRE FOR INNOVATION IN INFECTIOUS DISEASE, RESEARCH, EDUCATION & TRAINING (CIIDRET) and INSTITUTE OF EMINENCE (IOE)-DELHI SCHOOL OF SKILL ENHANCEMENT & ENTREPRENEURSHIP DEVELOPMENT (DSSEED) for FDP on "Advanced Technologies in Life Sciences".

Collaboration between Hansraj College and Bharati College, University of Delhi for FDP on "Gender Contours and Biasness: Mapping Pay Disparity and its Intrinsic and Extrinsic Challenges".

### **Number and percentage of students placed**

Total 28 students were placed during the year 2022-23.

### **Number of Companies visited for campus recruitment**

259 companies visited the campus during the year 2022-23.

### **Extension and Outreach Activities**

Hansraj College encourages and supports extension activities through a variety of mechanisms. The extension activities are carried out for the underprivileged communities primarily through student-led societies such as National Service Scheme (NSS) and National Cadet Corps (NCC) units of the college, 15 departmental societies and 63 college societies like Enactus, Haritima, Gender Equality Cell, North-East Cell, Women Development Cell etc. to name a few.

NSS has successfully run projects such as 'Padhaku' as literacy drive for the neighbourhood slum children, and 'Parvarish' to adopt a slum, 'Yamuna Khadar' to create health awareness. NCC initiated Tree Plantation Drives, Swachh Bharat Movement, Fit India Movement 2.0, and various cleanliness drives.

The societies' activities include food and clothes donation, plantation drives, menstrual and oral hygiene sessions, cancer awareness programs, cleanliness drives, blood donation camps, human trafficking awareness programs, environmental protection activities, creating awareness about legal rights of women, and visits to old age homes. Around 250 units of blood are donated to city hospitals annually in the vicinity of the campus.

"Mitti Café" by Enactus enables people with disabilities to be productive and showcase their potential. Project 'Silai' empowers poor neighbourhood slum women. 'Unnat Bharat Abhiyan' organised discussions on issues like free food policy, minimum wages act, school admission under RTA.

Students-led social outreach initiatives 'Ahsas', 'Arman' and 'Jugnu' have helped differently-abled, recovering drug addicts, women and transgenders. These student initiatives have been widely appreciated in print and electronic media and they have also been felicitated with many national and international awards.

### **Library Development**

The Hansraj college came into existence in 1948, has one of the well-established, automated, Air-conditioned and largest library in terms of space, collection among north campus colleges of University Of Delhi. The College library located at the centre of the campus, using RFID technology with Integrated Multiuser Library Management Software i.e. KOHA has Wi-Fi connectivity and is under surveillance of CCTV Cameras.

The college library adopted the RFID (Radio Frequency Identification) technology in year 2016 for the purpose of Library housekeeping operation, efficient security system, well tracking of materials throughout the library, faster circulation of books, inventorying, material handling and automated book drop, self-kiosk being used and in practice.

RFID technology consists of KIOSK, staff workstation, RFID reader, security gate, Book drop box, RFID tags, RFID enabled member ID card etc. and also alerts users through e-mail and SMS.

The college library has more than 1,37,000 books, around 9,200 book bank collections, 23 newspapers and 98 journals and magazines. It also occupied reference materials and Student Aided Fund collection. The library has an excellent collection of text, general and reference books to support academic requirements of students & faculty members.

Total No. of Books in library: 137000

Total No. of Magazine and Journals subscribed: 98

### **Faculty Strength**

Total Faculty Strength: 290

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 4.3 Crore

Grants Utilized: Rs. 3.89 Crore

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## **HINDU COLLEGE**

### **Brief history of the College**

Hindu College was founded in 1899 by Shri Krishan Dassji Gurwale along with a Board of Trustees who represented the prominent citizens of Delhi. The pre-eminent aim behind the founding of Hindu College was to provide modern and nationalist education to the youth of the country. The aim of the founding fathers of Hindu College was to make it a center of new ideas, whilst being non-elitist and non-sectarian.

The college welcomed youth from all sections of society without any differentiation on grounds of religion, caste, creed and gender. Both arts and sciences were introduced as subjects from the beginning. From its very beginning to now, the college has lived up to the vision of its founders by maintaining its excellence and inclusivity. Constantly adapting to the fast-paced transformations in the outside world, Hindu College has managed to achieve new heights of success year after year.

### **Major Activities and Achievements**

On 07 December 2022, the Relaxo Research Centre for Interdisciplinary Research was inaugurated by Prof. Yogesh Singh, Vice Chancellor, DU. This one of its kind 5-storeyed building houses 24 laboratories, and sophisticated equipment and instruments such as GC-MS, ED XRF work station and many more. The Research Centre building also houses the newly inaugurated 250-seater Sushila Devi Auditorium.

## Honours/Distinctions

Hindu College was ranked the Number 1 college in the country in Arts and Science streams in the India Today Best Colleges Ranking 2022, and was ranked 2<sup>nd</sup> in the Commerce stream. The College was also awarded the prestigious DBT Star College Project in August 2022.

## Students with Distinctions

Harshaa of B.Sc (Hons.) Physics was awarded the gold medal by the University of Delhi for getting first position in Delhi University examinations held in May/June 2022.

Yuvika Yadav of B.Sc. (Hons.) Statistics was awarded the gold medal by the University of Delhi for getting first position in Delhi University examinations held in May/June 2022.

Kanithi V P S Achari of B.A. (Hons.) Karnataka Music was awarded the gold medal by the University of Delhi for getting first position in Delhi University examinations held in May/June 2022.

Aditi Anand of M.A. Political Science was awarded the gold medal by the University of Delhi for getting first position in Delhi University examinations held in May/June 2022.

Kamal Kant Upadhaya of M.A. Hindi was awarded the gold medal by the University of Delhi for getting first position in Delhi University examinations held in May/June 2022.

## Publications

Prof. Anju Srivastava, Principal, Professor in Chemistry. (2022). ““An Efficient and Sustainable Approach to Decarboxylative Cross-Coupling Using Silica Coated Magnetic Copper Nanocatalyst for the Synthesis of Internal Alkynes” . *Frontiers in Chemistry*, na(9), na.

Prof. Reena Jain, Vice Principal, Professor in Chemistry. (2022). Optimization and development of ITO-free plasmonic gold nanoparticles assisted inverted organic solar cells’ . *Optical Materials*, 131(na), na.

Prof. Shalini Suryanarayan, Professor in Sociology. (2022). Of ‘Paradise’ and its Underbelly: Spaces of Power in the Everyday of a Gated Enclave in Urban India . *Asian Journal of Social Science*, 50(1), na.

Dr. Abdul Rahim Ansari, Assistant Professor in Economics. (2022). Financial Constraints and Investment Financing Decisions among Indian Firms in Post Sub Prime Crisis Era . *Indian Journal of Economics and Development (Indexed in Scopus & Clarivate Analytics (ESCI) of WoS)*, na(na), na.

Ms. Shayantani Das, Assistant Professor in English. (2022). The Captive Body in Minakshi Sen’s Jeler Bhitor Jel . *JCLA Journal of Comparative Literature and Aesthetics*, 45(3), na.

Dr. Lalit Kumar, Associate Professor in Physics. (2022). Optimization and Development of ITO-Free Plasmonic Gold Nanoparticles Assisted Inverted Organic Solar Cells’ . *Optical Materials*, na(na), na.

Dr. Maneesha Pandey, Associate Professor in Political Science . (2022). British Education: Introduction of Consumerism in Education . *UGC CARE journal Itihas Darpan*, 27(2), na.

Dr. Pallavi Saxena, Assistant Professor in Environmental Sciences. (2022). Atmospheric Sciences Perspectives on Integrated, Coordinated, Open, Networked (ICON) Science . *Earth and Space Science*, na(na), 1-6.

Prof. Achla Pritam Tandon, Professor in Sociology. (2022). "Intercultural competencies and soft skills in Universities" . *International Journal of Creative Research Thoughts*, na(na), na.

Dr. Devasia Muruppath Antony, Associate Professor in Philosophy. (2023). • Published book Hermeneutics of Religious Language: A Philosophical Exploration . *Bibliophile South Asia (Publishers)*, na(na), na.

Dr. B.M. Bhatia Memorial Research Fellowship, 2022-23 for the project titled, "To Investigate the Presence of Antibiotic resistant Genes and Proteins among Bacterial Diversity in the peri urban area of 'Yamuna River'". Sanctioned Amount: Rs.1,25,000. Principal Investigator: Dr. Varunendra Singh, Department of Zoology. Sanctioning Institution: Dr. B.M. Bhatia Memorial Trust.

Dr. N.V. Thadani Memorial Research Fellowship, 2022-23 for the project titled, "Investigating the Effect of Meditation on Stress and Anxiety Level on Undergraduate Students through EEG". Sanctioned Amount: Rs.2,00,000. Principal Investigator: Dr. Lalit Kumar, Department of Physics. Sanctioning Institution: Dr. N.V. Thadani Memorial Trust.

Dr. N.V. Thadani Memorial Research Fellowship, 2022-23 for the project titled, "An Investigation to Establish a Correlation between the 'Physiological' and the 'Psychological' Aspects of Ageing". Sanctioned Amount: Rs. 1,00,000. Principal Investigator: Dr. Shalini Suryanarayan, Department of Sociology. Sanctioning Institution: Dr. N.V. Thadani Memorial Trust.

Dr. B.M. Bhatia Memorial Research Fellowship, 2022-23 for the project titled, "A Field Test of a Mixture Binary Randomized Response Model to Estimate the Prevalence of a sensitive characteristics in the finite population". Sanctioned Amount: Rs.50,000. Principal Investigator: Dr. Samridhi Mehta, Department of Mathematics. Sanctioning Institution: Dr. B.M. Bhatia Memorial Trust.

### **Seminars Organized**

Seminar entitled, "Empowered Women Contribute in the Building of a Nation" by Dr. Yuthika Mishra and Prof. Gauri Srivastava, Associate Professor of history at Vivekananda College and Head of Department, Education in Social Science at NCERT, organized in association with the Ministry of Culture, Government of India, on 4-5 May 2022.

Seminar entitled, "Babasaheb's Bengal Constituency: A Near-Forgotten Chapter of Dalit Self-Assertion in Bengal" by Dr. Tapan Basu, Professor (Retd.), Department of English, University of Delhi, organized by the Department of English on 14 December 2022.

Seminar entitled, "LGBTQ+ Representation in STEM" by Dr. Bittu, Associate Professor of Biology and Psychology at Ashoka University, organized by the Department of Sociology on 30 June 2022.

Seminar entitled, "Great Talks: Collecting Scientific Innovation at the Science Museum, London" by Ian Blatchford, Director and CEO of Science Museum Group, UK and Natasha Mcenroe, Keeper of the



medicine at the Science Museum Group in South Kensington, London, organized by the Department of Chemistry, IQAC, and DBT Star project in collaboration with British Council, held on 14 November 2022.

Seminar entitled, "The Banyan Tree: Ideating the Indian Knowledge Traditions" by Professor Daniel Raveh, Professor of Indian and Comparative Philosophy at Tel Aviv University, Israel, organized by the Department of Philosophy on 29 August 2022.

### **Conferences Organized**

The Departments of Physics, Chemistry, Botany, and Zoology under DBT Star Scheme hosted the International Conference on "Infectious Disease: Management, Control and Preservation" on 12 December 2022.

Department of Chemistry and STE and co-organized by CSIR- NEERI, Delhi Zonal Centre & Royal Society of London, North India Section, hosted a conference on "Environment, Water, Agriculture, Sustainability and Health (EWASH-2022): Strategizing A Greener Future" on 12 January 2023.

Department of Chemistry in collaboration with department of Botany under the aegis of IQAC & DBT hosted an International Conference on "Flavours and Fragrances" on 19 September 2022.

An international online conference titled "Environment, Water, Agriculture, Sustainability and Health (EWASH-2022): Strategizing A Greener Future" was organized by the departments of Botany and Chemistry on 12 -13 January 2023.

### **Seminar/Conference Presentations**

Prof. Anju Srivastava, Principal and Professor in Chemistry, participated in the International Workshop & Symposium on Green Chemistry & Technology (Special Emphasis on Catalyst, Food, Water & Drug Research) organized by PG Department of Chemistry, Govt. Dungeer College, Green Chemistry Network, and RSC London North India Section from 22-24 December 2022. She delivered a talk on "Green Chemistry" and chaired a session during the event.

Prof. Rinku Manocha, an Associate Professor in Commerce, presented a paper titled "Impact of renewable and non-renewable energy consumption on carbon emissions: An empirical study from India" at the 8th Biennial International Conference on Energy and Infrastructure Management at the School of Petroleum Management, Pandit Deendayal Energy University on 27-29 July 2022.

Prof. Maneesha Pandey, Associate Professor in Political Science presented a paper on "Consumerism in Education Introduced by the British" at the one-day National Conference titled Bharat Manthan 2022, on 19 June 2022.

Prof. Pallavi Saxena, Assistant Professor in Environmental Sciences, served as an Invited Speaker in the online "Global Sustainable Futures: Progress through Partnerships Network, Friday Idea Exchange Seminar Series" and gave a talk on "Nature-Based Solutions for Urban Cities - A Sustainable Approach to Mitigate Air Pollution and Climate Change" on 11 November 2022.

Prof. Dr. Manoj Kumar Varshney, Associate Professor in Statistics, delivered a lead lecture titled “Impact of COVID-19 on Health: A Statistical Perspective” at the International Conference on Recent Advances and Innovations in Biological and Applied Sciences (RAIBAS 2022), organized by the Faculty of Agricultural Sciences at SGT University, Gurugram, in collaboration with The Society of Academic Research for Rural Development and ICAR-Central Soil Salinity Research Institute, Karnal on 14-16 June 2022.

Prof. Gitika De, an Associate Professor in Sociology, organized a panel, and delivered a talk on New Directions in Political Ethnography: Cases and Patterns, at the International Conference (Hybrid mode) on Old Discipline, New Trajectories: Theories, Methods and Practices in Anthropology, co-organized by the Society for Anthropological Sciences and The Institute of Asian and Transcultural Studies at Vilnius University, Lithuania on 16-18 June 2022.

Dr. Ananya Barua, Assistant Professor in Philosophy Presented a paper “Self and Consciousness: An Attempt to Bridge the Gap Between the East and the West” at the The Third World Congress on Logic And Religion held at Banaras Hindu University, Varanasi on 4-8 November 2022.

Dr. Neetu, Associate Professor in Zoology, presented a paper titled “Morphological and Biochemical Assay to Identify the Presence of Different Bacteria on Cleidoic Eggs and to Study the Varying Pattern of Sensitivity with respect to Antibiotic” in The Expanding Frontiers of Knowledge, organized by the Centre for Research, Maitreyi College from 11-13 August 2022.

### **National/International MoUs Signed**

An MoU was signed between Hindu College, DU, and MLB College, Hisar, Haryana, on 01 August 2022. As part of this MoU, both institutions aim to exchange skills and resources, and for an established institution like Hindu College to assist a relatively young institution like MLB College, by organizing academic exchange programs and seminars.

An MoU for academic cooperation was signed between Hindu College and Indian Institute of Technology, Delhi (IITD) in July-December 2022 semester. Under this MoU, Hindu College agreed to allow PhD Research Scholars registered at IIT Delhi under Prime Minister Research Fellowship (PMRF) Scheme to carry out Teaching Assistantship duties at the college, as per the requirements and terms & conditions of the scheme, without any financial liability on the part of college.

### **Other Inter-Institutional Collaboration**

Delhi University’s Vidya Vistar Scheme began with a collaboration between Hindu College and three North- East Colleges i.e. Dorjee Khandu Government College, Arunachal Pradesh; Nar Bahadur Bhandari Government College, Sikkim; and North Kamrup College, Assam on 25 April 2022 in the presence of distinguished chief guest Mr. Pema Khandu, honorable CM of Arunachal Pradesh.

As part of the Going Global Exploratory Grant, Hindu College has entered a collaboration with the University of York, Green Chemistry Network Centre and University of Ladakh, sponsored by the British Council.

**Student under Exchange Program (Inbound/Outbound): 75****Number and percentage of students placed**

More than 150 (15% of total student strength and 100 % students who sought placements) were selected by various recruiters and placed in the year 2022-23.

**Number of Companies visited for campus recruitment**

85 companies visited the campus in the year 2022-23

**Extension and Outreach Activities**

The Health Wing of the NSS undertook the Project Maitri as part of which students from the College visited an Old Age home to learn from the older generation while in turn making them feel attended to, loved, cared for. It also organized the Project Dastaan on the occasion of International Day of People with Disabilities on 5 December 2022, wherein they conducted interactive sessions with people with disabilities.

NSS Hindu's Education wing has initiated a project called Project Akshar wherein they teach the underprivileged children from Malka Ganj.

On the occasion of the 8th International Yoga Day on the 21 June 2022, NSS Hindu College commemorated the day with an array of activities such as Surya Namaskar, which was preceded by a talk on the benefits of Yoga.

NSS launched an "Article Writing Contest" on Malala Day on 20 July 2022 on the theme of "Beti Bachao Beti Padhao", during which a signature campaign was also conducted to spread awareness on the said theme. A session on the same theme was held by Mr. Apratin Thakur, Attorney of Law in the Supreme Court of India on 25 July 2022.

**Library Development**

The library received a total budget of Rs. 12,47,250, with Rs. 12,24,750 allocated to the Development Fund Library and the remaining to the Book Fund. During the fiscal year 2022-23, the library successfully added 1,053 new books to its collection, making the total collection of books at 124749. Additionally, users benefit from internet access through Wi-Fi, enhancing research and study opportunities within the library premises.

**Faculty Strength: 163****Financial Allocation and Utilization**

Grants Allocated: Rs.58.90 Cr

Grants Utilized: Rs.66.47 Cr

The amount shown is on the basis of actual grant received by the college from University Grants Commission and actual expenditure incurred on the approved expenditure heads. The grant received during the year is less than the actual expenditure incurred. However, the college has met the excess expenditure over the grant received from own funds. The deficit due to short grant received is receivable from the UGC in due course as the grant is received on account basis subject to finalization of Accounts.

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## **HOLY FAMILY COLLEGE OF NURSING**

### **Brief history of the College**

The Holy Family College of Nursing is affiliated by University of Delhi and managed by the Archdiocese of Delhi. The college aims to be a center of academic excellence in the field of nursing education. The School of Nursing, Holy Family Hospital, started in 1956, was a bud which has bloomed into College of Nursing.

In all these years it has stood steadfast for the mission and vision of providing high quality nursing education. B.Sc. (Hons.) Nursing programme was started in the year 2011 under University of Delhi, followed by Post Basic B.Sc. Nursing and M.Sc. Nursing courses from the academic session 2016-2017. The NPCC Residency course started in December 2022.

### **Major Activities and Achievements**

The college witnessed student engagement in diverse unit-level and state-level competitions organized by the SNA. Furthermore, the institution initiated the NPCC program, a postgraduate residency program, with an annual intake of 10 students.

Notably, the college achieved NAAC accreditation, obtaining a score of 2.75 and a B+ grade, valid for a five-year period starting from October 11, 2022.

### **Students with Distinctions**

Ms. Merin Benny of B.Sc.(Hons.) Nursing was the College topper. She secured 1<sup>st</sup> Position in the Batch 2019 – 2022.

Ms. Kessia Kuriakose of B.Sc.(Hons.) Nursing secured 2<sup>nd</sup> Position in the College Batch 2019 – 2022.

Alin Maria MR of B.Sc. (Post Basic) Nursing was the University Topper Batch 2020 – 2022.

Ms. Shilpa Sharma of M.Sc. Nursing was the College topper. She secured 1<sup>st</sup> Position in the Batch 2020 – 2022.

Ms. Blessy Elizabeth Varghese of M.Sc. Nursing was the College topper. She secured 2<sup>nd</sup> Position in the Batch 2020 – 2022.

### **Publications**

Rawat S, Babu C, Devi Jibanlata M. (2023). An experimental study to assess and evaluate the effectiveness of upright position among primary mothers during first stage of labour in terms of pain perception and

progress of labour in selected hospital of Delhi . *International journal of science and research*, 12 (2), NA .

Negi Lovely. (2022). Benefits and challenges of Online . *Jundishapur Journal of Microbiology*, NA(NA), 2744 - 2751.

Raminder Kalra. (2022). An observation study to assess the activities and time utilisation of Nursing Personnel working in selected Nursing care unit with a view to develop recommendation on effective time management for Nursing Personnel in selected Hospital of Delhi . *International Journal of Scientific Research*, 11(11), NA.

### **Seminars Organized**

Seminar entitled, “Issues and Concerns Related to Mental Health in India” by Dr. Deepika Cecil, Nursing Advisor, Ministry of Health and Family Welfare, for Mental Health Week Celebrations, held on 19 October 2022.

### **Seminar/Conference Presentations**

Srishty Solanki was Resource Person for a workshop on “Exploring innovation in emergency nursing”, organizer for workshop on “Communication, a patient centered approach & organ transplantation –together towards tomorrow”, attended TOT on viral Hepatitis & its complications titled “Hepatitis can’t wait” under project PRAKASH ILBS .

Prof.(Dr.) Raminder Kalra acted as a Resource Person in 3rd International conference on “Current trends in Nursing Perspectives: A Leading pathway to quality Care”

### **Number and percentage of students placed**

100% students were placed in the year 2022-23.

### **Extension and Outreach Activities**

Delhi Police organized a self-defense training program from 20-26 September 2022. A personality development and stress management program, in collaboration with Sahaj Yoga International, took place on 11 March 2023. A fire mock drill was conducted on 03 September 2022 in collaboration with the Security Department of HFH.

Various awareness programs marked significant health-related days. BSc 3rd Year, Community Health Nursing Department, celebrated World Health Day on 07 April 2022. World Hygiene Day was observed on 5 May 2022, and a Schizophrenia Awareness Day Program was conducted on 24 May 2022 by the Psychiatry Nursing department. International Yoga Day was organized by the Nursing Foundation Department on 10 June 2022, followed by a World Environment Day awareness program on the same date.

Independence Day was commemorated by B.Sc. 3rd year, Child Health Nursing Dept in collaboration with CNBC hospital. Mental Health Week was observed on 12 October 2022 with a focus on mental health and

wellbeing, featuring role plays and exhibitions. M.Sc. 2nd-year students conducted "World Diabetic Day " on 14 November 2022, and an awareness program on World Anemia Day was held on 26 November 2022.

BLS training for employees was done on 4 January 2023, World Leprosy Day was conducted on 30 January 2023 in PHC, Palam, and World Cancer Day was celebrated on 16 February 2023 at MCH, Defense Colony. A School Health Program took place on 13 March 2023 at Pratibha Kanya Vidyalaya, Malviya Nagar. International Women's Day was celebrated on 12 March 2023, and World Immunization Day was observed on 16 March 2023. A role play marked World Oral Hygiene Day on 20 March 2023, and a group project was conducted on "World TB Day" on 24 March 2023.

### **Library Development**

The library facility boasts of 24 book racks/cupboards, 5 journal racks, and 28 tables for students. The collection comprises 2,970 nursing books, with subscriptions to 13 nursing journals. Internet facilities are available for students.

Additionally, the library acquired 290 books in the last financial year, enhancing its resources for the academic community.

**Faculty Strength:** 32

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 255000/-

Grants Utilized: Rs. 225700/-

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## **INDIRA GANDHI INSTITUTE OF PHYSICAL EDUCATION & SPORTS SCIENCES**

### **Brief history of the College**

Indira Gandhi Institute of Physical Education & Sports Sciences (IGIPES) was established on 03.08.1987. Based on professional advice of institutions like Lakshmibai National Institute of Physical Education, Gwalior, Netaji Subhash National Institute of Sports, Patiala and Central Health Education, Bureau, Delhi, at the instance of University Grants Commission, a three years Degree Course viz B.Sc. (Physical Education, Health Education & Sports) was started in 1987. At present, Institute also offers B.P.Ed. (Bachelor of Physical Education) and M.P.Ed. (Master of Physical Education) four Semester Course duly recognized by the National Council of Teacher Education (NCTE). Apart from the above, two Self-financing Certificate Courses namely Fitness Trainer Course (FITCO) and Yoga are also offered by the Institute.

Indira Gandhi Institute of Physical Education & Sports Sciences (IGIPES) is the only Institute affiliated with the University of Delhi imparting Education in the field of Physical Education and Sports Sciences. The Department of Physical Education and Sports Sciences (University of Delhi) is also housed in the premise of IGIPES. The IGIPES is one of the constituent Colleges of the University of Delhi and is being funded by the Government of National Capital Territory of Delhi on 100% basis.

## Major Activities and Achievements

8th International Day of Yoga, IGIPSS & IQAC organized “Yoga Camp for Community” from 20-21 May 2022. 35th Foundation Day of the Institute was also organized in the Institute on this occasion. On the occasion of “Har Ghar Tiranga” National Flag was distributed among the Staff Members. 76th Independence Day was celebrated on 15 August 2022 with full zeal and enthusiasm. Flag Hosting Ceremony and Tiranga Humari Shaan Rally was also organized on this occasion. On the birth anniversary of hockey hero Major Dhyan Chand, college celebrated National Sports Day on 29 August 2022. A Volleyball match was played among the Teaching and Non-Teaching Staff of the Institute. Alumni meet was organized on 11 November 2022 in which a great number of alumni students were present. 1st Edition of Super 7 League for Under-16 (BOYS) organized. Various teams from different schools/ clubs of Delhi took part. An Orientation Programme was conducted for the Newly Admitted Students of B.Sc. (PE, HE & S) on 22-23 November 2022. A live telecast of Pariksha pe Charcha organized on 27 January 2023. Prime Minister Narendra Modi shared tips with students, parents and teachers to overcome examination stress.

## Students with Distinctions

Riya Kaushik of B.Sc (PE, HE & S) has secured 1st Position in the College- cumulative result of Semester VI with CGPA of 9.227

Mansi Singh of B.Sc (PE, HE & S) has secured 2nd Position in the College- cumulative result of Semester VI with CGPA of 8.879

Nidhi of B.Sc (PE, HE & S) has secured 3rd Position in the College- cumulative result of Semester VI with CGPA of 8.742

Dev Holker of B.P.Ed has secured 1st Position in the College- cumulative result of Semester IV with CGPA of 8.478

Munesh Kumar of B.P.Ed has secured 2nd Position in the College- cumulative result of Semester IV with CGPA of 8.053

## Publications

Tiwari, S. (2022). Assessment Of Sports Psychological Skills Between Male And Female Sports Persons. *Shodhsamhita*.9(4): 141-151.

Tiwari, S. (2022). Cardiorespiratory fitness between B.Sc. In Physical Education Students and B.Tech Students of Delhi. *ANVESHAK*. 52(10(1): NA.

Tyagi, S. (2022). A comparative analysis of body composition and health status among male and female teachers of Delhi University. *International Journal of Physical Education, Sports and Health UGC Listed*.9(4): NA.

Tyagi, S. (2023). Comparative study on sports anxiety irrespective of gender differences among badminton and tennis players. *Journal Of Sports Science and Nutrition*.4(1): NA.

Pramanik, T. N. (2022). Comparative Study Between North Eastern and Southern Senior Elite Women Soccer Players on Blood Lipid and Haemoglobin Constrictions. *The Calcutta Journal of Global Affairs*.6(3): 324-332.

### **Seminars Organized**

Seminar entitled, 'Elementary Scholar curriculum with special reference to Physical Education programme' by Dr. Naoki Suzuki, An Eminent Japan Scholar, Japanese Schools Secret organized on 17 August 2022.

Seminar entitled, 'Gymnastics Clinic on Modified Code of Points' by Dr. Anil Kumar Gupat, Head of Department, Department of Physical Education & Sports Gymnastics Clinic on Modified Code of Points organized on 17 August 2022.

Seminar entitled, 'Women Safety' by Mrs. Usha Sharma, Inspector, Delhi Police organized on 14 October 2022.

Seminar entitled, 'Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act-2013' by Prof. Anu Mehra, Faculty of Law, University of Delhi organized on 7 December 2022.

Seminar entitled, 'Government e-Marketplace' by Mr. Sudhir Singh Verma, Deputy Controller of Accounts organized on 11 February 2023.

### **Conferences Organized**

Organized one day conference on 'Save the Soil' on 22 May 2022.

Organized one day conference on 'Spirituality and Peace' on 15 June 2022.

Organized one day conference on 'Information Skill in 21st Century' on 17 June 2022.

Organized one day conference on 'How to manage Institute Database' on 22 July 2022.

Organized one day conference on 'Gymnastics Clinic on Modified Code of Points' on 17 August 2022.

### **Number and percentage of students placed**

Total 140 students were placed during the year 2022-23.

### **Number of Companies visited for campus recruitment**

5 companies visited the campus in the year 2022-23.

### **Extension and Outreach Activities**

On occasion of International Day of Yoga a month Yoga Camp for Community was organized in which residents of nearby areas participated in the Camp and learned/performed Yoga asanas every day. In addition, a School of Gymnastics has been setup to impart training to children of four plus ages.

### **Library Development**

Successfully implementation of digital library, users of IGIPESs have access to the full text documents in digital format i.e. old question papers, M.P.Ed., B.P.Ed., and B.Sc. Syllabus, all Ph.D. thesis and all M.P.Ed. Dissertations awarded from 2013 onwards. Presently IGIPES library database "Vidya: Library Management Software" put on-line through XAMPP Server.



Total Library collection 13268 (9230 Accessioned Books, 2322 Reading Room, 1118 Thesis and 598 Department Books) has been computerized in the database and Bar-coded which is searchable through Online Public Access Catalogue (OPAC).

Total No. of Books in library: 13268

### **Faculty Strength**

Total Faculty Strength: 24

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 19 Crore

Grants Utilized: Rs. 19.35 Crore

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## **INDRAPRASTHA COLLEGE FOR WOMEN**

### **Brief history of the College**

Indraprastha College for Women, established in 1924, is the oldest women's college of the University of Delhi, committed to women's education & empowerment, and nation building. The college takes pride in the fiery spirit of its girls who have always led the national movements from the front. They bunked their classes to participate in the Quit India and other movements at the call of Mahatma Gandhi. Visits by illustrious leaders like Rabindra Nath Tagore, Indira Gandhi, Atal Bihari Vajpayee have always inspired the college community to scale greater heights. The campus has a modern infrastructure coexisting with lush green surroundings and a well-preserved heritage building. It boasts of barrier-free access, two large hostels, several sports facilities including firing range, rock-climbing wall, gymnasium, swimming pool, sustainable practices such as solar panels and rain-water harvesting.

The NAAC A+ grade bears testimony to the holistic development and quality education of students. Embodying the spirit of Azadi ka Amrit Mahotasav, the College enthusiastically participates in nation building through programs such as Swacchha Bharat Abhiyan, Nadi ko Jano, SWEEP, implementation of NEP and promoting skill development. The research and innovation is fostered through eight Research and Learning Centres, Skill Development Cell and Entrepreneurial cell.

### **Major Activities and Achievements**

The College underwent the second round of NAAC accreditation in June 2022 and was awarded A+ grade. The celebration of College Day was graced by the presence of G20 Sherpa Dr. Amitabh Kant. Additionally, the inauguration of the Centre for Disability Studies marked a significant milestone for the institution. USIEF Administrators from the USA visited the campus.

The recognition as a Social Entrepreneurship, Swachhta, and Rural Engagement Cell reflects the commitment to societal impact. The college is proud to announce its institutional membership in the ICT Academy for on-campus skill development. Noteworthy events included the conference on "Rashtriya Shiksha-Neeti: Hindi aur Matrabhashaon ka Sandarbh," inaugurated by the Dean of Colleges, Prof. Balaram Pani, contributing to the implementation of the National Education Policy (NEP).

In alignment with the Government of India (GoI) and Delhi University programs, our college organized various events such as Har Ghar Tiranga celebration, Partition Horrors Remembrance Day, recognition of the International Year of Millets, and a tree plantation drive for Shatabdi Vriksharopan and Bhartiya Bhasha Diwas. The staff collectively pledged for a corruption-free India, marking Vigilance Awareness Week.

The Symposium, "Janmo Bhumi to Tapo Bhumi: A Journey of Consciousness" marked the 150th birth Anniversary of Sri Aurobindo. A symposium on Vishwa Hindi Diwas was organized with Hindi Sahitya Sabha and Vatayan, UK.

The listening session on "Ragas and Genres of Indian Music" contributed to the promotion of Indian Knowledge Systems.

### **Honours/Distinctions**

Prof. Poonam Kumria, Principal, has been awarded the Certificate of Honour for remarkable contributions in the field of "Higher Education" by the Ambassador of Slovenia under Indo-Slovenia Intellectual Dialogue 2023.

Dr. Praveen Dhanda received the Best Research Paper Award at ICSSR National Seminar on 'Vishwa Guru Bharat: Use of Indian Knowledge in Developing Interventions and Innovations for Contemporary World', organized at Aryabhatta College, University of Delhi, for his paper titled "The Quest for Global Leadership: Thinking Beyond Eurocentrism with Swami Vivekananda".

Dr. Shubhra Seth was selected as a participant by the Centre for Refugee Studies, Summer Course on Refugees and Migration, York University, Toronto, Canada.

### **Students with Distinctions**

Ritika Varshney of BMMMC, Part-III, clinched the 1st position in the University.

Following suit, Devansha Babel, pursuing BMMMC Part-II, secured the 1st position in the University, showcasing exceptional academic prowess.

Vritti Mediratta, in the inaugural year of BMMMC Part-I, achieved the remarkable feat of securing 1st position in the University.

In the realm of Psychology, Smridhi Seth, pursuing MA Part-II, exhibited outstanding academic excellence, earning her the 1st position in the University.

## Publications

Goyanka, R., Garg, C.C. (2023). Patient perception of attributes of primary care: a study of Aam Aadmi Mohalla Clinics in Delhi, India,. *Family PracticeOxford University Press*, [doi.org/10.1093/fampra/cmac154](https://doi.org/10.1093/fampra/cmac154)(19 january), 1-7.

Goyanka, R., Yadav, J. Sharma, P.. (2023). Financial burden and coping strategies for cancer care in India. *Clinical Epidemiology and Global Health*, 20(24 february), 101259-101267.

Bedi, P. S., Bala, M., Sharma, K.. (2022). Extractive summarization using concept-space and keyword phrase. *Expert Systems*, 39(10), e13110.

Sethi, R. (2023). Mamang Dei. . *Vagarth*, 403(March), 59-62.

Singh, P., Verma, P., Chaudhuri, A.S. et al.. (2023). Evaluating the relationship between Urban Heat Island and temporal change in land use, NDVI and NDBI: a case study of Bhopal city, India . *International Journal of Environmental Science and Technology*, [doi.org/10.1007/s13762-023-051y](https://doi.org/10.1007/s13762-023-051y)(18 august), 1.

Gupta, N., Bhattacharjee, M., Saha, A.R.. (2023). Role of Health Orientation in the Consumption of High Value Agriculture Products: An Exploration of Urban Indian Consumers . *Journal of International Food & Agribusiness Marketing*, ISSN: 0897-4438 (23 February), E-ISSN: 1528-6983.

Bhatia, Dipika.. (2022). The Phenomenon of Emotions in Indian Philosophical System: Some Reflections . *Journal of Dharma Studies*, Springer, 5(1), 17-31.

Sharma, Harsh Bala. (2022). Bhuvneshwar ke Natak me Rang Sandarbh aur Rang Prakriya, in Rang Prasang . *National School of Drama*, 25(55), 67-77 .

Sharma, Harsh Bala. (2022). Darshnik Aur Fantasy ke Andaj me likha gaya Upanyas . *Stri Darpan*, - Oct(Aug), 15-17.

Sharma J T. (2022). Savarkar and the French Connection . *International Journal of Arts and Education Research*, 11(6), 67-71.

## Journals

Kumari, T., Chowdhury, N. P., Chauhan, R., & Tiwary, N. K. .(2022). Eco-friendly extraction of Mosambi (Citrus limetta) essential oil from waste fruit peels and its potential use as a larvicidal, insecticidal and antimicrobial agent.. *Quarterly*, 3(29), 360–375

Sinha, Vinita. (2022). The Realm of Folktales and the Politics of Feminist Itinérance Italian Translation Title - Il regno dei racconti popolari e la politica dell’itinérance femminista *Journal of Cultural Studies*. *Quarterly*, XXXVIII(140), 55-76

Chopra AB, Jain D and Ladda I. (2022). Impact of Covid-19 Pandemic on the Print Media Industry in India: A Study. *Journal of Global Communication. Quarterly*, 15(2), 137- 146.

Kochhar, S. K., Soni A., Srivastava S. Gaur V. (2022). A Simulation-based Approach to Evaluate and Regulate the Reputation Score of a Software Agent in E-Market. *International Journal of Next-Generation Computing. Quarterly*, 13(3).

Verma, Maya. (2023). Shodh Drishti: An International Peer Reviewed Refereed Research Journal, Article in Peer Reviewed Research Journal titled श्री रामानंददिविजयः में प्रतिध्वनित रामानन्दाचार्य जी का सामाजिक दर्शन. *Quarterly*, 14(5), 33-42.

### **Research Projects**

ICSSR, March-2023, Exploring Climate Change and Forced Migration: The Narratives of Gender and Disability in South Asia, Rs. 4,50,000/-; PI: Prof. Anindita Roy Saha, Dept. of Economics with co PI Dr. Shubhra Seth, Dept. of Political Science.

### **Seminars Organized**

Seminar entitled, "Envisioning your Future, Planning Personal Finance" by C.A Kanan Bahl, Founder at Fingrowth Media, on 22nd November 2022.

Seminar entitled "Sustainable, Holistic, Healthy, and Sovereign Living Model for the Planet" by Dr. Khader Vali, The Millet Man of India, held on 28th September 2023.

Seminar titled, "Envisioning your Future, Planning Personal Finance" by CA Dhruv Bhatia, Co-founder at ZEVO, conducted on 20th January 2023.

Seminar entitled, "Persian Versions of Indian Lore: Translation and Transformation of Sanskrit Texts" by Eva Orthmann, Professor for Iranian Studies at the University of Göttingen, held on 23rd November 2022.

Seminar entitled, "Digital Transformation and Artificial Intelligence: Opportunities and Challenges" by Dr. Sachin Kumar, Assistant Professor at CIC, University of Delhi, held on 15th February 2023.

### **Conferences Organized**

Organized conference on "Security Challenges in South Asia" on 21 March 2023 under ICSSR.

Organized conference on "Línguas indianas: literaturas e-conversas/ Indian Languages: Literatures and Conversations" 'भारतीय भाषाएँ: साहित्य और संवाद', on 06 June, 2022 in association with the Faculty of Arts and Humanities, University of Lisbon.

Organized conference on "When the Other Half Dies: From Food Security to Food Sovereignty?", on 19 September 2022.

Organized conference on “Democracy in Crisis (Case Studies on Pakistan, Myanmar & Sri Lanka)”, on 15 September 2022.

### **Seminar/Conference Presentations**

Yadav, S presented a paper titled, “Extractive Geographies of Conservation: A case study of Kanha National Park”, at the International Conference organized by Central European University, Vienna, Austria held on 03 June,2022.

Vaiphei, L. presented a paper titled, “The Digital divides - Teaching and Learning during Covid Time (Online Presentation),” at the International Conference on 'Social Justice in Pandemic Times' organized by Asian Studies Association of Australia (ASAA) at Monash University, Melbourne, Australia held on 7 July 2022.

Sharma, T. presented a paper titled, “Ab-normalizing Trauma for Journalists in Post-Pandemic World - Implications for the Future of Journalism Education in South Asia”, at the Living to tell the tale - Building Community Resilience in Journalism Symposium, University of Sheffield, UK held on 16th June 2023.

Chopra, A. presented a paper titled, “Cartoon Programmes as a tool of Media Literacy in India: A Study (BEST PAPER AWARD)”, at the DME school of Media in collaboration with Deakin University, Melbourne, Australia held on 3 July 2022.

Seth, S. presented a paper titled, “Conflict Displaces to Climate Refugees”, at the International Conference on Climate Change and Sustainability: Education, Environment, Energy and Economy, Dhaka International University, Dhaka Bangladesh held from 12-13 November 2022.

Nisha, Singhal A. presented a paper titled, “A Literature Review of Differential Privacy and its Challenges”, at the 7th International Conference on Information and Communication Technology for Competitive Strategies (ICTCS) held on 9 December, 2022.

Bala, M. presented a paper titled, “Interoperability of Electronic Health Records for Dyslipidemia using Knowledge Graphs”, at the 13th International Conference on Cloud Computing, Data Science & Engineering (Confluence), Noida, India, 2023.

Gorai, B. presented a paper titled, “Reimaging Ashwathama Today: A Study of the Tamil Film Ashwathama 2023”, at the International Conference Mahabharata Epic Across Asia: Ancient Indian Knowledge System Transcending Spatio-Temporal Boundaries sponsored by ICSSR, hosted by EFLU, Hyderabad held from 29-31 May 2023.

Verma, M. presented a paper titled, “प्राचीन संस्कृत साहित्य में राष्ट्रीयता”, at the राष्ट्रीय शोधसंगोष्ठी (National Conference), संस्कृतम् आन्तरिकविकासश्च, JNU & Sanskrit Bharti, Delhi held on 09 October, 2022.

Bhatia, D. presented a paper titled, “Revisiting Swaraj and the moral order: Gandhi on the framework of Dharma and National Integrity”, at the National Seminar on 75 Years of Indian Independence: Nation and

Nationalism organized by Indian Council of Philosophical Research, at India International Centre, New Delhi, held from 23-24 February 2023.

### **National/International MoUs Signed**

College has signed two MoUs, one with “Greenobin” for paper recycling services and waste paper management services, with “Chintan” for plastic and e-waste management and with “Wildlife Rescue”, for wildlife rescue on campus and second with “Help The Blind Foundation to start Education, Mobility and Employability Training (EMET)”, a two-year Programme for the second- year students with visual disabilities.

**Number and percentage of students placed: 177**

**Number of Companies visited for campus recruitment: 55**

### **Extension and Outreach Activities**

To promote the spirit of Swaccha Bharat, a workshop was organized with MCD on “Solid Waste Management”. The College takes pride to work for the protection of the environment. It has signed MoUs, with “Greenobin” for paper recycling service, with “Chintan” for plastic and e-waste management, and with “Wildlife Rescue” for wildlife rescue on campus. Solar panels were installed in collaboration with ICICI Foundation to harness clean energy in the hostel.

Help -The Blind Foundation, started a two-year programme, “Education, Mobility and Employability Training” for skill development among students with visual disabilities. Alongside, the Equal Opportunity Cell & Enabling Unit of the college organized two skill development courses, In-Person Interview and Resume Building under the Project RISE. NSS unit of the college organized webinars on the following topics, “Harmful Effects of Tobacco Consumption” on 31 May, 2022; “Cervical Cancer and Breast Cancer awareness” in collaboration with Dharamshila Cancer Foundation and Research Institute on 4 and 7 May, 2022. NSS also organized a Workshop on First Aid on 19 December, 2022 and a March in the campus to observe Rashtriya Poshan Maah.

### **Library Development**

The College Library consists of 97300 books and 349 CD/DVDs. 435 books were added during the year. The Library subscribes to 70 Academic Journals, 25 Magazines. It has institutional membership with UGC-NLIST, DELNET. Library staff issue User-ID and passwords to students and faculty to facilitate remote-access of subscribed e-resources of NLIST, DELNET and DULS. In addition, updating the library portal/website with all necessary links and in-house digitized university question papers accessible to students and faculty.

In addition, the organization of and participation in webinars/workshops/meetings/lectures by the Librarian with the Library committee under the aegis of IQAC. Library Extended Services include the access of Punjabi, Bengali, Hindi, Sanskrit and English Books for the Translation and Translation Studies Centre.

Special services are provided to persons with benchmark disability users provided in the Enabling Unit with the vision of providing library services under one roof. Library facilitates access to visitors, researchers and members of the college community in the Museum and Archives Learning Resource Centre.

**Total Faculty Strength: 188**

#### **Financial Allocation and Utilization**

Grant Allocated: Rs.61,58,00,000/-

Grant Utilized: Rs.59,25,45,000/-

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### **INSTITUTE OF HOME ECONOMICS**

#### **Brief history of the College**

Institute of Home Economics (IHE) is a constituent college of the University of Delhi, situated in the heart of South Delhi. IHE is a premier institute imparting education to women since its establishment in the year 1961 by Dr. Surjit Malhan. College started functioning with a two-year diploma course in Home Science and eventually became a part of the University of Delhi in 1969. The college celebrated its Silver Jubilee in 1986 and the foundation stone of the new building was laid in 1987 by the then Honourable President Giani Zail Singh. In 2011, the college celebrated its Golden Jubilee with a series of national workshops, seminars and an oration by former President Dr. APJ Abdul Kalam. Over the years, the Institute has grown tremendously. Beginning with just 80 students, today it has strength of 2200 students, tutored by almost 80 faculty members and supported by about 125 non-teaching, administrative and auxiliary staff. The college offers a bouquet of programmes, including seven undergraduate programmes in Home Science (Pass and Hons), Microbiology, Biochemistry, Food Technology, Journalism and Elementary Education and three post-graduate programmes in the domains of Food and Nutrition, as well as Fabric and Apparel Science. The college also offers a Ph.D. programme in Home Science.

#### **Major Activities and Achievements**

The admissions in 2022-23 were via the CUET of the University of Delhi and the new session embarked with the introduction of the NEP in all the courses. A number of International and National days like, International Literacy Day, Hindi Diwas, National Nutrition Month, World Photography Day, National Handloom Day, World Breastfeeding Week, World Entrepreneurship Day, National Science Day, etc as well as the International Year of millets were celebrated by organizing underlying activities. The annual cultural fest of the college, FERIA-2023, was held in February 2023. The staff and students participated in the Har ghar tiranga campaign from 13-15 August 2022 and these celebrations were in resonance with Azadi ka Amrit Mahotasav. IHE also commemorated the centennial year of University of Delhi by organising series of events throughout the year. The college is now registered with MTPC (Metal Scrap Trade Corporation Limited) for management of e-waste. College carried out Environment Audit and Green Audits with EHS Alliance Services and Energy Audit by URS Verification Pvt Ltd to ensure further conscious

green practices. Several alumni of the college are placed in very good positions as nutritionists, dieticians, development practitioners, educationists, researchers, counsellors, designers and merchandisers.

### **Honours/Distinctions**

Faculty Department of Biochemistry received a grant as part of Shastri Conference and Lecture Series Grant (SCLSG) by Shastri-Indo Canadian Institute (SICI), to organize an online international symposium “Chronobiology and mental Health”.

Guidance Name of Supervisor Department Total Ph.D. Guided Ph.D. Awarded Ph.D. Ongoing

Dr. Nidhi Gulati from the Department of Elementary Education has supervised five Ph.D. students. Dr. Jyoti Dalal from the same department has supervised two Ph.D. students. One Ph.D. student was supervised by Dr. Ruchira Das.

Dr. Parveen Pannu from Department of Home Science (Development Communication & Extension and Journalism) is credited with three students, whereas Dr. Geeta Punhani and Dr. Savita Aggarwal four.

Several other faculty members have supervised Ph.D. students including the Director of the Institute.

Prof. Seema Puri (superannuated in June 2023) was member, FSSAI Scientific Panel on foods, Nutraceuticals, Dietetics and other similar products and member, FSSAI Scientific Panel on Labelling, Claims and Advertisements.

Prof. Geeta Trilok Kumar (former Director, superannuated in November 2022) was member, Steering committee for Healthy Lifestyle Trajectories Initiative, a multicounty initiative under Department of Biotechnology, Government of India; Selection Committee for Promotion to Associate Professor/Professor at various Delhi University Colleges; member, NCD Policy Group and Technical Advisory group for the Comprehensive National Nutrition Survey (CNNS) constituted by Ministry of Health and Family Welfare, Government of India & WHO; member, Consultation Group of ICMR “Growth assessment of Indian children: Need for India specific growth standards” and other technical advisory positions of ICMR, Mid-day meal scheme of Directorate of Delhi, large scale food fortification in GAIN.

### **Students with Distinctions**

Harleen Kaur of B. Sc. (Hons) Food Technology was recipient of Gold Medal (2019-2022) for her academics.

### **Publications**

Vachher, M., Bansal, S., Kumar, B., Yadav, S., Burman, A. (2022). Deciphering the role of aberrant DNA methylation in NAFLD and NASH. *Heliyon*, 8(10), e11119.



Garg, M., Yadav, R.L., Chopra, R., Pani, B., Sablania, V. (2023). Optimization and evaluation of quality characteristics of traditional Indian snack (baked balls) made by using pumpkin peel powder. *Journal of Food Science and Technology*, 222-2233(60).

Bhargava, S., Merckelbach, E., Noels, H., Vohra, A., Jankowski, J. (2022). Gut Microbiota in Chronic Kidney Disease. *Toxin*, 10(14), 648

Aggarwal, S., Sabharwal, V., Kaushik, P., Joshi, A., Aayushi, A., Suri, M. (2022). Postbiotics: from emerging concept to application. *Frontiers in Sustainable Food Systems.*, 6(6), 887642.

Gupta, S., Kapur, D. (2022). Energy Intake, Expenditure and Balance among Female College Students Having Normal and Disordered Eating Behaviours in Delhi, India. *International Journal of Food and Nutritional Sciences*, 6(11), 156-162.

Duggal, M., Sesikeran, B., Arlappa, N., Nair, S., Shekhar, V., Sabharwal, V. (2022). Large-scale staple food fortification as a complementary strategy to address vitamin and mineral vulnerabilities in India: A critical review. *Indian J Public Health*. 2022, 3(66), 313-320.

Shrivastava, P., Ramesh, M., Kaushik, P., Kumari, A., Aggarwal, S. (2022). Pyocyanin pigment from *Pseudomonas* species: Source of a dye and antimicrobial textile finish—a review. *Proceedings of the Indian National Science Academy*, <https://doi.org/10.1007/s43538-022-00109-x>.

Devi, R., Chauhan, A., Yadav, S., Kumar, P., Pundir, C.S. (2023). Development of aptamer based colorimetric assay for whole blood glycated haemoglobin (HbA1c) estimation using gold nanoparticles. *Biosensors and Bioelectronics*. (13).

Kumar, A., Manshaha, M., Aggarwal, J. (2023). A Review of Development of Waterproof Breathable garments. *Journal of the Textile Association*, 5(83).

Sachdeva, S., Gupta, S. (2022). Knowledge, Attitude and Involvement of First-Time Fathers in Infant and Young Child Feeding and Care Practices. *Current Research in Nutrition and Food Science*, 3(10), 959-970

## Research Projects

Projects entitled, ‘Long-term health after severe acute malnutrition (SAM): the role of the Pancreas (SAMPa)’ sponsored by Medical Research Council, Global Health Nutrition, UK and Principal Investigator Dr Geeta Trilok Kumar (former Director).

Projects entitled, ‘To improve understanding of interactions among intra-uterine growth retardation, early growth, gut permeability, body fat and risk of chronic disease in low birth children’ sponsored by The Wellcome Trust UK/ DBT India Alliance and Principal Investigator Dr Geeta Trilok Kumar (former Director).

## **Seminar Presentations**

Seminar entitled, 'Millets: Nutritional Value and Potential as Nutraceuticals and Functional Food' was presented by Dr. C. Tara Satyavati, Project Coordinator - Pearl Millet All India Research Project at the Indian Council of Agricultural Research (ICAR) Jodhpur, Rajasthan on 17 August 2022.

Seminar entitled, 'Journey towards being an entrepreneur' on the occasion of 'World Entrepreneurship Day' presented by Mr Mohit Goyal, Corporate Finance Expert, CA and founder of KGMC India, Gurugram, Haryana on 9 September 2022.

Seminar entitled, 'Research Ethics and Plagiarism' presented by Prof. Gaurav Singh, School of Education, Central University of Haryana on 3 October 2022.

Seminar entitled, 'Power of Legal Literacy in Women' presented by Ms. Koplin K. Khandhari, Lawyer in High Court on 19 July 2022.

Seminar entitled, 'Khadi - An Individual's Journey' presented by Prof. Himadri Ghosh, Former Principal Designer at NID Ahmedabad on 27 August 2022.

## **Conferences Organized**

Organized a conference entitled, 'Chronobiology and mental Health' in association with Shastri-Indo Canadian Institute (SICI) on 6 April 2023.

Organized a conference entitled, 'Women's Health Awareness- bridging the gap between knowledge and practice' in association with Azzura Pharmaconutrition on 16 September 2022.

Organized a conference entitled, 'Current Trends in Microbiology' in association with Vigyan Pratibha on 18 April 2023.

Organized a conference entitled, 'Centennial Oration and Panel discussion on National Education Policy; Transformations in Higher Education: The Changing Landscape' on 18 October 2020 which was sponsored by UGC.

## **Seminar/Conference Presentations**

Research Paper Presentations in International level Conferences/ Seminars/ Workshops

Dr. Savita Aggarwal and Dr. Jagriti Kher jointly presented research paper entitled, 'Building resilience to climate change: Role of quantifying gender and climate related risks' at an online seminar on Climate and Weather-Related Extremes New Dimensions, challenges and solutions ICCWE 2022 organized by IIT Roorkee on 19-20 September 2022.

Prof. Charu Gupta presented a paper entitled, 'Textile dyes from Fungi' at an International E-Conference on Textiles for Advanced Technologies 'TextileTech -2022' during 11-13 November 2022.

Prof. Jyoti Aggarwal presented a paper entitled, 'Finding the Gap between Purchase Intention and Purchase Behaviour Towards Sustainable Clothing Amongst College Students' at the 34<sup>th</sup>. Biennial National Conference of Home Science Association of India (HSAI) at the St. Teresa's College, (Autonomous) Kochi, Kerala on 15-17 December 2022.

Dr. Vandana Sabharwal presented a paper entitled, 'Breastfeeding Beliefs and Practices among the Covid-19 infected and uninfected mothers of the Delhi-NCR' at an online National E-Conference Paushti-Con 2023 organized by Nutrition Society of India, Mumbai Chapter on 27-28 January 2023.

### **National/International MoUs Signed**

MoU signed with Indira Gandhi National Open University (IGNOU) for the period July-2022 to June 2023.

MoU signed with National Institute of Immunology (NII) for introducing the Science Setu Programme for organizing talks, visits to NII.

MoU signed with Zirtri College, Aizwal for collaborative academic activities.

MoU signed with YOGAN Solutions Pvt. Ltd. for two years for attending conferences and setting up of clean air room.

MoU signed with IWART (India) from March 2023 for organising International film festival, seminars.

MoU signed with Global Honey Bee for one year for organizing short term courses in Digital Marketing and training students.

### **Other Inter-Institutional Collaboration**

E-Waste Collection Drive: A week long E-waste collection drive was organized from 18-21 April 2023 in collaboration with 'Attero Recycling Pvt Ltd'.

Plastic Waste Collection Drive was organized from 18-21 April 2023 in collaboration with Indian Pollution Control Association (IPCA).

Interactive meet on Organic Farming with Local Farmers was also organized on 21 April 2023 in collaboration with Krishikul Natural Farms to emphasise on the need and importance of sustainable agricultural practices

A workshop on "Resume building and Personal branding" was organized in collaboration with Jaipuria Institute of Management on 7 September 2022.

A webinar was held in collaboration with Upschool on 24 September 2022 in an online mode and 'Career Fair' in collaboration with Upschool was organized on 3 March 2023.

A workshop was conducted on “Career on Civil Services” in collaboration with NEXT IAS on 4 November 2022.

Blood Donation Campaign was organized in collaboration with ‘Red Cross’ to celebrate Azaadi ka Amrut Mahotsav on 17 Aug 2022.

Workshop on Menstrual Hygiene Management in collaboration with ‘Pratisandhi MAITRI’ was organized on 23 March 2023 and activities on menstrual hygiene in collaboration with Goonj and Pee Safe were conducted.

**Number and percentage of students placed:** 149 and 45%

**Number of Companies visited for campus recruitment:** 31

### **Extension and Outreach Activities**

'Each One Enable One' program at the Institute focuses on B.Sc. Home Science students sharing digital literacy skills with the community. Lasting from July 2022 to April 2023, students selected learners from the community and provided 30 hours of hands-on digital skill training, including need-based assessments and teaching useful daily apps. This year's focus was on imparting digital literacy to mothers, culminating in the 'Each One Enable One Mela.' The event featured student-developed educational materials on health and safety apps, with 120 attendees gaining insights into apps beneficial for women. An online workshop on Crochet was organized by Dr. Jyoti Aggarwal for skill upgradation of marginalized women in Bareilly on 31 January and 1 February 2022.

Department of Home Science (Food & Nutrition and Food Technology) organized several community outreach sessions in the online/offline mode throughout the year. Community outreach program- शिशुओं का पोषण और देखभाल (राष्ट्रीय पोषण माह सितंबर 2022) as part of "POSHAN MAAH" in was organized in the month of September. Department conducted a community outreach at an Anganwadi Center in Neb Sarai, Delhi, on 21 September 2022. Led by five students of Masters in Food and Nutrition students, the program focused on educating pregnant, lactating women, and family members on breastfeeding and Infant and Young Child Feeding practices. Using a nutrition communication aid, the session highlighted key points, including the importance of early-life nutrition, exclusive breastfeeding for the first six months, and proper complementary feeding. Interactive engagement through questions ensured effective communication.

In collaboration with the Nutrition Society of India, Delhi Chapter, college organized a millet awareness outreach at Kendriya Vidyalaya, INA on 24 January 2023. Undergraduate and postgraduate students educated 6<sup>th</sup> to 10<sup>th</sup> grade students about millets, their significance in regular diets, and demonstrated healthy recipes. The program included a skit by B.Sc.(Hons) Food Technology students, nutritional insights from M.Sc. Food Nutrition students, and sharing recipes. Gift hampers with various millets were distributed to the school students.

Department of Food and Nutrition and Food Technology initiated the 'Diet Counselling Centre' for college students and staff which was inaugurated during the POSHAN MAAH on 23 September 2022. Operational

since 26 September 2022, Center offers customized diet plans and counselling to IHE students, staff, and their family members.

M.Sc. Food and Nutrition students joined the Anemia Mukta Bharat Campaign at the India International Trade Fair in November 2022. Simultaneously, the college canteen introduced millet-based products to encourage healthy eating. A successful awareness drive by students and staff training resulted in the inclusion of millets in regular recipes. Popular recipes like Bajra, Palak, Cheela and Ragi Muffins were added, accompanied by instructional videos, significantly boosting millet awareness and consumption among students.

Voices, the Mental Health Society, plays a vital role in promoting mental well-being at the college. Through impactful online and offline events, including campaigns, workshops, and a pre-exam debate competition, Voices has engaged over five thousand online and approximately two hundred offline participants. Utilizing social media effectively, the society provided valuable mental health resources and created a supportive environment. Voices' efforts have had a positive and profound impact on the college community's mental health landscape.

### **Library Development**

Library has a collection of over 25000 resource materials which includes textbooks, reference books, thesis and back volumes of journals. It caters to the needs of over 1500 students, research scholars and faculty members. The library circulation services are fully automated using KOHA software. Library has two reading halls with a seating capacity of eighty students.

During the previous financial year, library acquired 187 new books worth Rs. 1,93,945/-. In addition, Library also provides e-resources to its faculty members, research scholars and students which are subscribed by Delhi University Library System (DULS). E-resources includes e-databases, e-books, e-journals subscribed by DULS and e-Shod Sindhu. College also has a subscription to N-LIST. Library provides remote access service to its faculty members, research scholars and post-graduate students (DULS remote access platform). Library orientation programs were organized for the first students to acquaint them to library resources. Library has been providing plagiarism check services to faculty members and research scholars using URKUND. Three new desktop computers have been added to support the software for visually challenged students and efficient circulation of books.

### **Faculty Strength**

Total number of sanctioned posts: 89

Total number of permanent faculty: 45

Total number of Ad-hoc faculty: 43

### **Financial Allocation and Utilization**

Grants utilized: Salary Rs.35,85,88,000/- and Non Salary Rs.40,00,000/-

Grants Allocated: Salary Rs.37,45,31,338/- and Non salary Rs.1,85,90,000 /-

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## **INSTITUTE OF HUMAN BEHAVIOUR AND ALLIED SCIENCES**

### **Brief history of the College**

The Hospital for Mental Diseases, Shahdara was converted to ‘Institute of Human Behaviour and Allied Sciences (IHBAS)’ by a Supreme Court order in response to public interest litigation in 1993. Since then IHBAS has come a long way in its journey of transforming custodial care setting to modern neuropsychiatric institute and today is one of the largest super specialties tertiary care centres in Delhi dedicated exclusively to neuropsychiatric and behavioural illnesses. The institute is progressing steadily to achieve its objectives, which are:

To provide high quality super specialty health care using state-of-art technology in mental health, neurosciences, behavioural and allied sciences.

To conduct research of high standard in the field of mental health, neurosciences and behavioural sciences.

To provide comprehensive training for MD, DM, M Phil and Ph D courses in field of mental health, neurosciences and behavioural sciences and research activities on current interest.

IHBAS as an apex neuropsychiatric institute has been continuously working to expand the patient care services beyond the hospital based care to community. This has been achieved through the community outreach services in various parts of Delhi, the awareness campaigns, active liaison with the NGOs, user and carer groups, RWAs and sensitization programme to facilitate involvement of the various stakeholders. In addition community oriented programmes, programmes for school children such as poster competition, workshops, symposia were organised to increase the awareness about positive mental health for prevention of neuropsychiatric illnesses and the facilities available at the institute. Mental Health Awareness week, Stroke Awareness Programme were carried out for the patients and their families.

### **Major Activities and Achievements**

NABH Accreditation has been accorded to Institute of Human Behaviour and Allied Sciences (IHBAS) becoming effective from 23.3.2022 for a period of four years. BSU licence has been renewed for another 02 years from September 2022 to 2024 by Assistant Drugs controller, Govt. of NCT of Delhi-32.

Department of Neurology conducted DNB Neurology exams in the month of June 2022 and was selected as Centre for conducting DNB Neurology Exams. Department received WSO ANGLES AWARDS 2022 and PLATINUM STATUS from World Stroke Organization for stroke services. Department of Neurology won prize in Neuro Quiz in DNACON. One of the faculty of the Department represented the Institute as a Chairperson.

Department of Neuroanaesthesiology and Critical Care at IHBAS has got approval to start “Post Doctoral Fellowship (PDF) course” in Neurocritical Care under able guidance of Director IHBAS, Prof. (Dr.) R.K. Dhamija. Pressurized Swing Adsorption technique (PSA) and an Oxygen Generator was installed under the Department of Neuroanaesthesiology & Critical Care in addition to already existing LMO and compressed gases. This has strengthened medical oxygen supply in critical areas of IHBAS. A “Skill Lab on Life Support

and Airway management was developed in CPR training Centre under the Department of Neuroanaesthesiology and Critical Care.

### **Honours/Distinctions**

Dr. Arvind Arya received “Chikitsa - Ratna Award” by Family Physician Forum for his contribution in COVID pandemic in Annual CME of Family Physician Forum on 31 August 2023. Dr. Arya was felicitated for the “exemplary services in Anaesthesia for teaching and training” in CME on recent advances in Anaesthesia on 17 September 2022. He was also a recipient of “ISA Delhi President's appreciation award “from Dr. Maitreyi, ISA Delhi President and HOD LHMC, on 9 October 2022.

Dr. (Prof.) Rajeev Thakur planned, organized, standardized and validated various molecular diagnostic kits, coordinated with ICMR, NACO and the state government for supply chain, trained the laboratory staff for conducting Real-Time PCR for HI, neurotropic viruses and for Covid-19.

### **Student Achievements**

Ms Usma (Nursing student), Mr Bharat (General store) and Mr Vikas Kumar bagged the first, second and third positions respectively during a poster making competition which was organised for IHBAS staff and students on the theme “Save Girl Child”.

### **Research Publications**

Sharma, M., Dhankar, M., Kumar, D. (2022). Awakening of Kundalini chakras presenting as psychosis-a case report. *Indian Journal of Psychological Medicine*. 44: 526-528

Chaturvedi, M., Jha, D., Anthony, A., Maheshwari, S. (2023). Leaking skull base – Imaging of two cases of spontaneous cerebrospinal fluid (CSF) rhinorrhea involving sphenoid sinus. *Acta Scientific Neurology* 23-27.

Prajapati, N., Kumar, M., Sharma, V. (2022) Cognitive Dysfunction in Euthymic Bipolar patients on Prophylaxis of Lithium Monotherapy. *Indian Jl. Of psychiatry*,.64 (4).

Jha, M., Sharma, V., Anthony, A. (2022) Post Traumatic Effects of COVID-19 on General Population. *Indian Journal of Clinical Psychology*. 49(1):33-39.

Jha, M., Sharma, V., Anthony, A. (2022) Post Traumatic Effects of Covid-19 on General Population. *Indian Journal of Clinical Psychology*. 49 (1), 33-39.

Sarma, P., Garg, M.K., Chaturvedi, S., Pant, I. (2023). Pediatric intraventricular cavernous hemangioma: A neurological rarity. *Journal of Pediatric* Available from <https://www.pediatricneurosciences.com/preprintarticle.asp?id=368804>.

Sharma, K.K., Srinivasan, M., Sarkar, S., Kaur, R., Sharma, Y., Venkatesan, L., Gupta, S., Venugopal, A. (2023). Depression, anxiety, insomnia, and distress among health-care workers posted in COVID-19 care. *Indian J PsyNsg [serial online]* 20:28-35. Available from: <https://www.ijpn.in/text.asp?2023/20/1/28/380348>

Mrinal, M., Khurana, S., Segan, M., Janardan, R., Upadhyay, P.K. (2022). An Ethnographic / Epidemiological Study of Folk Dentists Plight in Present Scenario. *Acta Scientific Medical Sciences* 6.9: 24-36.

Singh, R., Rani, A. (2022). Hand Preference (Hp), talents and Diseases - \_Is there any association? *IJEAST*, 7(12), 14-20.

Dhamija, R.K., Saluja, A. (2022). Seizures Associated with Cerebrovascular Disease: Experience from an Indian Tertiary Care Center. *Neurology India*. 1;70(5):2279.

### **Research Projects**

National Action Plan for Drug Demand Reduction (NAPDDR) project funded by GOI, through Department of WCD, GNCTD for the awareness regarding drug abuse through workshop and community activities and Principal Investigators as Dr. Deepak Kumar and Dr. Shruti Garg.

Project entitled, 'Understanding enablers and barriers in OST delivery at Public health facilities and community centers' (Funding Agency – National AIDS Control Society) and Principal Investigators as Dr. Deepak Kumar, Dr. Mahadev Singh Sen and Dr. Shruti Garg.

Project entitled, 'Factors influencing access to offline services of targeted interventions amongst virtually active MSM in Delhi' (Funding Agency – National AIDS Control Society) and Principal Investigators as Dr. Deepak Kumar, Dr. Mahadev Singh Sen and Dr. Shruti Garg.

Project entitled, 'Development of training module of caregivers working in Child Care Institutes for rescued children in 5 districts in Delhi' which was sponsored by ICSSR. Principal Investigator Dr. Perna Sharma and sanctioned amount of Rs. 5 lakhs.

Project entitled, 'Study of Cardio and Encephalographic Correlates of Panic Disorder and effect of Meditation on Clinico-Physiologic profile of individuals: A Randomized Control Trial' functional at Department of Physiology, AIIMS, Patna and sponsored by Department of Science and Technology.

### **Seminars Organized**

Seminar entitled, 'Nasha Mukta Shahdara Abhiyaan' was delivered jointly by Dr. Manoj Kumar and Dr. Shruti Garg and was held at GBSSS Janta Flats, Delhi, in collaboration with DM Shahdara on 7 October 2022.

Seminar entitled, 'Neuropsychiatric disability' was organized on the eve of World Disability Day and was delivered by Dr. Manoj Kumar and Dr. Mahadev Singh Sen on 6 December 2022.

### **Conferences/Activities Organized**

Autism Awareness Week was celebrated from 31 March 2022 to 2 April 2022.



A Health Education Campaign for Autism Awareness through street play and poster exhibition in collaboration with Holy Family College of Nursing was organized on 1 April 2022.

Preparation and release of health awareness leaflets on Autism Spectrum Disorders and its management.

Display of Autism Awareness Video and information through LCD screens placed in OPD.

A pledge was taken by all the participants to spread the awareness regarding Autism Spectrum Disorder and its management.

Department of Neurology organized Stroke Awareness Programme to sensitize the Nursing Staff on the occasion of World Stroke Day on 31 October 2022.

The Department of Neurology organized “Broken and Beautiful” Dance Movement Therapy” for Healing, Recovery, Rehabilitation & Self Care session for stroke survivors on 14 March 2022.

### **Seminar/Conference Presentations**

Dr. Jahanara M. Gajendragad was a special Invitee and panelist at the UGC Sponsored Two Day National Seminar on ‘Community Health and Sustainable Development Goal (Perspectives, Challenges, Solutions and Policies)’ held at Acharya Nagarjuna University, Guntur Andhra Pradesh from 21 to 22 March 2023.

Dr Sangeeta Gotewal presented a paper entitled, ‘Mental Health and well-being’ organized at Vishwa Yuva Kendra Delhi on 18 May 2022.

Dr. Himanshu Singh presented a paper entitled, ‘Mental. Health and Well-Being’ in a Conference organized by Mewar University and Vishwa Yuva Kendra NGO on 29<sup>th</sup> March 2023 for college-going students.

Prof. Rajinder K Dhamija was invited as a Chief Guest to deliver a keynote address on ‘Heal Your Mind and Heal Your Life’ at a seminar organized by Vishwa Yuvak Kendra, New Delhi on 26 April 2023.

Dr. Sushma Kumari presented a paper entitled, ‘Mental Health and Well- Being’ at DMHP Clinic - Chhatarpur, Delhi on 10 October 2022 and at DMHP Clinic- Timarpur on 14 October 2022 during the Mental Health Awareness Week (from 10 October 2022 to 15 October 2022).

### **Collaborations**

Since 2008, the molecular microbiology section of the department under the lead and direct supervision of Dr (Prof) Rajeev Thakur has been serving as a reference laboratory for HIV viral load monitoring for the linked ART centres of NACO for the ART therapy. With this collaboration with NACO, the department is also making an active contribution towards the national health program (NACP) of India.

Gap assessment of Biomedical waste management practices in Delhi Govt hospitals was conducted in collaboration with Delhi Pollution control committee and Delhi Society for Promotion of rational Use of Drugs (DSPRUD) from December 2022 till March 2023.

Two batches of Certificate course on Antimicrobial Stewardship (CCAMS) from 19-23 September 2022 and 28-4 March 2023 were organized in collaboration with Public Health foundation of India and DSPRUD.

National level workshop 'Review Workshop of NAC-NET' was organized on 14-15 November 2022 in collaboration with WHO country office India, National Centre for Disease Control, MoHFW and DSPRUD at Gurugram (Haryana).

Two 'National Training of Trainers to Strengthen Infection Prevention & Control' were organized on 1-2 December 2022 and 13-14 December 2022 in collaboration with WHO country office of India, National Centre for Disease Control, MoHFW and DSPRUD at Gurugram (Haryana).

### **Extension and Outreach Activity**

District Mental Health Programme (DMHP) clinics were involved in community awareness outreach activities, training of medical officers, nurses and other paramedical staff about mental health, conducting mental health awareness camps in community, and various other IEC activities. Participation in Health Expo: It was held from 25-27 February 2022 at Delhi Haat, Pitam Pura. At this Expo, DMHP team organised a stall for creating Mental Health Awareness among the masses and received First Prize for "Excellence in Mental Health Promotion and Patient Care".

In an effort to enhance community awareness of psychiatric and behavioral disorders, community outreach programs have been undertaken to deliver the neuropsychiatric services to the doorstep of patients. The community outreach services help to create awareness in the public regarding neuropsychiatric disorders and remove the stigma and myths associated with mental illness.

Mobile Mental Health Unit service was started at Institute of Human Behaviour and Allied Sciences (IHBAS), Delhi in January, 2011 (with 2 Mobile Mental Health Units), keeping in mind the significant treatment gap and difficulty in accessibility to mental health services to vulnerable populations especially homeless as well as homebound severe mentally ill persons. Mobile Mental Health Unit (MMHU) Service Network of Delhi currently has been expanded from two units to a total of eleven units. It is an innovative and specialized service to bridge the treatment gap in mental health services ensuring due legal and ethical correctness. In India, this specialized service is first time implemented by Government run Mental Health Institute IHBAS, Delhi.

### **Library Development**

Institute Library is centrally air-conditioned with an impressive collection of Books and Journals. Library is equipped with a computer lab with LAN and Internet connectivity. Library and an Information Center provides information services to all teaching and other departments. It has enabled learning and advancement of knowledge to promote academic & research activities of the institute.

Library has developed an updated collection of books, periodicals in the area of Mental Health and Neurosciences. approx. 15,000 books and other documents such as bound journals, Thesis etc. are available in the library. 127 scientific (82 foreign & 45 Indian) Journals were subscribed. Karger-e resources package with 17 e-journals series up to 2018 is also available for the users. Some free e-journals available with print subscription & e-books are available for the users in the library. The library also has a collection of some good

English & Hindi literature books for readers and employees. The library collection comprises of books, journals, theses, and back volumes. Books are arranged on shelves according to Department wise. Back Volume Journals are arranged on shelves alphabetical order by title.

The library uses KOHA software for management of Library documents and facilitates searching of documents through OPAC for users and also provide the facility of Plagiarism detecting facility for Faculty members, Doctors and researchers through Original software incorporates with University of Delhi. The library is open after office hours till up to 7.00 P.M. to extend facility to the users. The Library also extend facility to facilitate faculty members, doctors & students of the Institute to avail the off line & Online resources of National Medical Library (NML)

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## **JANKI DEVI MEMORIAL COLLEGE**

### **Brief history of the College**

Janki Devi Memorial College (JDMC) aims to provide quality education to young women and empower them to become self-reliant and contribute meaningfully to the society. In 1959, Shri VKRV Rao, the then Vice-Chancellor of Delhi University appealed to the wealthy philanthropists of the city to come forward to open girls colleges in Delhi. It was then, founded in the same year by the eminent Gandhian Shri Brij Krishan Chandiwalla who had no children, donated all his inherited wealth to the family trust Shri Banarsidas Chandiwalla Sewa Smarak Society which in turn funded the establishment of JDMC in memory of his late mother Smt. Janki Devi. The founder, Bhajji, built this college with the single-minded aim of empowering women. Today JDMC is one of the most distinctive institutions of DU. It offers education in liberal arts, social sciences, mathematics and commerce and also offers short-term add-on courses.

The college offers great facilities, good infrastructure and dedicated administration of college premises and affairs. It also has a beautiful hostel for 105 outstation students, which was inaugurated by the former Honorable President of India, Late Shri Pranab Mukherjee. The hostel also houses crèche facilities for all who may require them for their infants.

### **Major Activities and Achievements**

JDMC scored an A + grade in its second NAAC cycle with a high score of 3.43. It is also a matter of great pride for the college to have received the prestigious ISO 21001:2018 and ISO 9001:2015 certifications, both accredited by NABCB. We are the only Delhi University college to have been awarded the prestigious ISO 21001 certification.

As an initiative of the Vidya Vistar Scheme, Conference proceedings of Tribes: Learning and Unlearning Tribal Culture (organized in 2021) was published in May 2022. An online panel discussion series called Samvaad in collaboration with different departments of the college. A total of 100 alumnae were invited to speak on different topics, and their articles were compiled in a book called Hundred Voices; Sau Swa. It was presented to VC, Prof. Yogesh Singh, at the Centenary Alumni Meet of the University of Delhi held

on 21 April 2023. In addition, a total of 79 webinars and seminars were held, in addition to 3 international and 11 nationals.

The JDMC–IQAC Research Centre facilitated 11 college funded faculty projects and 4 funded by external sources, 22 student projects funded by the college, mentored by teachers and 48 independent research projects by students.

### **Honours/Distinctions**

Department of Commerce Poonam Bewtra Awarded Best Women Faculty Award by INSPIRA Research Association (1 February 2023).

Department of English Swati Pal Was awarded the Sashakt Mahila Samman by Bharat Vikas Parishad on their 60th Foundation Day (10 July 2022).

Department of English Indu Jain Was awarded Eric Auerbach Fellowship in collaboration with the Institute of Advanced Studies, University of Cologne, Germany (May - July 2022).

Department of Environmental Sciences Sana Rehman Was awarded a Ph.D. degree on August 24, 2022, by Department of Environmental Studies, University of Delhi, for her dissertation titled, A Multi-Species Occupancy Modelling Study of Common Water Birds in Response to Habitat Variables in the River Yamuna of Delhi.

Department of History Saumya Gupta Was awarded Nehru Memorial Museum and Library Fellowship (2021-23)

Department of Physical Education Abha Jain Was co-convenor of Delhi University Centenary Celebrations Inter College Football Tournament for women from 18 September 2022 to 5 October 2022.

Department of Political Science Rajshree Chandra Awarded IWM (Institute of Human Sciences), Vienna, Visiting Fellowship (May-June 2022).

Department of Political Science Debahuti Brahmachari Won best prize paper award titled Impact of Covid-19; Strategies for the Future at International Conference on Social Determinants of Health Inequality and Health Inequity, organized by Jesus and Mary College, University of Delhi. (23-24 February 2023).

Department of Sanskrit Tanuja Rawal Awarded best oral presentation in the track titled Vedic Ganit, in the ICSSR sponsored International Seminar on Technology for Environmental Sustainability, Socio-Economic Responsibility and Associated Entrepreneurial Opportunities in Society and Rural Environment, organized by Sri Aurobindo College, University of Delhi (16-17 March 2023).

Department of Sociology Vandana Madan Received a certificate of appreciation by MGNCRE, Ministry of Education for implementation of Social Entrepreneurship Activities at JDMC (24 October 2022). Received a certificate of recognition by the University of Muenster, Germany for leading as a project coordinator for Bystander implementation (August 2022). V. Rajyalakshmi Was awarded Fellowship titled

Honorary Research Fellow of Women's Studies and Development (WSDC) (2 years) by University of Delhi (15 February 2023) (for a period of 2 years).

### **Students with Distinctions**

Arpita Kumari of B.Com. III Year was awarded rank II in Inter college basketball competition organized by Asian Education Group.

Aakanksha Pandey of B. A. (Hons.) Economics II year Published a research paper titled Statistical Analysis of Investment Hesitancy of Indian Youth in Crypto currency, International Journal of Research in Engineering, Science and Management.

Jayanti Sahu of B. A. (Hons.) English II year Published a book titled Doodles.

Ekta of B. A. (Hons.) Hindi III year was selected in Indian Team, Half Marathon Meet held in Dhaka, Bangladesh.

Manju and Sonu both from B. A. (Hons.) Hindi III year won the Gold medal, Delhi team won the Gold medal & Championship in All India 5-A-Side Women's Hockey Tournament held at Nainital.

### **Publications**

Bewtra P. (2022). Women Empowerment & Gender Inclusion Fund: Equitable and Inclusive Vision in The National Educational Policy 2020. *International Journal of Innovations and Analysis (IJIRA)*, 2(3 (I)): 144-15.

Charan A. (2022). Analysing and Regulating Body-Shaming Contents on Facebook (Meta) Advertisements against Women. *International Journal of Enhanced Research in Management & Computer Applications*. 11(9): 1-4.

Chaudhary S. and Vasisht N. (2022). Financial Literacy and its Determinants: Evidence from Delhi-NCR. *International Journal of Advanced Research in Commerce, Management and Social Science*. 5(1): 154-169.

Pal S. (2022). Thou Shalt Not Snitch: Mohan's Story. *Settu, Pittsburgh, USA*. NA(NA): NA.

Rawat D. et.al. (2023). Iron-Dependent Mutualism between *Chlorella Sorokiniana* and *Ralstonia Pickettii* Forms the Basis for a Sustainable Bioremediation System. *ISME Communications*. 2(1): 83.

Gupta S. et.al. (2022). Translating Foods of the World: A Roundtable Discussion on the Challenges and Triumphs of Translating Foods. *Gastronomica: The Journal for Food Studies*. 22(2): 2-14.

Bhardwaj R., and Muralidhar N. (2023). The Pursuit of Wellness: A Sociological Perspective. *International Journal of Creative Research Thoughts*. 11(1): 305-318.

Arora R., Madan S., Garg P., and Singh D.K. (2022). Analysis Of Covid-19 Spread In Himalayan Countries. *Advances and Applications in Mathematical Sciences*. 21(6): 3249-3263.

Singh G. H. (2022). The Cultural Ethos of Indian Folk Lore. *Naad Nartan -Journal of Dance and Music*. 10(2): 17-21.

Chandra R. (2022). An Indian Critique of Indian Nationalism. *Economic and Political Weekly*. 58(34): 358.

## **Journals**

Pal S., Garg S., Madan V., Gupta S., Sheemar T., Sharma T.(2023). Perspectives- An interdisciplinary, bilingual, peer - reviewed e-journal. *Annual*. III(NA): 1-242.

## **Research Projects**

Institute of Eminence, University of Delhi funded project entitled, “Environmental Prevalence and Emerging Environmental Threats from Aromatic Amines Developed in Wastewater from Textile Industry”. Sanctioned amount of Rs. 5 lakh. PI: Dr. Deepak Rawat (Department of EVS)

Arts and Humanities Research Council, United Kingdom funded project entitled, “Forgotten Food: Culinary Memory, Local Heritage and Lost Agricultural Varieties in India”. Sanctioned amount of Rs. 21 Lakh. PI: Dr. Saumya Gupta

Women Power Connect, New Delhi funded project entitled, “Violence Against Unmarried Women and Men During Covid”. Sanctioned amount of Rs. 0.16 Lakh. PI: Dr. Vandana Madan

Janki Devi Memorial College funded project entitled, “Sociological Analysis of the Impact of Medical Tourism in Delhi”. Sanctioned amount of Rs. 0.30 Lakh. PI: Prof. Ruby Bhardwaj (Department of Sociology) and Ms. Nirmala Muralidhar (Department of HDFE)

Janki Devi Memorial College funded project entitled, “Spiritual Healing Practices – A Case Study of Andhra Pradesh and Rajasthan”. Sanctioned amount of Rs. 0.30 Lakh. PI: Dr. Jitender Gill (Department of English) and V. Rajyalakshmi (Department of Sociology)

## **Seminars Organized**

Seminar entitled, ‘Labour and the Macro-economy: The Indian Experience’ by Prof. Jayan Jose Thomas, Department of Economics, IIT Delhi organised on 10 October 2022.

Seminar entitled, ‘Navigating Queer Legal Reforms in India in the 21st century’ by Vqueeram Aditya Sahai, Activist organised on 14 March 2022.

Seminar entitled, ‘Sensitization of Students and Employees to Constitutional Obligations’ by Prof. Sushma Yadava, Member, University Grants Commission & Ex Vice chancellor, B.P.S Mahila Vishwavidyalay organised on 27 July 2022.

Seminar entitled, 'AFSPA and Gendered Violence, Gender' by Dr. Rituparna Bhattacharyya, Senior Fellow, Advance HE UK, and Adjunct Professor, Indian Institute of Technology, Guwahati organised on 30 October 2022.

Seminar entitled, 'Manual Scavenging and its Environmental Impact' by Dr. Bezwada Wilson, Magsaysay award winner and founder of the Safai Karamchari Andolan organised on 16 December 2022.

### **Conferences Organized**

Organised one day conference on 'Sufi Poets, and Saints' on 15 February 2022.

Organised one day conference on 'Population and Environment: The Discourse' on 11 July 2022.

Organised a Genderlogue on 'Preventing gender based violence' on 16 November 2022.

Organised a one day conference on 'Writers Festival-Conference' on 10 April 2023.

Organised a one day conference on 'Metropolis and Margins: Shifting Perspective in Literary and Language Studies' on 27 April 2023.

### **Seminar/Conference Presentations**

Sushma Maurya a paper titled "Sustainability Reporting in India- A Study of Selected Listed Companies" at the Annual International Conference by Department of Commerce, Delhi School of Economics, University of Delhi on 11 January 2023.

Sakshi Bansal presented a paper titled, "Dynamics of Convergence in Indian States in the Post Reforms Period" at an International Conference by National Economics University, Hanoi Vietnam at the 5<sup>th</sup> CIEMB on 25 November 2022.

Prof. Swati Pal delivered an invited talk in the International Conference on 'Infrastructure, Information and Innovation for Building New Bharat', organized by the Gandhi Bhawan, Delhi University, Gandhi Smriti and Darshan Samiti in collaboration with the Delhi Library Association and Satija Foundation for Library and Information Science, Conference Centre, University of Delhi (10-12 November 2022).

Deepak Rawat was invited as speaker on "Iron-Dependent Mutualism between Chlorella Sorokiniana and Ralstonia Picketti for a Sustainable Bioremediation of Industrial Waste" at 2022 Algal Biomass Summit, organized by Algae Biomass Organization on 11 October 2022.

Nirmala Muralidhar presented a paper titled "Volunteering for Community Awareness: Screening for Retinoblastoma in Children" at International Conference on Natural Products and Human Health – 2022, organized by Deshbandhu College, University of Delhi on 5 November 2022.

Saumya Gupta was invited as a speaker for a lecture on “Collecting Oral History in Covid Times” at an International Conference on Jashn e Rampur, organized by the Forgotten Food Project organized by the University of Sheffield and JDMC, at India International Centre (28 October 2022).

Indu Jain from the English Department presented a paper titled ‘What’s in a Dream? The Social Dimensions of Dreams in Feminist Theatre’, at Eric Auerbach Lecture Series, University of Cologne in the month of July 2022.

Ritu Arora from the Mathematics Department presented a paper titled ‘Bounds for Correction of m-Repeated Bursts of Length b(fixed) in Multiple Sub-Blocks’, at International Conference on Analysis and its Applications (ICAA-23) organized by Department of Mathematics, Shivaji College, University of Delhi (28 February 2023)

Rajshree Chandra invited as a speaker for a lecture on “Rule by Law and the Making of Authoritarian Democracies” at Fellows Colloquium at IWM, Vienna organized by International IWM (Institute of Human Sciences), Vienna on 27 June 2022.

Shalini Singh presented a paper titled “A Dialogue of Populism with Policy Formulation: An Analytical Study of What Informs the Agricultural Policy Processes in Contemporary India” at Third International Workshop on The Politics behind Problem Structuring. Construction and Effects of Problem Structures in Policy Design and Implementation, organized by Third International Workshop of Public Policy, International Public Policy Association, Budapest Hungary on 28 June 2022.

### **National/International MoUs Signed**

Ripudaman Charitable Trust - To enhance capacity building of students/staff by organizing programmes focused on diversity and inclusion.

Clean to Green- To create aware about E waste and its hazards and educating students and staff about their responsibilities, conduct few engagement activities.

Shakti Shalini -To provide the framework for the collaboration taking place between Enactus JDMC and Shakti Shalini NGO under Enactus JDMC's Project Delara.

The Guild for Service -To build a policy framework and send recommendations to the concerned authorities for the upliftment of the widows of Vrindavan.

Ms. Parul Daga for JDMC Kitchen Garden -To bring about ecological restoration and greening the college campus.

Sanskrit Bharti, Delhi -To organize Spoken Sanskrit camps/workshops/webinars/conferences Women Power Connect- To conduct Bystander Intervention Programme.

Possangipur Gaon Awam Mandir -To organize activities related to capacity building of students and extension and outreach.



## **Other Inter-Institutional Collaboration**

Mahatma Gandhi National Centre for Rural Education (MGNCRE), Hyderabad, Ministry of Education, GOI -To promote mutual cooperation in educational, training and research activities and establish a framework for programmes of exchange and collaboration in areas of Rural Development, Education, training and internship programmes;

**CL Educate** - For publishing a work on Pedagogy Series 2022

**Number of students placed: 82**

**Number of Companies visited for campus recruitment: 38**

## **Extension and Outreach Activities**

The college stayed steadfast in fulfilling its social responsibilities even as it pursued its academic and co-curricular objectives. The Centre for Extension and Outreach Activities (CEO-A) collaborated with the Department of Human Development and Family Empowerment (HDFE), National Cadet Corps (NCC), National Service Scheme (NSS) and Equal Opportunity Cell/ Enabling Unit, among others for various events.

The Department of HDFE, under the aegis of the CEO-A organized many events such as an Independence Day Drive in collaboration with the Robinhood Army; The National Service Scheme (NSS) & CEO-A conducted many diverse events be it a session on Menstruation in Jahangirpuri slum in collaboration with Sampark Sathi Foundation; a Blood Donation Drive; a session on POCSO ACT under the aegis of the government of India (Ministry of Youth Affairs) in partnership with the SAKSHI Organization; a Cloth Donation Drive in the slum area of Rajouri Garden; on the occasion of Gandhi Jayanti, under the Clean India Campaign, a Mega Plogging Drive; in collaboration with the NGO Paint It Red, the Daan Utsav ; in collaboration with Rotaract, an NGO, a session on Breast Cancer; In collaboration with the DKMS BMST Foundation, a seminar on the theme Blood Cancer Awareness ; a session for Shadipur slum students on Biographical Sketches of Unsung Heroes of Indian Struggle; a Slogan writing competition on the occasion of Independence Day on the theme Ek Bharat, Shreshth Bharat; Project NEEV Education to the Underprivileged Slum Children started offline teaching from 26 June 2022.

National Cadet Corps (NCC) & CEO-A collaborated for the following events: Vasundhara-Voice for the Voiceless, a campaign to spread awareness related to global animal rights issues; celebrated the National Safety Day on March 4, 2023 with poster making competitions and an awareness rally; Conducted an awareness session on 14 June 2022, World Blood Donor Day 2022, to raise awareness about saving lives through blood donations. On the day of Plantation Drive 2022 cadets along with college staff planted saplings in the college lawn and pledged to protect the planet and its biodiversity on 2 June 2022; On the occasion of World Anti-Tobacco Day 2022, 31 May 2022, cadets participated in a rally to make people aware of the severe consequences of tobacco addiction through creative and informative posters.

## **Library Development**

The library constantly endeavours to make its services available and updated, in sync with the instructional program of the college.

JDMC library is fully computerized and has successfully shifted library software on Cloud server.

The library catalog is available 24x7 at [jdm.copac.lease.in](http://jdm.copac.lease.in). Libsys is an integrated Library management system where all the housekeeping jobs are performed.

The database of books and journals available is updated on a day-to-day basis. Library also subscribes to digital databases - Nlist and Sugamya Pustakalaya and also provides access to all the databases subscribed by the Delhi University Library System.

A separate faculty reading and research room with laptops, a newly developed E-resource Centre for 43 students and a state-of the art recording room with internet facility are available for students and teachers.

In order to create more reading space in the library, a mezzanine floor has been developed in the Reference Section, creating seating for 50 more students.

To provide equal access to visually challenged users, the library is developing its collection to meet their requirements. It has installed screen reading software in 5 laptops at the E-Resource Centre and an exclusive room is also maintained with 7 laptops having screen reading software, Scanner with editing software, braille books and talking books.

Total No. of Books in library: 90184

Total No. of Magazine and Journals subscribed: 72

**Total Faculty Strength: 154**

## **Financial Allocation and Utilization**

Grants Allotted: Rs. 54.22 Crore

Grants Utilized: Rs. 61.48 Crore

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## **JESUS & MARY COLLEGE**

### **Brief history of the College**

Jesus and Mary College, a constituent college of the University of Delhi, was established by the Congregation of Jesus and Mary in 1968. This religious congregation was founded by Saint Claudine Thevenet in Lyon (France) in 1818. College initially started with one department offering English (Hons)

and B.A. (Pass) programmes with an enrolment of 116 students. In the span of a few years' students were made available with other options of Honours programmes, including Economics, Political Science, Hindi, Psychology, B. Com, and B. Com Pass. In the year 2000, the road in front of the college was renamed 'Jesus and Mary College Marg'. Ms. Sheila Dixit, Chief Minister of Delhi, and His Grace Alan de Lastic, Archbishop of Delhi graced the occasion. In 2006 a fully equipped State-of-the-Art Multi-Purpose Hall (MPH), named 'Saint Claudine Thevenet Hall' was inaugurated and blessed by Archbishop Vincent Concessao. In 2016 JMC became one of the three colleges in Delhi University to introduce two professional degree programs- B. Voc Healthcare Management and B. Voc Retail Management and IT, sponsored by UGC under PMKVY.

### **Major Activities and Achievements**

Jesus and Mary College achieved significant milestones in various domains. In 2021, college was awarded with 'A+' grade in the second cycle of accreditation by the National Assessment and Accreditation Council (NAAC). College organized "International Conference on Social Determinants of Health Inequality & Health Inequity: Impact of Covid 19; Strategies for the Future" providing a crucial platform to address health disparities. Establishment of the Community Engagement Centre in February 2023 exemplifies the college's commitment to community outreach, aiming to raise awareness and empower local communities through skill training. The visit of U.S. Commerce Secretary Gina Raimondo during the "Future Female Forward" program underscored the college's dedication to international collaboration and women's empowerment. Additionally, collaborative efforts with the National Institute of Educational Planning and Administration (NIEPA) involved hosting Principals degree colleges from Andhra Pradesh. The visit of Dr. Wendy Bignold from Liverpool Hope University strengthened global academic ties. Recognizing academic excellence, college organized a formal Faculty Felicitation Programme, specifically honoring faculty members promoted to the prestigious position of Professor by the University of Delhi. These endeavors collectively highlight Jesus and Mary College's commitment to impactful initiatives, community engagement, and global collaboration.

### **Honours/Distinctions**

Dr. Anupama Srivastava was facilitated with the Best International Research Paper award in February 2023.

Dr. Archana Tripathi was recognized for her exceptional work in women empowerment by Saksham Society, Jaipur, and also honoured with the Pralekh Uday Nath Smriti Samman for her contributions to Hindi Literature in July 2022.

Dr. Nilima Chitgopekar served as a keynote speaker at the Shakti Kumbh International Meet in Rishikesh in February 2023.

Dr. Sharon Pillai served on the editorial board of the Journal of Gender Studies at Routledge, United Kingdom.

Ms. Monica Chhabra received the Young Researcher award from the Inspira Research Association (IRA) as part of the Inspira-IRA Academic Excellence Awards in November 2022, and she was also honored with membership in the INSPIRA Research Association during the same month.

Priyanka Marwah was honored with the Innovative Teacher Award by Genius Brain and HRD Mission in September 2022.

Dr. Ruhi Ghai was honored with the Innovative Teacher Award by HRD Mission and Genius Brain in September 2022.

Ms. Saloni Arora was honored with the Innovative Teacher Award by HRD Mission and Genius Brain in September 2022.

Dr. Anupreet Vij was honored with the Exceptional Women of Excellence Award in December 2022.

### **Students with Distinction**

Harshita Dangwal, B.A. (Programme), received a global recognition for her essay titled, 'Venice and India-a Bonded Epiphany' being among the top three essays in an international essay contest organized by Ca' Foscari University in collaboration with Sun Network, commemorating the 1600<sup>th</sup> anniversary of Venice.

Arunima Marwaha, B.A. (Hons) Economics, awarded with the Millennium Fellowship for her active participation in a social impact project as part of a leadership development program, dedicated to advancing Sustainable Development Goals (SDGs). She collaborated with fellows to educate underprivileged children on subjects related to legal awareness and gender sensitization, in an initiative organized by the United Nations Academic Impact.

Shreshta Varghese, B.A. (Hons) Psychology, achieved the third position in the Monomousumi International Creative Essay Writing Competition, showcasing her outstanding talent and skill in essay writing on a global platform.

Elizabeth Mohan, B.Sc. (Hons.) Mathematics, honoured with a cash prize of Rupees fifty thousand and a prestigious award for her exceptional contribution to the National Cadet Corps (NCC) by the Delhi Commission for Women.

### **Publications**

Kaushik, P. (2023). QEEG characterizations during hyperventilation, writing and reading conditions: A pre-post cognitive-behavioral interventions study on students with I. *Clinical EEG and Neuroscience*, 01-12.

Marwah, R., Ramanayake, S.S., Yasmin, L. (2022). Political Economy of Trade in BIMSTEC: A Contemporary Perspective". Online, 23217081.

Mishra, S., Goel, Y. (2023). Cultural understandings of fathering and fatherhood in India: An exploration of lived experiences. *Culture & Psychology*, 01-34.

Mittal, D., Ranjan, A. (2023). The Citizenship (Amendment) Act and the changing idea of Indian Citizenship. *Asian Ethnicity*. 24: 463-481.

Mittal, D. (2022). Narrativizing partition and producing stigmatized identities: an analysis of the representation of Muslims in two Indian history textbooks. *India Review*, 21:329-348.

Philip, J. K. (2022). Land for dignity' and struggle for 'Identity: Trends in Caste and Class Relations in a Village of South India. *Journal of Agrarian Change*, 23(2), 327-345.

Ruchi, B., Surendra, M. (2023). Interstate Disparities in Education and Health Infrastructure: A Multivariate Analysis. *IASSI*, 41, 534-548.

Shashwati, S., Kansal, P., Sethi, D. (2022). Exploring Artistic Representations in Psychological Research: A Step-by-Step Guide for Using Found Poetry. *The Qualitative Report*. 27, 1621-1637.

Tohan, S., Dharmaraja, S. (2023). On the time-dependent solution of fluid models driven by an M/M/1 queue using a probabilistic approach. *International Journal of Operational Research*, 46, 65-72.

## **Journals**

The JMC Review: An Interdisciplinary Social Science Journal of Criticism, Practice and Theory. *Annually published*. 5: 001 – 301. Chief Editor: Prof. Sandra Joseph Editor: Sandhya Devesan Nambiar Editor: Prof. Reena Marwah. (2022-23).

## **Research Projects**

Project entitled, 'Beyond Private Power of Employers and Precarity: Why municipalizing paid domestic work will benefit everyone' sponsored by Rosa Luxemburg Stiftung for an amount of Rupees forty thousand for the year 2022-2023.

Project entitled, 'Asian Security' sponsored by ICSSR for an amount of Rs. 5 lakhs for the year 2022 - 2023.

## **Seminars Organized**

A seminar entitled 'Community Engagement Research and Social Responsibility: Role of Teachers in Higher Education' was delivered by Dr. Rajesh Tandon, the Founder-President of Participatory Research in Asia (PRIA) on 23 August 2022.

A seminar entitled 'Mediated Dis (Plays): The Future of Text after Web 2.0' was delivered by Abhinandan Sekhri, Co-founder, and CEO of News Laundry, during a Two-Day National Student Seminar on 28 October 2022.

A seminar entitled 'National Identity: Issues and Challenges' was delivered by Dr. Swati Mukherjee, Scientist at DRDO, on 2 September 2022.

## **Conferences Organized**

As a part of the DU centenary celebration, college organized an International conference on 'Social determinants of health inequality & health inequity: impact of COVID-19; strategies for the future', on 23 and 24 February 2023.

## **Seminar/Conference Presentations**

Dr. Amrita Sastry as a national resource person presented a Sociology seminar on "Gender, Society, and Development: The Contemporary Issues" from July 2022 to June 2023.

Dr. Anuradha Sharma as an international resource person conducted a Sociology seminar entitled "Women in Sports in India" during the month of September 2022.

Dr. Archana Tripathi as a national resource person conducted a Hindi seminar entitled "Jaishankar Prasad ke Srijan Mein Rashtravaad ki Avdharna" during the month of June 2023.

Dr. Archana Tripathi as the national resource person delivered a Hindi seminar on "Chhatisgari Lok Sansakriti Mein Shri Ram" during the month of June 2023.

Dr. Joan Antony as an international resource person presented a Psychology seminar with a focus on "Women in Academic" in the month of March 2023.

Dr. Reena Marwah as an international resource person presented a Commerce seminar on "India-Vietnam Relations" for the students of RMIT University during the India Day celebrations in Vietnam in the month of November 2022.

Dr. Divya Agarwal as the National Resource Person presented a B.A. Program seminar discussing the "Impact of Environmental Changes on Agriculture" in the month of November 2022.

## **National/International MoUs Signed**

MoU signed with Liverpool Hope University for Human Values.

MoU signed with Vietnam Academy of Social Sciences for Human Values.

MoU signed with Vietnam Eco Park University for Human Values.

MoU signed with St. Josephs' Girls Degree College under Vidya Vistar Scheme.

**Number and percentage of students placed: 119.**

**Number of Companies visited for campus recruitment: 22**

## **Extension and Outreach Activities**

Community Engagement Centre (CEC) launched a three-month tailoring course from 15 February 2023 to 19 May 2023 for the nearby communities of Sanjay camp, Vivekananda camp and Babu Dham Society. The Centre also organized Nukkad Natak to raise awareness against acid attack violence. An awareness session was organized to give information about provisions in the Indian Penal Code 1860, CrPC 1973, and Delhi Victim Compensation scheme concerning acid attacks on 31 March 2023. College organized an awareness session on menstrual hygiene during the menstrual hygiene day and distributed women's hygiene products to women in the nearby community.

Regular teaching and weekly dance classes for the kids from nearby communities were organized under the Jesus and Mary College Educational Programme (JMCEP).

National Service Scheme (NSS) unit of the college, conducted a cleanliness drive in the JMC campus from 15 -17 February 2023. NSS unit also organized a plantation drive on the occasion of World Soil Day. National Cadet Corps (NCC) in collaboration with the Ministry of Culture, Government of India organized a blood donation camp.

A Breast cancer awareness seminar was conducted by Enactus in collaboration with Win over Cancer provided a comprehensive overview of breast cancer, its treatment, and the importance of early detection in January 2023.

Green Society of JMC and IQAC collaborated with Karo Sambhav to organize the National E-Waste Collection Drive. The team also organized User-Generated Written Content (Social Media Awareness Initiative). Green Society of JMC organized animal shelter visits and workshops on the welfare of Strays in collaboration with the Sanjay Gandhi Animal Care Centre.

### **Library Development**

Library block is located at the heart of the college campus, covering an expansive area of 1686.81 sq.m., and spread over three floors. Library houses two large reading rooms, stack areas, a reference section and an e-resource centre. The college library serves as a resource centre for both printed and electronic resources. Library provides a large collection of reference sources (e.g., encyclopedias, dictionaries, atlases, yearbooks, handbooks etc.) in addition to various textbooks and other reading materials. Subscription to INFLIBNET- NLIST & DULS databases are also available for better research and academic pursuits.

Library uses Troodon ILMS software, version 5.6, provided by Comtek Services. Key features of the software is its easy-to-use Graphical UI, Unicode support with Multilingual Search and export facility for most reports. The library operates based on an 'Open Access' system. The OPAC module of the software allows for a full search of the library database by entering preferred terms, making information retrieval a seamless process.

Circulation module of the software covers all circulatory operations; from creating member records to printing reminders for outstanding books. Database Maintenance module includes operations of database creation and maintenance. It uses the acquisition module for data on recently acquired books. The library also has access to a fully automated anti-plagiarism software, URKUND. Two information kiosks have been

added to the library infrastructure in the year 2023, making it easier to search for books in the library. Through these various frameworks, the JMC Library presents a modern, automated approach to management.

Total number of books in library: 62,000

Total number of magazine and journals subscribed: 79

### **Other Inter-Institutional Collaboration**

College has academic collaborations with various Institutes and colleges of repute, namely, Loreto College, Kolkata, St. Teresa's College, Autonomous Ernakulam, Loyola Academy, Autonomous Secunderabad, Mount Carmel College of Teacher Education for Women, Kottayam, Bishop Kurialasserry College for Women, Amalagiri, Little Flower Degree and PG College, Uppal Hyderabad, Claret College, Bangalore, St. Joseph's College of Teacher Education, Mandya and St. Joseph's College, Autonomous Tiruchirappalli.

### **Faculty Strength:**

Total faculty: 121, Permanent faculty: 55, Ad-Hoc faculty: 66

### **Financial Allocation and Utilization**

Grants Utilized: Rs.48,51,12,500/-

Grants Allotted: Rs.61,06,79,000/-

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## **KALINDI COLLEGE**

### **Brief history of the College**

Kalindi College was established in the year 1967 with an objective to provide higher education to young women. In its 56 years of journey college has demonstrated its commitment in fostering an academically stimulating environment, thereby facilitating transformative educational experiences for its students. College has consistently worked towards facilitating a space for academic excellence by encouraging students to develop an outlook for academic critical enquiry, civic awareness and build a sound moral foundation. The enriching and transformative learning experiences enable students to express explore and evolve themselves for an empowered and enlightened development. Besides the various programs that are offered in humanities, commerce and science discipline, the college also offers coveted Professional degree courses in Computer Science and Journalism, Vocational Course such as web designing and Add-on courses such as foreign languages to meet the requirements of a fast-evolving global world. With a team of around 179 well qualified and dynamic teaching faculty and 75-member efficient and cooperative administrative /technical /support staff, college aims to provide quality education and holistic development to its students.



## Major Activities and Achievements

College was awarded an “A+” grade in the second cycle of the NAAC in December 2022. Women Leaders Conclave and Inter-College Gender Fest was organized on 20-21 March 2023 by the Women's Development Cell in collaboration with Transgender Cell and Gender Sensitization Committee on the theme "Ordinary Women: Extraordinary Lives". Eminent dignitaries like Ms. Shelly Oberoi (Delhi MCD Mayor), Locket Chatterjee (MP), Mahua Maji (MP), Udit Raj (former MP), Shubhashini Ali (former MP), Akhilesh Pati Tripathi (MLA), Sanjeev Jha (MLA), Vidushi Kaushik (ACP, Delhi Police), Rudrani Chettri (Social Activist), Rina Kumari Pandey (Social Activist) and Prof. Krishna Menon (AUD) were present for this mega-event.

## Honours/Distinctions

Prof. Anula Maurya was honored with ‘Mata Savitri Bai Phulle Smriti Rastriya Siksha Samman 2023’ by Antararaashreey Mata Savitri Bai Phulle Shodh Sansthan, Delhi on 23 January 2023. She was also honored with ‘Vishwa Wageshwari Samman 2023’ by Vishwa Hindi Sahitya Parisad, Delhi on 21 January 2023.

## Students with Distinctions

Tejal Dua of B.A. (Hons) Journalism was awarded with University medal.

## Publications

Ahmad, C. V., Gupta, R., Chakraborty, K., and Verma, P. (2022). Inner-shell ionisation of Xe–Au and Pb collision systems: MO picture. *Nuclear Instrumentation and Methods in Physics Research*, B 531, 9-23.

Gupta, S. (2022). Impact of tin oxide step functionalization on Recovery time of carbon nanotube gas sensors. *Shodhsamhita: Journal of Fundamental and Comparative Research*, IX(5), 334- 338.

Gupta, S., Anand, A., Neeru., Kumar, R. (2022). Impact of Tin Oxide functionalization on Recovery time of Carbon nanotube gas sensors. *Journal of Fundamental & Comparative Research*, IX(5).

Kumari, G., Sajjad, H., Rahaman, M. H., Md Masroor., Roshani., Ahmed, R., Sahana, M. (2023). Climate variability induced livelihood vulnerability: A systematic review and future prospects. *Royal Geographical Society with IBG*, 1-20.

Lakaal, K., Kria, M., El Hamdaoui, J., Varsha, Prasad, V., Nautiyal, V.V., El-Yadri, M., Pérez, L.M., Laroze, D. and Feddi, E. (2022). Polaronic corrections on magnetization and thermodynamic properties of electron–electron in 2D systems with Rashba spin–orbit coupling. *Journal of Magnetism and Magnetic Materials*, 551, p.169042.

Rajani., Kumar, N., Kaswan, K. S. (2022). Soft Hunting Algorithm for Auto Tuning - Software Reliability Growth Models. *Wireless Communications and Mobile Computing*, ISSN: 1530-8669, (Print)

Saunthwal, R.K., Saini, K.M., Grimblat, N., Danodia, A.K., Kumar, S., Gandon, V., Verma, A. K.. (2022). Expedient Access to Polyaromatic Biaryls by Unconventional Ag-Catalyzed Cycloaromatization of Alkynylthiophenes and Au-Catalyzed Double C–H Activation. *Org. Lett.*, (24), 5018–5022.

Sahdev, S. (2022). Mapping Party Competition in Uttar Pradesh: A Study of 2017 Assembly elections. *Rabindra Bharati Journal of Philosophy*, ISSN: 0973 – 0087(No: 05 Vol. XXIII).

Verma, D. et al. (2022). Prevalence of Airborne Pollen Grains and Fungal Spores in a City of Thar Desert. *India Journal of Advanced Scientific Research*, (8) (13), EISSN 0976-9595.

Yadav, P., Parshad, B., Krishna, Sharma, A., Kakkar, R., Sharma, S. K. (2023). Triazole-based C3- symmetric Multivalent Dendritic Architecture as Cu(II) ion sensor. *Indian Journal of Chemical Technology*, (30), 111-116.

### **Journals**

Dr. Desh Raj .(2022-2023). Yearly Academic Journal. Annual, Volume: XXII ISSN: 2348-9014. 130. Editor (English Section) – Dr Chaity Das Editor (Hindi Section)

### **Research Projects**

Project entitled, Functional interaction between ovarian catecholamine and steroids in the catfish *Heteropneustes fossilis*: effect of ovarian denervation’ sponsored by SERB-Department of Science and Technology and sanctioned amount of Rs. 19,80,000/-. Principal Investigator: Dr. Varsha Singh.

### **Seminars Organized**

Seminar entitled ‘Literature, Text and History’ was delivered by Professor Emeritus David. L. Curley, Department of Liberal Studies, Western Washington University on 25 September 2022

Seminar entitled ‘Prodigious Ligature Between Ancient Mathematics and Artificial Intelligence’ was delivered by Mr. Jagdish Rai Garg, Broadcast Media Consultant on 17 October 2022.

Seminar entitled ‘Montreal Protocol @ 35: Global Cooperation Protecting Life on Earth’ was delivered jointly by Dr Amrisha Pandey Associate Professor (Law), BML Munjal University on 16 September 2022.

Seminar entitled ‘Dr. B.R. Ambedkar: A Symbol of Knowledge’ was delivered by Professor Suresh Kumar, Dean of African Studies, University of Delhi was organized on 28 September 2022.

Seminar entitled “Intellectual Property Rights in Academics’ by Dr. Mahesh Kulharia, Director, Centre for Computational Biology & Bioinformatics, Central University of Himachal Pradesh was delivered on 9 November 2022.

## Seminar/Conference Presentations

Prof. Anula Maurya presented a paper entitled 'नारी उन्नयन में डॉ अम्बेडकर की भूमिका' in a 3 days Women Conclave on "Leadership by Indian Women: The Precursors of Pioneering Change in Indian Society" organized by Earth Revital Foundation on the occasion of Constitution Day at National Institute of Health and Family Welfare, Govt. of India, Delhi from 24-26 November 2022.

Prof. Rachana Kumar presented a paper entitled 'Recovery time in Tin Oxide Functionalized Carbon Nanotube Gas Sensor for NO<sub>2</sub> Gas' in the 3<sup>rd</sup> International Conference on "Continuity, Consistency and Innovation in Applied Sciences and Humanities" organised by St Martin Engineering College, Secunderabad on 16-17 September 2022.

Prof. Pushpa Bindal presented a paper entitled 'Graphical User Interface (GUI): Characterization Technique for Photonic and Plasmonic Structures' at the 2<sup>nd</sup> International Conference on "Advanced Functional Materials and Devices AFMD-2023" organized by ARSD College on 13-15 March 2023.

Prof. Sangita Dhal presented a paper entitled 'Mapping the synergy in Inter-Governmental Engagements: A Case- Study of ICDS through Cooperative Federalism' during the International Conference on Trends In Federalism: Expanding Horizons Comma Exploring New Terrains, organised by Department of Political Science, Shahid Bhagat Singh College, in collaboration with the Comparative Federalist Research Group, Department of Political Science, University of Delhi, Bharati College, ARSD College and Satyawati College on 10 December 2022.

Ms. Monica Zutshi presented a paper entitled 'What is being Assessed and How? A Preliminary Investigation of Teacher Beliefs of Undergraduate ELT teachers in India' at the 8<sup>th</sup> International Assessment Conference on Classroom-based Assessment in the New Normal and Beyond: Challenges and Possibilities held in Chennai, India on 26-28 October 2022.

Ms. Geeta Kumari presented a paper entitled 'An assessment of livelihood vulnerability to climate change: The case of rural Dimapur district, Nagaland' during the International Geographical Union Thematic Conference, 2022 on the topic "Sustainability, Future Earth and Humanities: Opportunities and Challenges" organized by the Central University of Haryana, Mahendragarh, Haryana Rapporteur from 24-25 November 2022.

Ms. Mamta presented a paper entitled 'Depictions of Domestic and Sexual Violence in the Indian Digital Space' in two days International Conference on "Role of Journalism in Nation Building" organized by Department of Mass Communication and Media Studies, Gautam Buddha University in Collaboration with SAARC Journalist Forum on 10-11 January 2023

Ms. Neha Singh presented a paper entitled 'Performance Comparison of Cuckoo Search and Ant Colony Optimization for identification of Parkinson's Disease Using Optimal Feature Selection' in 3<sup>rd</sup> International Conference on Modeling, Simulation and Optimization (CoMSO 2022) organized by National Institute of Technology Silchar, India from 21-23 December 2022.

Dr. Tajender Kumar presented a paper entitled ‘On the Construction of quasi groups by planer mappings over finite fields’ in Virtual Conference International Conference on the topic “Evolution in Pure and Applied Mathematics (ICEPAM-2022)” organized by Akal University, Talwandi, Sabo, Punjab, India from 16-18 November 2022.

### **National/International MoUs Signed**

MoU with Chartered International Da Vinci University (CIDVU), Delaware, USA.

MoU with West Coast International University of Science, Technology, Management and Arts (WCIUSTMA), Delaware, USA

MoU with Crown University International Chartered Inc. (CUICI), Argentina, Santa Cruz Province, USA

MoU with Ronkel Media Education & Research Institute (RONKEL MERI), Mumbai. This MoU is being facilitated through Department of Journalism by introducing Add-On-Courses in Television, Radio, Films & Theatre.

### **Extension and Outreach Activities**

Social Responsibility Cell organised a talk on "New Pension Scheme" on 7 December 2022,. The speaker of the event was Ms. Jyoti Kapoor, a certified SEBI & PFRDA trainer. The Cell as part of Medical Awareness Lectures Series also conducted a talk on 20 October 2022. Dr. Shyam Sunder Nagpal delivered his lecture on ‘Youth & Cosmetics’. He enlightened the attendees and centered his talk on cosmetics, procedures of hair transplantation, hair care tips and usage of natural products. A free dental check-up camp was organized on 10 November, 2022. Dr. Monica Shahi, a dental surgeon, along with her team visited the campus for the dental check-up camp. They offered complete dental check-up and counselling to the attendees. The event was attended by 137 participants (115 Students, 11 Teaching staff, 05 Non-teaching staff and 06 Outsiders under the outreach activity of SRC).

Social Responsibility Cell also organized a childrens day event in collaboration with Robin Hood Army for small kids on 14 November 2022. Akash Goswami (guest singer), Fuzon Divine (guest band) and Karma Dance Crew of Kalindi College gave their performances. A free medical health check-up camp for senior citizens and students was organized on 8 December 2022. Physical examination along with free blood sugar, blood pressure, dental and eyes check-up was provided by the medical staff. A medical team of 8 members including doctors and medical staff was present at the camp. Over 200 faculty members, staff, students and local senior citizens showed up for the camp and consulted the doctors.

Social Responsibility Cell in collaboration with the Anti-Tobacco Committee organized a lecture on respiratory ailments in the seminar room on 8 December 2022. Speaker for the event was Dr. Sandeep Nayar, a pulmonologist, senior director, and HOD at BLK MAX Super Specialty Hospital, Delhi. Dr. Nayar split his talk into three parts- first, where he touched upon the basics of respiratory diseases like asthma, chronic obstructive pulmonary disease (COPD), and pneumonia; second, where he briefed his audience about the health effects of pollution and third, wherein he elaborated on the precautions and treatment.

## **Library Development**

The library resources have been enhanced during the year 2022-23 and the total collection of the library reached up to 87,308 books including Book Bank and Student Aided Fund books. The Library users have been able to enlighten themselves by going through the newly added books. At present library is subscribing 60 magazines/journals and 14 newspapers in English and Hindi languages on different areas of interest for its readers.

The library has a web center for access of e-resources, separate reading room for consultation purposes and photocopy facility for the students and staff. The remote login access of e-resources through N- List, DELNET and DULS (for faculty members and Post Graduate students) ID is also provided by the library. A large number of Open Access Print Journals, E Books and E Journals, previous year question papers and link for useful educational resources are available on college website. Journal Content Alert Service is also provided to faculty members through email and is uploaded on college website also. Library has organized Department wise Library User education program for First Year Students of the college.

Two Information Kiosk has been added to the library. The library is also promoting Green initiative and thus procuring recycled material in lieu of library waste paper. Facility of E Books for print disabled student is provided through DU Braille library and Sugamaya Pustakalaya and screen reading software i.e. NVDA is available in library.

**Total Faculty Strength: 180**

### **Financial Allocation and Utilization**

Grants Utilized = Rs. 548,758,441.50/-

Grants Allocated = Rs. 580,247,503.00/-

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## **KAMALA NEHRU COLLEGE**

### **Brief history of the College**

### **Major Activities and Achievements**

As a Mentor institution under the UGC Paramarsh, we are happy to report that from amongst our four mentee institutions, two have been successfully accredited by NAAC, namely, Aryabhata College and Motilal Nehru (Evening) College, University of Delhi. The process of accreditation is underway for the others.

College launched a “Jewellery Designer – CAD Course (2022-2023)” on 16 March 2022 as a ‘Skill Hub Initiative’ sponsored by NSDC and UGC under the Pradhan Mantri Kaushal Vikas Yojana 3.0 (PMKVY 3.0). A well-equipped Media Lab for audio-visual production has been set up by the Department of Journalism. A Happiness Station was set up in the college with a kiosk that exhibited and sold handmade products made by

the Entrepreneurship Cell and Luminoso, the Fine Arts Society. Bilingual signboards were put up outside classrooms and other signboards were also fitted at various places on the college premises.

College organic waste which is generated from canteen and horticulture is regularly converted into compost. A Mechanical Composter was installed and inaugurated on 1 July, 2022 with a capacity of producing 50 kg waste in 24 hours. Compost that is generated is used for growing planters which are then sold under the project 'Hariyali'. Green Beans, the Environment Society invited Mr. Ramveer Tanwar, the Pondman of India, as also the brand ambassador of the Swachh Bharat Mission for an interactive session with students.

### **Students with Distinctions**

Megha Bhadana from B. Sc. (Hons) Mathematics III year is the college topper with a CGPA of 9.527.

Aastha from B. Com (Hons) II year is the college topper with a CGPA of 9.45.

Sanjana Saigal from B.A. Hons Economics II year is the college topper with a CGPA of 9.37.

Samiksha Ahlawat from B.A. (Hons) Geography II year is the college topper with a CGPA of 9.36.

Mahak from B. Sc (Hons) Mathematics II year is the college topper with a CGPA of 9.36.

### **Publications**

Aggarwal, S. (2022). Ramdhari Singh Dinkar aur Sanskriti ke Chaar Adhyay. *Pragay Path*. 109-110. ISSN 2395-4000

Aggarwal, S. (2022). Swatantrayotar Hindi Sahityik Patrikayen. *Samkaleen Prakashan, Delhi*. ISBN978-93-92356-27-8.

Gautam, P. (2022). Calculus Using Mathematica. *Daryaganj, Delhi: K.K. Publisher*.

Gautam, P. (2022). Association Schemes Over Some Finite Group Rings in Mathematical Modelling, Computational Intelligence Techniques and Renewable Energy. *Springer. Singapore*, 13-23.

Rani, R. (2022). Main Shaadi Nahin Karungi. Samkaleen Bharatiya Sahitya. *Sahita Akademi, New Delhi* 0970-8367

Santosh, R. (2022). Rieman–Liouville Fractional Operators of Bi-Complex Order and Its Properties. *Mathematical Methods in the Applied Sciences*.

Sethy, M. (2022). Philosophical exposition of Sri Chaitanya Bhakti on the Cultural diversity of Odisha. *Journal of the All Odisha Philosophy Association (JAOPA)*.

Suri, S. (2023). Management and Sports. *International Journal of Yogic, Human Movement and Sports Sciences*. ISSN: 2456- 4419

Sehrawat, S. (2022). Fantasy Ke Byaj Se Karyalayi Jeevan Evam Jatil Vyavastha Tantra Ki Abhivyakhti. *Shodh Ritu*. ISSN: 2454-6283

Yadav, P. (2022). Elements of Discrete Mathematics. *Sultanchand and Sons, New Delhi*.

### **Journals published by the College**

*Akados* (ISSN 2231-0584), multi-disciplinary, peer-reviewed academic journals of Kamala Nehru College in English and Hindi have been published annually since 2006.

*Akados* published in Hindi is now registered under the new title *Shodh Bodh*.

*The Journal of Undergraduate Research Innovation and Sustainable Education* is published under the aegis of the RISE Cell. The interdisciplinary, peer-reviewed, bilingual journal is an outcome of a year of rigorous research conducted by the students under the supervision of faculty members. The title of the Journal has been verified by RNI and the process of registration of the journal with RNI has been initiated.

### **Seminars/Webinars Organized**

Seminar entitled, ‘Indian Knowledge Tradition and Science’ was delivered jointly by Prof Balram Singh, Massachusetts University, America and Prof. Dayashankar Tiwar, University of Delhi on 18 January 2023.

Seminar entitled, ‘Global Economic Crisis’ was delivered by Prof. Rahul K. Mishra on 9 November 2022.

Seminar entitled, ‘Careers in Geography’ was delivered jointly by Dr Puja Sawhney, Associate Director, Habitat for Humanity, Manila, Philippines; Ms. Shivani Pathak, Data Science Product Engineer, ESRI, R&D Centre India, and Ms Sreedevi Kurur, Graduate Teaching Associate, CEPT University, Ahmedabad and organized in collaboration with Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blair under the Vidya Vistar Scheme of the University on 25 February 2023.

Seminar entitled, ‘Tribal Philosophy’ was delivered by Samar Bosu Mullick, Director, Institute of Community Forest Governance, which was organized in collaboration with Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blair under the Vidya Vistar Scheme of the University on 7 November 2022.

Seminar entitled, ‘Qualitative Research Methodology’ was delivered jointly by Prof. Janaki Abraham, Delhi School of Economics and Dr. Shivani Nag, B.R. Ambedkar University, on 11 January 2023.

### **Seminar/Conference Presentations**

Dr. M.V. Shobhana Warriar presented a paper entitled, ‘Gendering the workplace: Women workers in colonial Tamil Nadu’ at the 17<sup>th</sup> Biennial conference of the Australian society for the Study of Labour History, Bendigo, Victoria, Australia on 23 April 2022.

Dr. Shubhra Sinha presented a paper entitled, 'Life Beyond Business:- Socio- Religious World of Jain Community in 17<sup>th</sup> century Bihar' at the 5<sup>th</sup> International Conference organised by the Asian Association of World Historians an held on 12-13 October 2022.

Dr. Jyoti Raghavan presented a paper entitled, 'Digital Marketing: Ethical Issues and Challenges' during the Media Meet 2022, (Media Technologies) organized by Department of Media Studies, CHRIST (Deemed to be University), Bangalore on 26 August 2022.

Ms. Swapnil Verma presented a paper entitled, 'Revisiting Chatterjea type nonunique fixed point theorems via interpolation in qpb – space' during the 6<sup>th</sup> online International Conference on Computational Mathematics and Engineering Sciences, (CMES-2022), Ordu – Turkey held on 20-22 May2022.

Dr. Minakshi Sethy presented a paper entitled, 'Samskaras in Jaina Tirthankaras' in the National Sanskrit Vidushi Sammelan 2022 organized by Sanskrit Sanskriti Vikash Sansthan in collaboration with Sanskrit Department, Daulat Ram College on 23 April 2022.

Dr. Nupur Ray presented a paper entitled, 'Whose Body is it anyway: Women, Cinema and Nationalism Discourse in India' at the 8<sup>th</sup> World Conference on Women's Studies 2022 on Feminist Futures in Precarious Times: Decoloniality, Borderlands and, and Transformative Visions' 12-14 May 2022.

Dr. Nupur Ray presented a paper entitled, 'Gender, Sexual Health and Rights: Looking beyond the bio- medical lens during pandemic' at the HDCA Conference -Capabilities and Transformative Institutions on 19 September 2022.

#### **National/ International MoUs Signed**

MoU signed with Sophia Girls College, Ajmer, Rajasthan.

MoU signed with Assistech Lab, IIT, DELHI

MoU signed with Industrial Incubation Of Entrepreneurship And Skill Training Federation (IIEST) Federation

MoU signed with Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blair, Andaman affiliated to Pondicherry University (Vidya Vistar Scheme).

**Number and percentage of students placed: 114**

#### **Extension and Outreach Activities**

NSS unit of the college in collaboration with the Red Cross Foundation organized a blood donation drive on the college campus. In order to generate awareness on the issue of human trafficking, the NSS unit performed a play educating both children and adults. To mark the National Education Day and Children's Day, the NSS organized a visit to Inside Me, an NGO for blind children. Our volunteers spent time with the children and taught them some basic subjects. Another visit was conducted to the Mann Ka Tilak, an old age home. On the occasion of Independence Day and following the initiative of Har Ghar Tiranga, NSS volunteers visited their



adopted village -Begumpur. Volunteers spent time with the children, and made flags with them for Independence Day.

NCC cadets attended camps, participated in CM Rally and PM Rally during the Republic Day Parade. Entrepreneurship Cell, or the E-Cell's Project BeeSafe envisions providing sustainable alternatives to toxic and non-recyclable products used in our day-to-day lives, wherein it launched beeswax wraps as a sustainable alternative to aluminum foil and scented tablets as a sustainable alternative to naphthalene balls. The project also seeks to uplift a marginalized section of society by assisting them in taking up entrepreneurial initiatives. The team worked with the Muskaan NGO located in Vasant Kunj, which works towards providing opportunities for capacity development to individuals with intellectual disabilities. This project idea was presented in the Enactus National competition held in July 2022 under the ideation stage projects and received appreciation as an innovative and futuristic endeavour with sustainability as the primary goal.

### **Library Development**

The institution possesses a good, well-stocked Library which spreads over three floors of an impressive building. It is well-furnished and wi-fi enabled with a seating capacity of around 250 users. The college Library is fully automated (through NETTLIB Software 3.0.3 version) which is connected with one server and thirteen clients of the Local Area Network. An air-conditioned well-equipped Research Room for faculty is available on the first floor with 16 laptops and two desktops with one Scanner/photocopier cum printer to facilitate the Research output of the faculty. The second floor is dedicated to the e- library, which has 100 MBPS internet bandwidth to access e-journals through INFLIBNET, N-LIST, DU Remote Access.

INFLIBNET membership is open to students and faculty for the access of e-resources and e-journals through N-List e-resources. This can be accessed by the QR barcode of the college. Faculty members can access inter-library loan facilities which enable them to get any book they require from any library in the country. Web OPAC services are accessible by remote access for faculty, MA, MPhil and PhD students. Students can access previous years question papers and syllabi from 1966 onwards through the QR bar code provided by the college library. The library also owns the Urkund Plagiarism Checker to check plagiarism of the research documents.

An E-Resources Centre has been set up in the library with one server and six users. The library has around 106371 books and 70 journals/periodicals. The library has an audio-visual section with 771 DVDs and 421 CDs in the Teachers' reading/research room, and all have been barcoded. The library ensures the purchase of the latest edition of books/publications by accessing and cross-checking various websites, catalogues, book reviews and bibliographies and consulting those publishers who are enrolled by DULS.

The library staff is well-trained, having specialized knowledge of using NETTLIB software which has been in use since 2002. The library staff provides relevant information to the differently-abled students and faculty. The material required by the physically challenged is made available at their desk and on there is a provision for a separate table for them for reading in the library office room. The library has 62 Braille Books and 48 CDs to facilitate the visually challenged students and faculty members. JAWS enabled computers with scanners are accessible for users. Two units of Angel Fully Talking Digital Pocket Daisy Player cum e-book, Reader cum MP3 Player cum Radio cum voice Recorder are available in the library for visually-impaired students and staff members.

**Total Faculty Strength: 156**

### **Financial Allocation and Utilization**

Grants Allocated Rs. 56.017 cr/-

Grants Utilized Rs. 57.74 cr/-

### **Other Significant Information**

It is worthwhile to enumerate our achievements in the field of Sports:

Priyanka Mohapatra from B. A. Psychology (Hons) II year secured a Gold Medal in the Odisha state Kyorugi Taekwondo championship under the 62-weight category held from 3-4 December 2022.

Kirti Gupta from B.A. (Prog) III year participated in All India Inter-University and secured Team- Gold from 9-12 April 2022. She was selected to participate in Khelo India University Games Karnataka to be held in Bangalore from 23 April 2022. Mehakpreet Kaur was selected to represent India in FIG World Cup, Portugal from 27-29 May 2022.

Romila Singh from B. A. Political Science (Hons) III year secured 3<sup>rd</sup> position in 37<sup>th</sup> Delhi State Shooting Championship 2022 Rifle Pistol organized from 19-27 July 2022. She secured Bronze Medal in 37<sup>th</sup> Delhi State Shooting Championship 2022 in 10M Rifle Pistol Junior Women Individual.

Our Football Team secured 1<sup>st</sup> position in the Honob'22, the Annual Sports Festival of Jesus and Mary College held from 11-13 April 2022, second position in BITS Open Sports Meet held from 15-18 October 2022 and third position in in Delhi University Sports Council Football (Women) Tournament held from 18 August 2022 to 5 September 2022. Basketball Team secured the first position in Varchas'22 organized by The Indian Institute of Technology, Jodhpur held from 4-6 November 2022.

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## **KESHAV MAHAVIDYALAYA**

### **Brief history of the College**

Keshav Mahavidyalaya is one of the youngest constituent colleges of the University of Delhi, established in 1994 by the Govt. of NCT of Delhi. It is fully funded by Govt. of NCT of Delhi. The college first started functioning from a school building in Keshav Puram, with just two courses i.e., B.Com. (H) and B.Sc. (Gen) with Computer Science. Gradually, courses like B.Sc. (H) Electronics, B.Sc. (Gen) Mathematical Science, PGDCA and B.Sc. (H) Computer Science were added. The new campus of the college at Pitampura, which stands on a sprawling campus of more than 10 acres, started functioning from the academic session 2006-07 and courses like B.Sc. (H) Mathematics, B.Sc. (H) Physics, B.A. (H) Psychology and Bachelor of Business Studies (now Bachelor of Management Studies) were added. The college has reached great heights in a very short span of time, under the able guidance of its founder Principal Dr.

K.P. Chinda and present Principal, Dr. Madhu Pruthi. The institution has consistently moved on the path of success and is acclaimed for its achievements, faculty, and infrastructure.

### **Major Activities and Achievements**

The college at present offers nine courses in the disciplines of Science, Commerce, Management Studies, Psychology and Computer Science. The college also offers short-term courses in French and German Languages. It has around 1800 students studying under the supervision of more than 100 faculty members and 60 non-teaching staff.

The inspection for 2nd Cycle by NAAC was done on 17-18 May'2022, in which the college received an 'A' grade accreditation. The college was ranked 77 by MHRD's NIRF in 2022. Inspection of the college for use of Hindi as an Official Language was done by the Sub-Committee of Parliament Committee of Rajbhasha at Vigyan Bhawan on 21.10.2022.

To improve accessibility, the college installed an automatic glass door at the entrance. Many assets for the college and Girls Hostel have been purchased through GeM/Cpp portal/Local purchase including more than 110 CCTV, NVR, PTZ cameras, and TV for surveillance. An additional leased line of 100 Mbps was purchased from Tata Teleservices. Three additional rooms were developed for accommodating six foreign students in the Girls' hostel-international wing. A Mother Dairy Booth and Photocopier machine facilities were started on the college campus on 14 and 16 December respectively. On July 8 2022, Ms. Sakshi Bansal, a Keshav Mahavidyalaya Psychology alumna, was honored for receiving the prestigious Diana Award in England at the college auditorium.

### **Honours/Distinctions**

Prof. Vinita Jindal and Dr. Anjali Thukral were resource persons for the VAC-1: Digital Empowerment FDP workshop held on 19 Oct 2022 at Hansraj College.

Prof. Padmasai Arora was awarded the Best Paper of the Conference for the paper titled What Determines Venture Capital Mode of Exit?: A Study of Indian Venture Capital Exits in 2nd International Conference on Business and Management organised by Delhi Technical University (DTU) on the theme Digitalisation and Sustainable Development Goals, January 19-20 2023

Dr. Anita Mendiratta was awarded for the Best Paper and the MSR Promising Dissertation Award for her research work on 'Relationship between Engagements in Corporate Social Irresponsibility, Corporate Social Responsibility, and Firm Value' at the 29th Annual Global Finance Conference, Portugal, June 20-22 2022

Dr Mona Ranga was awarded the best paper for the paper: Psychological well-being among patients and caregivers of patients with dementia at the International Conference on Health Science organized by the Professional Institute of Business, Bangladesh in association with the Indian Academy of Health Psychology on 2-3 September 2023

Prof. Pardeep Kumar published the following books: 1. Pardeep Kumar, Management Principles and Application, Sultan Chand and Sons, Delhi 2023, ISBN: 978-93-91820-60-2 2. Pardeep Kumar, Principles of Marketing, Sultan Chand and Sons, New Delhi 2023, ISBN 978-93-91602-01-6. 3. Pardeep Kumar, Organisation Behaviour, JSR Publishing House LLP, New Delhi, 2023, ISBN 978-93-94336-43-8

### Students with Distinctions

S.No.	Name of Students	Class
1	Deepti Sharma	B.Sc. (Prog.) Mathematical Science
2	Mohd. Sadiq Ansari	B.Sc. (Prog.) Mathematical Science
3	Garima Pandey	B.Sc. (Hons.) Computer Science
4	Nupur Tyagi	B.Sc. (Hons.) Computer Science
5	Somya Gupta	B.Sc. (Hons.) Computer Science

### Publications

Dr Jasmeet Singh. (2023). Exploring three-body fragmentation of acetylene trication . *The Journal of Chemical Physics*, 158(7), 74302.

Prof. Vinita Jindal. (2022). Detecting and Locating Storage Based Covert Channels in Internet Protocol Version 6. *IEEE Access*, 10(-), 110661-110675.

Dr Jasmeet Singh. (2022). R-matrix calculation electron collisions with HCN and HNC molecules. *The European Physical Journal D*, 76(-), 242.

Dr Harpreet Bhatia. (2023). "Psychological Correlates of Materialism: Life Satisfaction, Subjective Happiness, and Self- Esteem". *Education and Society*, 46(3), 177-184.

Ms. Akanksha Mendiratta. (2022). Resilience and Life Satisfaction: Predictors of Well-being in Pensioners and Non-Pensioners. *International Journal of Indian Psychology*, 10 (2), 446-453.

Ms. Akanksha Mendiratta . (2023). "Neuroplasticity in Psychopathological Disorders: A Review". *International Journal of Indian Psychology*, 11(1), 343-358.

Dr Bhavna Gupta. (2022). Enhancing System Robustness of Active Products using Trust based Collaboration. *Journal of Intelligent & Fuzzy Systems*, 43(-), 939-956.

Prof. Padma Sai Arora. (2023). Determinants of exit options of venture capitalists: evidence from India. *Journal of Indian Business Research*, 15(3), 403-430.

Dr Anita Mendiratta. (2023). When do ESG controversies reduce firm value in India? . *Global Finance Journal*, 55(-), -.

## **Patents Filed/Granted**

1 and System and Method for Providing Identical Recommendation Information to User Based on Artificial Intelligence

1 and Implementing Blockchain Technology in Automated Teller Machine (ATM) based Electronic Voting Machine, Applicants

## **Seminars Organized**

Seminar entitled ‘Empowering Gen Z to be Employable and Adaptable in the Modern Workplace’ on 23 April 2023

Seminar entitled ‘Open Source with GIT/GITHUB, Information Technology’, on 14 November 2022

Seminar entitled ‘Acid Attacks’, on 08 February 2023

Seminar entitled ‘How to solve case studies’, 30 July 2022

Seminar entitled ‘How to ace group discussions and personal interviews’ on 21 August 2022

## **Seminar/Conference Presentations**

SB Taneja, GC Brahma, Sanjay Bisht, Vinita Jindal, and Punam Bedi presented paper entitled ‘Predator-Prey PSO based Weapon deployment in Constructive’ in the International Conference on Contemporary Computing (IC3) jointly organized by the Jaypee Institute of Information Technology (JIIT), Noida, India and the University of Florida, Gainesville, USA (IC3-2023), Aug 03-05 2023, Noida, India, ACM, Scopus Indexed <https://doi.org/10.1145/3607947.3608296>

Pinki & Harpreet Bhatia presented paper on Understanding phenomenon of trauma in the background of COVID-19 at 1st National Annual Conference of Clinical Psychology Society of India (CPSICON-2023) in association with the Department of Clinical Psychology, NIMHANS, 10th-12th August 23 at NIMHANS, Bengaluru.led

Arti Dua, Vinita Jindal, Punam Bedi, DICCh-D presented paper on ‘Detecting IPv6-based Covert Channels using DNN’ in 7th International Conference Information, Communication & Computing Technology (ICICCT-2022) on July 16 2022.

Siya Garg, RAHUL JOHARI, Vinita Jindal, Deo Prakash Vidyarthi and Himesh Nayak presented pape on ‘VAiBT : Vulnerability Assessment in Block Chain Technology’ in an International Symposium on Smart Cities Challenges, Technologies and Trends (SCCTT – 2022), Organised by Department of Computer Science & Engineering, MAIT, Delhi, India in collaboration with NIT Delhi & IEEE Communication Society Delhi Chapter, 4 November 2022

Dev A., Agrawal S.S., Sharma A. (eds) presented paper on ‘Artificial Intelligence and Speech Technology’. AAIST’21IST 2021. Communications in Computer and Information Science, vol 1546 (pp 318-328). Springer, Cham. [https://doi.org/10.1007/978-3-030-95711-7\\_28](https://doi.org/10.1007/978-3-030-95711-7_28) (Print ISBN 978-3-030-95710-0)

### **Other Inter-Institutional Collaboration**

Prof. Vinita Jindal is recognized as Associate Supervisor at RMIT University, Melbourne, Australia for PhD Supervision for the student named Ms. Rania Alshikhe, Joint Supervision with Prof. James Harland and Dr Elham Naghizade on the topic “General Information System in specific Spatial-temporal data analysis”, registered since 03rd Nov 2018 at School of Science, RMIT University, Melbourne, Australia.

**Number and percentage of students placed: 70**

**Number of Companies visited for campus recruitment: 54**

### **Extension and Outreach Activities**

A one-day free vaccination facility for booster shots of COVISHIELD on 10 June 2022 & COVAXIN & COVISHIELD on 1 July 2022 was arranged in the college premises. Cleanliness drives in the Canteen Lawn on 2 September 2022, in a local park on 6 September 2022, and on the roadside on 7 September 2022 were organized. Nasha Mukh Bharat Abhiyan on 12 August, 2022 was carried out with various activities.

FINANCIAL LITERACY WORKSHOP: One of our initiatives also sought to address the issue of financial illiteracy in lower-income groups, so we held a session for the underprivileged neighbourhood close to the Azadpur metro station

NSS initiative: DAAN UTSAV was organized to honour the neighbourhood. We distributed handmade sandwiches while making sure that we did not use any plastic.

The College’s society, Enactus initiatives Project Pehel: An initiative to give underprivileged women more control over their lives and create long-term employment opportunities for them. Under the project Pehel, we have created more than 25 Entrepreneurs, trained more than 50 Women through workshops, and overall impacted around 100 women in our community. This helped raise the monthly income of many women from ₹2,000 to ₹7,000.

This year we have done R&D in terms of types of bags as per market research like potli, tote bags, travel pouches, etc. We have connected with women in slum areas of Azadpur to provide them with sustainable income by combating their socio-economic problems.

Project Sahaayta is an initiative by Enactus. By cutting out the middlemen and establishing a direct market link using both offline and online platforms, the project seeks to empower the Potter community. This year we skilled/employed 10 and educated more than 30 potters, raising the monthly income of 10 families from 10,000 to 15,000. We have visited and surveyed various communities across Delhi, like the Katputli community, the Deaf and Dumb community, and many more to provide them with employment opportunities by preparing sustainable business models for them.

## **Library Development**

Keshav Mahavidyalaya's library is a modern, two-story building with ample space and a vast collection of books. Several resources are accessible online through the e-Granthalaya software on the NIC Cloud. The library houses approximately 29984 books, including textbooks, reference materials, and encyclopaedias from various fields. Recently, in 2022-23, the library purchased 1030 new books and subscribed to several daily, weekly, and periodical publications. There are around 36 magazines and 18 newspapers available for readers. Additionally, the library renewed its membership of N-List-Database, which provides access to numerous e-books and e-journals for Keshav Mahavidyalaya users. The library also offers access to thousands of e-journals and research articles provided by the Delhi University Library System (DULS) through the Internet to staff members and students. Moreover, to ensure the safety of its users and resources, the library has installed 32 CCTV cameras.

**Total Faculty Strength:** 100

## **Financial Allocation and Utilization**

Grant Sanctioned: 34.79 Crore

Grant Utilized: 32.63 Crore

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## **KIRORI MAL COLLEGE**

### **Brief history of the College**

Kirori Mal College is a constituent college of the University of Delhi. It is ranked 2nd best for Political Science and 6th best for Chemistry in India according to India Today 2023 College Ranking. It has also been ranked 9th best college in India (overall category) according to the Central Ministry NIRF ranking 2023 i.e., 4th among the top colleges of the University of Delhi. According to NIRF, it has invested Rs 363,30,91,509 in the year 2021-22 for salaries of teaching and non-teaching staff due to which it has one of the best faculties and facilities all over India.

Established in 1954, it is located in the North Campus of the University of Delhi. Kirori Mal College was one of the few institutions of the University of Delhi selected for sports training during the Commonwealth Games in 2010, which led to new facilities being created in the form of a new building and a gymnasium to facilitate sports and other activities. It offers undergraduate and postgraduate programs in the sciences, humanities, social sciences, and commerce. The NAAC accredited it with a CGPA of 3.54 (A++) in 2023, which is the third highest among all Delhi University colleges.

### **Honours/Distinctions**

Dr. Praveen Kumar Anshuman was selected among 100 writers for History TV18 in the competition conducted by #Kalakar. Also, his name was included in the Harvard World Record 2022 for having written

the highest number of shayaris in a day, in a month, and in a span of two years, along with a record of 100 poems written in Hindi in a day on 7 May 2021. Additionally, he was honored with the Best Illustrator Award Q2, 2022 by Ukiyoto for his book “Shabd-Sanwaad: ‘Avicharo’ ki aviral dhara”, and also enlisted his name in Kavita Kosh as a poet. He was also awarded with Best Professor of the Year by Indian Shiksha Awards 2022 of Education Sensations.

## **Publications**

Akanksha Behl, Subhash Solanki, Shravan K. Paswan, Tirtha K. Datta, Adesh K. Saini, Reena V. Saini, Virinder S. Parmar, Vijay Kumar Thakur, Shashwat Malhotra, Anil K. Chhillar.. (2022). Biodegradable PEG-PCL Nanoparticles for Co-delivery of MUC1 Inhibitor and Doxorubicin for the Confinement of Triple-Negative Breast Cancer . *Journal of Polymers and the Environment*, 31(N.A.), 999–1018.

Singh, D.; Dhiman, S.K.; Kumar, V.; Babu, R.; Shree, K.; Priyadarshani, A.; Singh, A.; Shakya, L.; Nautiyal, A.; Saluja, S.. (2022). Crop Residue Burning and Its Relationship between Health, Agriculture Value Addition, and Regional Finance . *Atmosphere*, 13(9), 1405.

Sachin, Rohit Raj, Srishti Dhiman & Leena Shakya. (2022). Nanotechnological interventions in sustainable agriculture . *Journal of Biochemistry & Biophysics*, 59(N.A.), 1153-1158.

Verma, N.. (2022). Capital Account Openness and Financial Stability in Asian Emerging Markets . *Journal of Business Thought*, 13(N.A.), 13-24.

Akanksha Behl, Zahoor A. Wani, Nagendra Nath Das, Virinder S. Parmar, Christophe Len, Shashwat Malhotra, and Anil K. Chhillar. (2023). Monoclonal antibodies in breast cancer: a critical appraisal . *Critical reviews in Oncology/hematology*, 183(N.A.), 103915.

Sharma, N., Pathak, A., Lavanya, B.L., Garg, N. and Lata, K.. (2023). Exploring the psychometric properties of personal optimism and self-efficacy optimism-extended (POSO-E) scale among Indian teachers . *Benchmarking: An International Journal*, 30(7), 2234-2247.

Garg, N., Sharma, N. and Burgess, J.. (2023). Three-item loneliness scale: Exploring the psychometric properties in the Indian context . *Asian Journal of Psychiatry*, 80(N.A.), 103323.

Garg, N., Mahipalan, M. and Sharma, N.. (2023). Does workplace toxicity influence turnover intentions among Indian healthcare employees? Investigating the moderating role of gratitude . *Journal of Health Organization and Management*, 37(2), 250-272.

Sharma, N. and Samantara, R. . (2023). Maximising organisational outcomes: The essentiality of individual spirituality . *NIU International Journal of Human Rights*, 10(5), 67-78.

Garg, N., Sharma, N. and Palframan, J.. (2023). Validation of the existential gratitude scale (EGS) in India and its relationship with spiritual well-being and distress . *British Journal of Guidance & Counselling, ahead-of-print*(ahead-of-print), 1-14.



## **Conferences Organized**

Organized conference on “Nanobiotechnology (NBT 2022)” on 20 July 2022 in collaboration with Institute of Nano medical Sciences.

Organized conference on “Mushroom: Nutraceuticals capsule” on 29 September 2022 by Medini.

Organized conference on “Hydroponics- Smart Urban Farming” in hybrid mode on 11 March 2023 under the aegis of DBT status scheme in collaboration with IARI.

## **Seminar/Conference Presentations**

Prof. Rakesh Kumar Pandey participated virtually in an international conference “The 2nd World Conference on Sustainability, Energy and Environment” organized by [www.steconf.org](http://www.steconf.org) and presented a paper titled "Sustainable World: Protection of Emotional Resources" in Berlin, Germany from 9-11 December 2022.

Prof. Usha Kulshreshtha was invited for a talk at the International Conference on Algebraic and Analytic Methods in Physics organized by Institute of Nuclear Physics, Prague, Czech Republic from 6-9 September 2022.

**Number and percentage of students placed: 86**

**Number of Companies visited for campus recruitment: 16**

## **Library Development**

The N. S. Pradhan Memorial Library is one of the most extensive libraries of the University of Delhi. It is fully computerized, houses about 1.5 lac books and can accommodate about 350 students. In the year 2022, Dr. N.S. Pradhan Memorial Library of Kirori Mal College was renovated, whitewashed and converted into a fully air-conditioned building. A newly constructed second floor of the library was inaugurated on 24 December 2022. The second floor of the library has two big spacious reading halls and one E-learning centre for students and teachers. The E-learning centre has been designed to provide facilities like internet access, downloading online e-resources, printing, scanning and photocopying in the library itself.

The task of proper utilisation of space in the library was taken up in 2022 to cater to the needs of more than 5000 students in the college. On the first floor of the library building, the books on language courses, science stream, and commerce stream have now been stacked separately in the three big halls. A small room on the first floor has been converted into a language lab. On the ground floor, which has two big halls, one hall has been reserved as a textbook section, and the second hall has been designed to accommodate 100 students in an air-conditioned environment from 8am to 8pm for self-study. Also, an online login facility was created on the college website where teachers can login and search the books which are available in the library or have been issued to him/her. Also, a teacher can request for reservation of book(s) online which he/she wants to get issued.

**Total Faculty Strength: 237.**

Professors: 35, Associate Professors: 57, Assistant Professors: 145.

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 96,42,15,000/-

Grants Utilised: Rs. 94,71,84,760/-

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## **LADY IRWIN COLLEGE**

### **Brief history of the College**

Lady Irwin College has pioneered women's education following an inclusive and empowering approach and focusing on capacity building, skill development and sustainability. Started in 1932 with just eleven students, it has eventually upgraded to one of the best institutes for providing Home Science education. Over last nine decades, the college has participated in national policies and program implementation. Our forte over the years has been to steer community outreach through the pillars of research, innovation, collaboration and quality assurance. Having recognized as the Centre of Excellence by University Grants Commission (UGC), the college proudly holds the positions of Women Collectives led Social Action Centre (ROSHNI by MoRD), National Centre of Excellence and Advanced Research on Diets (NCEARD by MoHFW), Design Innovation Centre (SPOKE by MHRD), Star College Grants under the DBT Star College Scheme, Nodal Center for PMFME Scheme Flagship scheme by MoFPI, Government of India and Skill Development Centre by National Skill Development Council (NSDC).

Well-trained faculty and state-of-the-art infrastructure including partnerships with Government Ministries, UNICEF funding and Master NGOs, has strategically placed our college as a nodal agency to guide national policies and aid in nation development. NCEARD Centre has been able to guide national policy on diets, anaemia and development of a PAN-INDIA maternal nutrition Toolkit. ROSHNI Centre has served as technical hub for FNHW interventions aligned with DAY-NRLM Dashasutra strategy and Jan Andolan under Poshan-Abhiyan.

### **Major Activities and Achievements**

Lady Irwin College is among the top 25 colleges of India as per the NIRF ranking during the year 2023 and has been awarded with an impressive grade of 'A+' by NAAC. In the year 2022-23, thirty-eight faculty members were promoted to Associated Professor or Professor level by the college. With a strong impetus on research more than hundred Master's dissertations were submitted to the University of Delhi. In the year 2022-23 more than ninety students were pursuing Ph.D. from Department of Home Science, at Lady Irwin College and nearly thirty students were awarded with Ph.D. degree.

Lady Irwin College has been recognized and given a special status through various Centers of excellence. This year the college has established Centre of Excellence, Centre for Social and Behavior Change with a MoU with UNICEF to provide technical support and guidance to Universities for the roll out of the CSBC modules nationally. The college houses Centre of Excellence for Women Collectives led Social Action (ROSHNI) supported with MoRD and UNICEF working with women collectives in the area of FNHW and WASH. It has also been given the status of the Nodal Center as SLTI for PMFME Scheme Flagship scheme by MoFPI, GoI. The college is also housing the Design Innovation SPOKE Center, under the MHRD. Other than this, it was also recognized as Centre of Advanced Studies (CAS), UGC special assistance programme (SAP) from 1985-2012 and had the national centre of NCEARD (National Center for Excellence for Advanced Research on Diets). College actively participated in Jan Aandolan during Poshan Maah. It has immensely promoted undergraduate research under the DBT Star College Scheme and skill development of entrepreneurs and District level trainers under ODOP.

### **Honours/Distinctions**

Prof. Anupa Siddhu was awarded the prestigious 13<sup>th</sup> Rajamal Devdas Memorial Award at Nutrition Society of India, Hyderabad, December 2022.

Dr Lalita Verma received an appreciation letter from Rural Health Training Center of Ministry of Health and Family welfare for organizing a workshop for ASHA workers, Anganwadi workers and auxiliary midwife nurses on the topic “Step up for Breastfeeding: Education and Support” on dated 2 August 2022.

Dr. Aparna Agarwal and Dr. Pooja Raizada received Letter of Appreciation for Mentors for Blue Planet Sustainability Fellowships Program, Blue Nudge Collective Responsibility Drive (CRD), offered by Delhi Effective Education and Pedagogy Cluster (DEEP-C) in partnership with Blue Planet Environmental Solutions (BPES) in the month of February 2023.

Dr. Madhuri Nigam received Letter of Appreciation for Assessment of Climate Change Impacts of Textiles through Life Cycle Inventory for Indian Textile Sector (oral presentation - Online) ; Climate Change: Science and Technology Innovation (NCCCSTI-2022) 16 December 2022 by Department of Environmental Science, Tezpur University, 2022.

### **Publications**

Agarwal, A., Gandhi, S., Tripathi, A. D., Iammarino, M., Homroy, S. (2022). Analysis of Bisphenol A migration from microwaveable Polycarbonate cups into coffee during microwave heating. *International Journal of Food Science & Technology*, 57(12), 7477-7485.

Anand, A., Sekhri, S. (2022). Indian Handlooms: Present Scenario and Future Directions. *Journal of Arts, IIS University, Jaipur, UGC CARE-listed*, 10(3), 339-57

Batra, S., Anand, S., Verma, A. (2022). Services for maternal health in Haryana: perception of human resources for health. *Indian Journal of Home Science*. 2022: 34(1). Pp. 43-52.

Bhamrah, A., Rangila, D. (2023). Young Adults with Visual Impairment: Challenges in Social Inclusion. *The Indian Journal of Home Science* (UGC Care listed), 35(1), 167-176.

Chopra, S., Goyal, N., Harish, G., (2022) Traditional and Contemporary Facets of String Puppets of Rajasthan, *Textile: The Journal of Cloth and Culture*, pp: 1-11.

Dipti, S., Kumari, A., Kaur, N., Tripathi, A. D., Agarwal, A. (2023). Development of cake by using persimmon fruit (*Diospyros kaki*) as a fat replacer and its chemical and structural profile analysis. *LWT*, 178, 114601.

Jain, M., Mital, M., Syal, M. (2022). Solar Energy Policies for Commercial Buildings Sector: Experiences from India. *OIDA International Journal of Sustainable Development*, 15(3), 33-38.

Mediratta, S., Mathur, P. (2022). Determinants of Food Choices and Selection of Healthier Food Products by Adults (20–40 Years Old) Residing in Delhi. *Current Developments in Nutrition*, 6(Supplement\_1), 491-491.

Mehta, R. (2022). Gender Divide in Education in India: A study on female education. *International Journal of Advance and Innovative Research*. 9 (2) : 131-136.

Mehta, R. (2022). Attitude and Behaviour towards child labour. *Parishodh Journal*. 15(6), 73-85.

### **Research projects**

A Skill hub initiative was established under the PMKVY3:0 NSDC, MSDE, Government of India, for Paper Bag making (Green Jobs) supported by an industry partner M3M.

Star College Scheme for ‘Strengthening Life Science and Biotechnology Education Training at undergraduate level’ funded by Department of Biotechnology, Ministry of Science and Technology for Twenty-five lakhs for three years for BSc (Hons) Food Technology (2020 to 2023).

### **Patents/ Copyrights**

10 Copyrights and 4 design registrations by SPOKE center of MHRD under NIDI Scheme.

### **Seminar/Workshops Organized**

A seminar entitled ‘Food Safety- Relevant issues and Challenges in the region’ was delivered by Ms. Shashi Sareen. Senior International Food Safety, Quality and Nutrition Expert on 13 July 2022.

An International Webinar entitled ‘Food Safety: Relevant issues and challenges in the region’ was delivered by Ms. Shashi Sareen, Food Safety, Quality and Nutrition Expert, FAO on 13 July 2022.

A Public Lecture entitled ‘Child Rights in India: Issues and Challenges’ was delivered by Shri Kailash Satyarthi, Nobel Peace Prize Laureate of the year 2014 at Dr Ambedkar International Centre, New Delhi on 17 March 2023.

## **Conferences Organized**

A National symposium on 'Ayurveda and Nutrition' was organized by Maharishi Ayurveda Hospital, New Delhi on 17 December 2022.

Organized the 18<sup>th</sup> Sanjam Randhawa Memorial Conference which was supported by FICCI, Chemical Brothers, Swayam, Manohar Filaments, CCPL, Archroma on 16 March 2023.

Organized a National Conference on 'Learning (NCL 2022)' on 17 December 2022.

## **Paper Presentation in Conferences/Seminars**

Dr. Madhuri Nigam presented a paper entitled, 'Assessment of Climate Change Impacts of Textiles through Life Cycle Inventory for Indian Textile Sector' during the Climate Change: Science and Technology Innovation (NCCCSTI - 2022) Conference organized by Department of Environmental Science, Tezpur University on 16 December 2022.

Dr. Meenal Jain presented a paper entitled, 'Solar Energy Policies for Commercial Buildings Sector: Experiences from India' at the 16<sup>th</sup> International Conference on Sustainable Development, Bangkok, Thailand, organized by International Centre for Interdisciplinary Research in Law (ICIRL), Centre for Research in Social Justice and Policy (CRSJP) at Laurentian University and Ontario International Development Agency (OIDA), Canada on 15-16 November 2022.

Dr. N. Makol presented a paper entitled, 'Analyzing viable renewable procurement options of renewable power: An integral decarbonization tool for C&I consumers in India' at the 16<sup>th</sup> International Conference on Sustainable Development, Bangkok, Thailand, organized by International Centre for Interdisciplinary Research in Law (ICIRL), Centre for Research in Social Justice and Policy (CRSJP) at Laurentian University and Ontario International Development Agency (OIDA), Canada on 15-16 November 2022.

Dr. D. Rangila presented a paper entitled, 'Representation of disability in children's literature' at the the National Conference on Learning organized by the Department of Education of the college on 17 December 2022.

## **National/International Mous Signed And Inter-Institutional Collaborations**

MoU signed with UNICEF, India, for Communication for Social and Behaviour Change (CSBC) curriculum roll-out for Higher Education Institutions (HEIs).

MoU signed with WHO- SJRI for Optimization of Supplementary Nutrition Provisions for ICDS.

MoU signed with Department of Biotechnology, Ministry of Science and Technology, Government of India for DBT Star College Scheme.

MoU signed with Apparel Made Ups & Home Textiles Sector Skill Council (AMHSSC & FAS LIC) for Apparel & Home textile sector, 2022

MoU signed with School of Planning, Design and Construction, Michigan State University, MSU and Dept. of RMDA, Lady Irwin College valid from 2019-2024.

MoU signed under Roshni Project between NRLM and Lady Irwin College, Oct 2018 valid till Oct 2023.

MoU signed with Michigan State University for Collaborative Masters and Doctoral researches, Collaborative publications, Annual task force, Annual Symposium.

MoU signed with GoI, M3M for skill hub initiative under PMKVY3:0 NSDC, MSDE, GOI, on Paper Bag making (Green Jobs) supported by industry partner M3M.

### **Extension and Outreach Activities**

College celebrated the Poshan Maah in collaboration with ONGC by holding a workshop on 6 September 2022 at the Constitution Club of India, Delhi. College conducted a workshop with the theme “Step-Up for Breastfeeding : Educate and Support” for ASHA, AWW and ANM workers for celebrating Breast Feeding Week, 2 August 2022. World Food Day Celebrations were also held by the department on 27 October 2022.

A Seminar on ‘Search Engine Optimization’ for SEC course under NEP was organized with Resource Person: Mr. Rajat Gupta, Content Writer, CREDFLOW. A Webinar on ‘CSR: Current Trends & Opportunities’ was also organized with Resource person: Ms. Gayatri Subramaniam, Director, Association of Women in Business, Former Chief Programme Executive, Indian Institute of Corporate Affairs, Ministry of Corporate Affairs, Government of India. Further, the dept also hosted a Workshop cum Seminar on ‘Search Engine Optimization (SEO) for Digital Marketing’ Resource Person: Mr. Manish Jain, Founder & Director, and Let’s Build Brands Media (LBB)

HDCS Department along with Rajkumari Amrit Kaur Child Study Centre organised ‘Baal Mela’ on 14.11.2022. Various activities such as outdoor games, role-playing, and singing, storytelling, and puppet shows were organised. Students from the department set up diverse stalls to display and enhance their culinary, craft, and entrepreneurial skills.

Trashion - Fashion from Waste & Styling Contest, supported by Tale of a Trend, Wabi Sabi Sustainability, Zoom Delhi & Chemical Brothers was organized by FAS dept in February, 2023, wherein UG and PG students created dresses from waste material.

### **Library Development**

Library has installed a Library management software LIBSYS 10, which is a cloud-based platform and hence OPAC is now available 24x7 to every user on any internet- connected device since June 2022. Eight new computer systems were purchased and installed for the use of students and. Subscription to N-LIST and DELNET was renewed. Library acquired KIBO – device in March 2023 that enables users to listen, translate, digitize printed, handwritten document. This shall help the visually impaired as well as align with the need to use Hindi in day to day working.

Library also conducted a session on “Plagiarism” was conducted for undergraduate students of research practical of third-year hons. and second-year pass on 5 March 2022 via Google Meet. During the financial year 2022-2023, 112 number of books were purchased for Rs. 88,164/- and subscription to 42 journals were renewed for Rs. 6,23,001/-

**Total Faculty Strength: 103**

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## **LADY SHRI RAM COLLEGE FOR WOMEN**

### **Brief history of the College**

LSR is committed to nurturing women who are equipped to be world citizens. Women who take pride in their culture and heritage but also have a cosmopolitan understanding of the world today and a sensibility that celebrates diversity. Established in 1956 in New Delhi by the late Sir Shri Ram in memory of his wife, the college had its modest beginnings in a school building in Daryaganj, Central Delhi, with 243 students, 9 faculty, 4 support staff and 3 distinct courses of study. The aim of the institution was to provide access to higher education of quality to women. LSR is a testimony to the farsighted vision of its founder and his indefatigable enthusiasm to actualize his dream. Today, the college is located in a beautiful 15 acre campus in South Delhi, has approximately 2000 students, over 150 faculty, administrative and support staff and 16 courses of study. The College became a byword for academic and extracurricular achievement, under the inspiring Chairmanship of industrialist and philanthropist, late Dr. Bharat Ram. An enlightened and supportive Board of Governors, drawn from the fields of industry, law, journalism, academics and the bureaucracy, assists the Chairman in the running of the college.

### **Major Activities and Achievements**

LSR also hosted a delegation from the University of Queensland, Australia. The visiting group was led by Professor Deborah Terry AO, President and Vice-Chancellor of the University of Queensland. UQ ranks among the world's topmost Universities. We signed a Memorandum of Understanding with La Trobe University on 2 March 2023. IQAC LSR organised an online certificate course titled 'Vidhi Gyaan' in collaboration with the Delhi State Legal Services Authority with the aim to orient students with the legal framework of the country. This course involved field visits to Patiala House Courts Complex and the Chittaranjan Park police station. The Department of Economics under the aegis of the IQAC organized a guest lecture by Ms. Nandita Bakhshi who is currently serving as the President and CEO of Bank of West, a BNP Paribas company. In addition the Department of Elementary Education organised a two-day National seminar titled 'National Education Policy 2020: Themes and Perspectives', sponsored by the Indian Council of Social Science. The Placement Season was unprecedented this year and we witnessed the participation of more than 140 companies extending 236 offers to our students. Various industry giants offered positions to our students in a diverse range.

## **Honours/Distinctions**

Prof. Sharma awarded with 4th Dr. APJ Abdul Kalam National Dedication Award 2023 in the field of “Research” in March 2023

Dr. Shernaz Cama awarded with the World Zarthushti Community Service Award at the 12th World Zoroastrian Congress, New York in 2022.

Dr Kanchan Verma awarded with the Kaka Saheb Kalelkar Smriti Rashtriya Protsahan Samman for exemplary work in the field of Education and Translation work awarded by Sannidhi Sangoshthi, New Delhi (National) during 2021-2022.

Dr. Vartika Nanda awarded with Kissa Khaki Ka on 16 January 2023. Kissa Khaki Ka is the first and the only podcast in India which is being run by any police department. Vartika Nanda has conceived these podcasts and is the official storyteller. This podcast series presents to the world extraordinary stories of crime and humanity related to Delhi Police personnel.

Dr. Vartika Nanda awarded with Laadli Media & Advertising Award for Gender Sensitivity in the Web Podcast (Hindi) category by Population First in 2022 for her Tinka Tinka Jail Radio Podcast, episode 11, titled-Holi and Karnal Jail Radio, conceived and produced by Tinka Tinka Foundation. Tinka Tinka Jail Radio podcasts are the only podcasts in India dedicated to prison reforms.

## **Students with Distinctions**

Navneet Kaur of B.A. (Hons) English III year was awarded rank I in LSR college as based on college-cumulative result.

Ami Sehgal of B.A. (Hons) Sociology III year was awarded rank I in LSR college as based on college-cumulative result.

Nikita Sawhney of B.A. Programme III year was awarded rank I in LSR college as based on college-cumulative result.

Anshita Bansal of B. Com III year was awarded rank I in LSR college as based on college- cumulative result.

Osheen Khare of B.A. (Hons) Mathematics III year was awarded rank I in LSR college as based on college-cumulative result.

## **Publications**

Dhillon, M. (2023). Evaluating a body image school-based intervention in India: A randomized controlled trial. *Body Image*. 44(NA): 148-156.



Darbari, J. (2022). Sustainable performance measurement of Indian retail chain using two-stage network DEA. *Annals of Operations Research*. 315(2): 1477-1515.

Ahuja, K. (2022). Scanning the VIRUS: A study of dimensions of stress and coping with COVID-19. *Current Psychology*. NA(41): 7326-7336.

Darbari, J. (2022). Analysis of Collaborative Sustainable Practices in multi-tier food supply chain using integrated TISM-Fuzzy MICMAC model: A supply chain practice view. *Journal of Cleaner Production*. 354(NA ): 131271.

Jha, P. (2022). Tracing Historical Forms of Servitude: Introductory Remarks and Elementary Reflections. *South Asian History and Culture*. 4(13): 433-444.

Dhillon, M. (2022). “I’ve learnt from my experience and by my senior officers to face any challenge with a brave heart”: Lived experiences of Indian police community members during the pandemic. *Community Psychology in Global Perspective*. 22(8): NA.

Sehgal, S. (2023). Making Dents in the Paradigm of a Perfect Wife: Parvati’s Negotiation with Patriarchy in Indian Mythology. *Advances in Social Science Research Journal*. 4(10): 221-232.

Ganguly, R. (2022). An analysis of economic, health and environmental factors influencing India’s import demand for U.S. almonds. *International Journal of Social Science and Economic Researc*. 8(7): 2661-2670.

Ghosh, J. (2022). Enhancing students’ mathematical thinking using applets . *Journal of Mathematics and Science Teacher*. 2(2): NA.

Joshi M. (2022). A Buddhist Response to Climate Change: What We Must Do. *The Maha Bodhi: The International Buddhist Journal*. 2566BE(130): 29-39.

## **Journals**

Ahuja, K., Dhillon, K.(2022-23). The Learning Curve. *Annual*. 12(1): 100.

Khandelwal, A. and Parveen, S.(2022-23). Eclat. *Annual*. 14(NA): 100.

Ravishankar, A., Mathur G., Singh S., Dhyani, V.(2022-23). Alternatives- Sabab. *Annual*. 7(1): 130.

Ananya.(2022-23). Noesis. *Annual*. 9(NA): 127.

Kakkar, S.(2022-23). Ecolloquial. *Annual*. NA(NA ): 201.

## **Research Projects**

Indian Council of Social Science Research (ICSSR) funded project entitled, “Abandoned aged widows in shelter homes in India: A Study of their Socio- Economic Wellbeing and Percolation of Government Welfare Policies”. Sanctioned amount of Rs. 8 lakhs. PI: Prof. Suman Sharma

Dr. Bharat Ram Research Grant funded project titled, “Representing Women in the Indian Metropolis: Gender, Violence and the Urban Space,”. Sanctioned amount of Rs. 2 lakhs. PI: Dr. Wafa Hamid and Dr. Arunima Roy

Dr. Bharat Ram Research Grant funded project titled, “Historical and contemporary portrayals of disability: Implications for young women in India”. Sanctioned amount of Rs. 2 lakhs. PI: Dr. Megha Dhillon and Dr. Shatarupa Bhattacharya

Charles Wallace India Trust and British Council funded project entitled, “Poetics and Politics- A study of Agha Shahid Ali’s Poetry”. Sanctioned amount of Rs. 1.53 lakh. PI: Dr. Wafa Hamid.

### **Seminars Organized**

Seminar entitled, ‘NEP2020 & Teacher Education’ by Prof. Poonam Batra, Professor (Retd), Department of Education, University of Delhi organised on 29 March 2023.

Seminar entitled, ‘Individual Responsibility and Climate Change’ by Dr. Bhaskajit Neog, Faculty, Centre for Philosophy, Jawaharlal Nehru University organised on 13 April 2023.

Seminar entitled, ‘Start ups vs. Scale ups- Meaning of Value Creation’ by Mr. Abhishek Sethi, Founder of Grad Capitalo organised on 17 March 2023.

Seminar entitled, ‘Medium term Growth’ by Dr. V Anantha Nageswaran, Chief Economic Advisor to the Government of India organised on 31 March 2023.

Seminar entitled, ‘Embedded Knowledge in a disembedded world: Folk Knowledge in the 21st Century’ by Prof. V Sujatha, Faculty at Center for the Study of Social Systems, School of Social Sciences, Jawaharlal Nehru University (JNU) organised on 12 April 2023.

### **Conferences Organized**

Organised one day conference on ‘Deconstructing Psychology in the Indian Context’ on 23 March 2023.

Organised one day conference on ‘Reading Between the Panels: Deconstructing the Graphic’ on 17 April 2023.

Organised one day conference on ‘Decoding the interplay of Math, Finance and Tech’ on 12 April 2023.

Organised one day conference on ‘Liberalism in Crisis’ on 17 April 2023.

Organised one day conference on ‘Histories of Labour and Leisure’ on 23 March 2023.

### **Seminar/Conference Presentations**

Sharma, S. presented a paper titled “Developing Critical Socio-political Consciousness in Prospective teachers” at the 12<sup>th</sup> Annual International Conference of the Comparative Education Society of India (CESI) 2022 on the theme Educational Transformations: Crisis and Resilience held at Maulana Azad National Urdu University (MANUU), Hyderabad, from 9 –11 December 2022.

Bassi, T. presented a paper titled “Gender, Socialization and Education: A Study of Girlhood in Kotla Mubarakpur, New Delhi” at the 12<sup>th</sup> Annual International Conference of the Comparative Education Society of India (CESI) 2022 on the theme Educational Transformations: Crisis and Resilience held at Maulana Azad National Urdu University (MANUU), Hyderabad, from 9-11 December 2022.

Minocha, A. presented a paper titled “Digital Cultures, ‘Media Narcosis’ and the Question of Agency” at the Conference “Cultural Trajectories through Language, Literature and Media,”

Department of Humanities and Social Sciences, LNM Institute of Technology, Jaipur on 29 April 2022.

Cama, S. presented a paper titled “A Heritage of Humanity: The Zoroastrian Experience of New Birth” at Department of National Heritage in collaboration with UNESCO Office in Jakarta University of Malaysia, Kelantan an International Conference on Intangible Cultural Heritage in 2022.

Mishra, M. presented a paper titled “Recovered Women and Partitioned Nation” at the International Conference of Jai Narayan Vyas University, Jodhpur on The Concept of Nation in Indian Literature on 11-12 March 2023.

Hamid, W. presented a paper titled “Precarious Bodies: Gender, Class, and the Grammar of Violence in the Metropolis” at the Third Annual Intersectional Studies Conference at South Carolina State University (online) on 24 March 2023.

Koshy, J. presented a paper titled “Heretics, Heathens and Christians; or How the Church of England Produced the History of the Syriac Christians” at the Second City Anthropology Conference organised by the University of Illinois on 22-24 April 2022.

Verma, K, presented a paper titled “Chunautiyon Ke Daur Mei Rangmanch: Bol Ki Lab Azad Hein Tere” at a two day webinar on Natak aivam Rangmanch: Sambhavnayein aivam Chunautiyan, ARSD College, University of Delhi on 1-2 February 2022.

Dhillon, M. & Bhattacharya. S. presented a paper titled “Struggle, Strength and Well-Being: A Feminist Thematic Analysis of Bollywood Representations of Mothers having Children with Disability” in Multidimensional Conference to celebrate 100 years of the University of Delhi on Revisiting Wellbeing: Perspectives, Challenges, and the Road Ahead at Gargi College, University of Delhi on 2 February 2023.

Ahuja presented a paper titled “Contouring the work scope of work from home: Insights from critical discourse analysis of communication by Indian IT majors” at the 27 International & 58th National Conference of Indian Academy of Applied Psychology, on ‘Psychology & Education: Shaping the World’ organized by the Department of Psychology, University of Delhi, and Indian Institute of Psychology on 16 February 2023 (Awarded the best paper).

Padhy, P. presented a paper titled “Making Popsicles Out of Lemons: Exploring Happiness & Resilience in Children with Chronic Illnesses” at Amity Centre of Excellence for Positivity and Happiness International Conference: “Permanand: Philosophy, Psychology, and Physiology of Happiness” on 28-30 September 2022.

Dhillon, M. presented a paper titled “Fighting Against all the odds: A feminist analysis of intersections of womanhood, disability and mental health in India” at the Two-Day National Conference on “Gendering Rights, Debating Justice: Issues and Concerns (Organised by the Indian Association for Women’s Studies) held on 5-6 May 2023.

### **National/International MoUs Signed**

**MoU with La Trobe University (International):** Lady Shri Ram College for Women signed Memorandum of Understanding with La Trobe University on 2nd March 2023. The event was witnessed by Minister of Education, Hon. Dharmendra Pradhan and his counterpart Australian Education Minister, Hon. Jason Clare MP.

### **Other Inter-Institutional Collaboration**

Cargill Scholarship: Two students of LSR were awarded the prestigious Cargill Scholarship in 2022. Out of ten students selected from all over India, Ms. Agrima Gupta, Psychology (Hons) and Ms. Shaziya Perveen, Mathematics (hons.) were selected for the Scholarship in 2022.

The Asian University Summit was held online and was conducted by the National University of Singapore. The participants from LSR represented India: Ms. Barsha Das (Economics), Ms. Gunisha Aggarwal (English), Ms. Mehek Singh (Psychology), Ms. Sakshi Mishra (Psychology) and Ms. Tamara Vundru (Political Science). The theme for the year at AUS was “Leadership in a Complex World: Creating Opportunities in Times of Uncertainty”. It was held over nine days, from 20-29 June 2022.

The Lady Shri Ram College’s Office of International Programs was honoured to host a delegation from the University of Queensland, Australia on 4 August 2022. The visiting group was led by Professor Deborah Terry AO, President and Vice-Chancellor of the University of Queensland. Professor Terry along with her colleagues, Professor Heather Zwicker and Professor Helen Klæbe held a session with the students on the topic “Women in Leadership.”

A Delegation from the University of Melbourne came to visit LSR along with Ms. Anu Jain from the Australian High Commission on 7 September 2022. Prof. (Dr) Lindsay G. Oades, Director, Centre for Wellbeing Science, University of Melbourne.

The delegation visited LSR to discuss future collaborations and research plans specially with the Department of Elementary Education, LSR. From the department Dr A. Kalyani, Dr Smriti, Dr Tripti Bassi and Dr Jonaki Ghosh interacted with the delegation along with Prof Sharma, Ms. Bhawana Sharma Jha, and Dr Shatarupa Bhattacharya from the Office of the International Programme.

On 14 September 2022, the Honourable Minister for Europe and Foreign Affairs, Catherine Colonna, in her first visit to India, was welcomed by the Office of International Programmes at the college. She was accompanied by the Ambassador of France Emmanuel Lenain and other dignitaries from the French Embassy for the event organized by LSR. She emphasised the strong relationship that exists between the two nations in education and training, highlighting the association between Lady Shri Ram College and Sciences Po as an example and reiterated the key targets to double the number of Indian students in France.

Distinguished representatives from the French Embassy also attended the ceremony and the event was covered by important media outlets such as ANI Network, The Hindu, and The Times of India, to mention a few.

The Office of International Programs was also honoured to host a delegation from Macquarie University, Australia for a four day study tour, beginning from 28 November 2022 to 2 December 2022. The visiting group was led by Professor S. Bruce Dowton, Vice-Chancellor and President of the Macquarie University who inaugurated the Study tour. The inauguration was followed by plantation of saplings by the esteemed guests to commemorate the event. The seven students were accompanied by Dr. Andrew Alters, Senior Lecturer, Music Studies. The students from different fields had participated in the Study Tour. Ms. Bruna Gomes, Ms. Tenielle Corcoran, Ms. Kasey Cross, Ms. Evelyn Robinson, Ms. Eunice Zhao and Ms. Shimran Kumar.

Ms. Preeti Dawra, Director, Global Marketing Strategy, Office of International Engagement, Nanyang Technological University, Singapore and Mr. Rahul Singh, Assistant Director, Global Marketing, Office of International Engagement, NTU visited LSR on 14 December 2022 to discuss partnership and exchange opportunities in the coming years between the two institutes.

### **Student under Exchange Program (Inbound/Outbound)**

Ms. Radhika Gursahni from NUS joined LSR for one semester. She did papers from Political Science, history and Sociology.

**Number and percentage of students placed: 242**

**Number of Companies visited for campus recruitment: 140**

### **Extension and Outreach Activities**

The National Service Scheme at Lady Shri Ram College for Women strives to espouse social conscientiousness amongst youth. Notwithstanding the obstacles presented by the pandemic, the team endeavoured to revive offline activities during the 2022-23 tenure.

In observance of the 8th annual International Yoga Day, NSS organised a 5-day yoga workshop, led by the esteemed Yogacharya Kajal Chaudhary, integrating both in-person and virtual sessions, to emphasize the significance of worldwide well-being. Consequently, Kargil VijayDiwas was celebrated through an online session by Colonel V.N. Thapar, the father of Captain Vijayant Thapar, a Kargil martyr and recipient of the Vir Chakra. Colonel Thapar shared readings from the biography titled “Vijayant at Kargil, The Life of a

Kargil War Hero,” allowing the audience to glimpse the life of this great hero whose valor far surpassed the number of years he lived. In a bid to instil a sense of patriotism among the underprivileged strata of society, NSS volunteers undertook the Har Ghar Tiranga Campaign, organizing community visits and a series of events including activities such as impromptu quizzes, engaging discussions, and performances including plays, with active participation from children.

Swachhta Pakhwasa: The Swachhta Pakhwada Campaign, a nationwide initiative to promote the significance of cleanliness and sanitation, elicited an array of events, including cleanliness drive, pledge-taking, documentary screenings, a waste management quiz, and a poster-making competition. We also revived our three annual festivals- Kala, Noor and Nexus in the physical setting which received riveting response from the student body.

The NSS annual art festival, Kala, took place on 15th September, offering a platform for children from beneficiary NGOs to showcase their creativity. The theme for Kala 2023 was "Kudrat aur Kala," celebrating nature's breath-taking power and the artistic expression of children. Events such as sponge painting, storytelling, and newspaper pen stand making engaged the children. The Dramatics Society presented a production on sustainability, which was well received by all.

NOOR- the Diwali Mela: On 21 October 2022, NSS organized NOOR- the Diwali Mela of NSS-LSR. After a hiatus of three years, this annual cultural fest returned as an offline event, garnering fervent participation from the college community. Themed “NOORARAMBH: New beginnings in the post-pandemic world”, the fest offered a platform to local vendors to set up stalls, while LSR students received subsidized rates for showcasing their talents and products, providing a market place to test and foster their budding ventures.

Nexus: The annual youth convention organized by NSS-LSR, was held on 15-16 February 2023 under the theme of “Discourse on Disability: Building an Inclusive tomorrow” to lead social change vis-à-vis the challenges of disability. The convention included informative panel discussions on the socio-political construct of disability and the role of assistive technology in building an inclusive world. Esteemed speakers such as Dr. Renu Addlakha, Ms. Maitreyi Mishra, and Mrs. Malini Dhiran graced the event. Volunteer training sessions on disability sensitization and inclusion were conducted in collaboration with an NGO, The Sarvodaya Collective and REACH: The Equal Opportunity Cell of LSR.

SVEEP Program: Additionally, NSS collaborated with ‘Young India Foundation’ to register 100+ unregistered voters for the SVEEP program under the Election Commission of India. NCC LSR is proud to congratulate its meritorious cadet CHM Mahima Yadav who have achieved another milestone. On the occasion of the 74th NCC Raising Day, some meritorious cadets got the opportunity to pay homage to our brave soldiers. The National War Memorial is a national memorial created to honour and remember Indian military personnel who participated in the wars that led to the country's independence. CHM Mahima Yadav was the Wreath Bearer of Rear Admiral Puneet Chadha, VSM. CHM Mahima Yadav and JUO Megha Yadav got the prestigious opportunity to interact with the Defence Secretary of India, Shri. Giridhar Aramane. I.A.S. Rear Admiral Puneet Chadha and Defence Secretary Shri Giridhar Aramane attended the celebration for NWM 2022 as the chief guests.

CM rally was held on 15 August 2022 at Chhatrasal stadium, New Delhi. Chief Minister of Delhi Arvind Kejriwal was the guest of honour who inspected the parade. Several personnels of different services such as Delhi Police, Home Guard, Fire Service, Indian Engineering Service, Delhi Police Band etc took part in the parade. Besides, many students of Delhi government schools also joined the parade as free marchers and flag bearers. CHM Mahima Yadav, JUO Megha Yadav, JUO Himanshi and SGT Isha M.Khobragade represented LSR there.

**HAR GHAR TIRANGA- PRABHAT PHERI**” The event took place on 9th August 2022 near Zamrudpur village and Amar colony in the supervision of PI staff from 4 DGBN unit. Around 30 students from Lady Shri Ram College and Deshbandhu College participated in the rally. They marched with flags in their hands and heads held high with pride. Cadets exalted slogans and patriotic songs. They were full of enthusiasm and patriotism. On the other hand, the response from the public was overwhelming. They too participated in slogans and showed their support by clapping and providing chocolates to the cadets. It was an amazing experience for the cadets who participated in Promising Day Parade.

**Promising Day Parade:** On the occasion of the 75th Independence Day, Promising Day parade was organized by the National Cadet Corps, LSR on 15 August 2022 where newly enrolled cadets took an oath to commit themselves to the NCC, the country, and its citizens. The majority of college students and staff witnessed this event. The ceremony started with a squad of 30 cadets marching in front of the flag area where Dr. Suman Sharma, Principal, performed flag hoisting ceremony, followed by the national anthem. Following the ceremony of oath taking, which is the most significant event of the promising day parade, the purpose of which is to instil in the cadets a sense of commitment towards the promotion and protection of their country.

**National Women’s Day:** On the occasion of National Women's Day, National Cadet Corps, Lady Shri Ram College for Women celebrated the birth anniversary of one of India's most influential politicians, feminist and civil rights activist - Sarojini Naidu. Through a short play the plight of thousands of girls around the country was showcased, as they are forced into marriage and subsequently, a life of obedience to harsh in-laws. The crowd cheered and clapped after the powerful performance as people expressed their views about the play.

**VEERANGANA 2023 - KHAKI KI KALAKARI:** The annual fest of NCCLSR was finally able to take place for the first time after COVID-19. The event took place on 3 April 2023 and contingents from several colleges across Delhi participated in the event. The Chief Guest for the event- Major General S.P Vishwasrao and Guest of Honour- Col. K.S. Bisht also attended the event and motivated cadets to pursue an active and dedicated life.

### **Library Development**

The College Library with its fully computerized user-friendly data filing system has an invaluable collection of about 1,25,7026 books, 7162 bound journals, 1360 repro-graphic material and about 360 CDs and DVDs. It subscribes to a range of newspapers, national and international journals. The Library is linked to the Delhi University Network and DELNET, facilitating access to text and material. The Library is open from 8.00 AM to 8.00 PM and is fully computerized with an error free database of all books and bound journals,

created and maintained by the in-house team. The LSR Library has developed a service of indexing articles published in the journals procured by the Library. The data for these articles is available online. These articles are assigned subject headings according to the LC List of Subject Headings. This will be an excellent resource for faculty and students engaged in research. They will be able to access required material for their research without searching various journals. It will save them effort and time. Every reader will be able to access the required material expeditiously. There is a quarterly list of books which are added in the library during the year which is arranged subject wise and supplemented by author, title and subject indexes which serve as access points for precise and quick retrieval. The Library has started the Current Awareness Service through e-mail. All faculty members along with students (class representatives) are intimated about the books added during the specified period, articles indexed and news alerts. The OPAC (Online Public Access of Catalog) is fully accessible to readers and the circulation of reading material is also fully automated. Although the Library is fully automated, there is also a parallel system for accession of books. The full record is created and maintained manually as well as on computers. Along with access to all online resources available on DU networks, the LSR Library subscribes to N-List which is an online database of journals. The Library has also taken an annual institutional membership of NLIST and DELNET and all members are entitled to benefits and privileges pertaining thereto. The library has carried out a stock verification process using barcode technology to find out the missing books and rectified the records. NAAC team visited the library and appreciated its activities. The library has replaced the automation software from Libsys (commercial software) to Open source software KOHA. Koha is an open source integrated library system (ILS), used world-wide by public, academic and special libraries.

It has been installed in the library with Web OPAC to access the library collection easily from anywhere around the globe. Installation & Configuration of Mysql database, mail server, Apache server with KOHA LMS was done along with data migration from Libsys to Koha N-computing has been started in the library. N-Computing is a desktop virtualization company that manufactures hardware and software to create virtual desktops (sometimes called zero clients or thin clients) which enable multiple users to simultaneously share a single operating system instance. The library staff frequently conducts exhibitions on relevant themes such as Women empowerment, The Life of Mahatma Gandhi, The Work of Sri Aurobindo, Independence day etc. and organizes webinars for its users. To maintain the motivation and professional development of the staff, three members of the library staff have now been promoted to the post of Library Assistant.

Total No. of Books in library: 118687

Total No. of Magazine and Journals subscribed: 77

**Total Faculty Strength: 154**

#### **Financial Allocation and Utilization**

Grants Allotted: Rs. 55.12 Crores

Grants Utilized: Rs. 54.98 Crores

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## LAKSHMI BAI COLLEGE

### Brief history of the College

Lakshmi Bai College for Women was established in 1965 and named in honour of Rani Lakshmibai of Jhansi, the fearless warrior and patriot. The college is run by the Government of Delhi, and is located in the neighborhood of Ashok Vihar. It has multiple departments, including Commerce, Computer Science, Economics, English, Hindi, History, Home Science (Food technology & Apparel Design and Construction), Mathematics, Music, Philosophy, Physical Education, Political Science, Psychology, Punjabi, Sanskrit, and Sociology. It offers courses in the Humanities, Social Science and Commerce at both the undergraduate and postgraduate levels. In addition to the three year long BA and BCom (Hons) courses, undergraduate students can also enroll in a BA (Prog) and BCom courses. Masters in Arts are offered with specializations in Philosophy, Political Science and Sanskrit.

### Major Activities and Achievements

In alignment with the National Education Policy 2020, the University has ardently embraced its vision, both in essence and execution. Pioneering a series of initiatives, College has proactively facilitated the transition for the inaugural cohort entering the Under Graduate Curriculum Framework (UGCF). Demonstrating its commitment to academic excellence, the institution successfully navigated a prolonged deadlock, emerging as one of the trailblazers in conducting interviews for the regularization of teaching positions. A significant milestone was achieved with the appointment of 79 new permanent teachers, strategically distributed across 15 departments. Further exemplifying its dedication to the transformative principles of the National Education Policy, College has inaugurated fifteen new centres, meticulously designed to incorporate the policy's core tenets. These initiatives collectively aim to foster the development of engaged, productive, and socially responsible citizens, equipped with a global perspective. College's flagship brand, Parampara, took centre stage at the prestigious Global Millet Exhibition and Conference held at IARI, PUSA. This event not only showcased the institution's commitment to innovation but also provided invaluable international exposure to both students and faculty. Such endeavours underscore the College's unwavering commitment to shaping an educational landscape that aligns with contemporary global standards and aspirations.

### Honours/Distinctions

Prof. Pratyush Vatsala received the Sashakt Mahila Saman Award from Bharat Vikas Parishad on its 60<sup>th</sup> Foundation Day on 10 July 2022. Additionally, he was honoured with the National Education and Training Excellence Award by the Confederation of Indian Universities on 21 October 2022, on the occasion of the United Nations Day. Furthermore, Prof. Vatsala was also recognized with the Spiritual and Value Education (SAVE) Award by the Spiritual and Value Education Summit on 13 March 2023.

Prof Anita Malhotra was facilitated with a certificate of achievement as author of a top cited paper (on the basis of Clarivate analytics of work published between Jan 2021-Dec 2022) in journal 'Obesity Reviews' in the month of February 2023.

Dr Ruchi Mundeja was awarded the Zdzislaw Najder Essay Award for essay entitled “Worlding Appetite: Colonialism, Modernism, and the Gustatory in Joseph Conrad’s Heart of Darkness” published in English Studies by The Joseph Conrad Society of America.

### **Students with Distinctions**

Ms. Ishita Das, B.Sc. (Hons) Maths III year achieved an outstanding CGPA of 9.419 and secured the distinction in her class.

Ms. Vanshika Mangal, B. Com (Hons) III year achieved an outstanding CGPA of 9.365 and secured the distinction in her class.

Ms. Shreya Jajoria, B.Sc. (Hons) Home Science II year achieved an outstanding CGPA of 9.36 and secured the first distinction in her class.

Ms. Deepika Sharma, B.A. (Hons) Economics III year was achieved an outstanding CGPA of 9.216 and secured the first distinction in her class.

Ms. Chhavi Garg, B.Sc. (Hons) Maths I year achieved an outstanding CGPA of 9.197 and secured the first distinction in her class.

### **Publications**

Malhotra, A., Arora, C., Ranjan, P., Singh, V., Singh, N., Shalimar., Dwivedi, S.N., Vikram, N.K. (2023). Effect of intensive weight-loss intervention on metabolic, ultrasound and anthropometric parameters among patients with obesity and non-alcoholic fatty liver disease: an RCT. *European Journal of Clinical Nutrition*, (76), 1332-1338.

Malhotra, A., Chopra, S., Ranjan, P., Sarkar, S., Kumari, A., Prakash, Bindu.,kaloiya, G.S., Dwivedi, S.N., Siddhu, A., Vikram, N.K. (2022). Validation of tools to assess predictors of successful weight Loss outcome in individuals with overweight and obesity. *Journal of Nutrition Education and Behaviour*, 9(54), 878-885.

Malhotra, A., Chopra, S., Ranjan, p., Verma, A., Kumari, A., Upadhyay, A.S., Baitha, U., Vikram, N.K. (2022). A cross sectional survey of 504 women regarding perceived risk factors and barriers to follow healthy lifestyle and association with sociodemographic factors and menopausal symptoms. *Diabetes and Metabolic Syndrome – Clinical Research and Reviews*, 16(6), 102529 (online).

Chaturvedi, S. (2022). The Dialectic Between the Self and the Other in Mridula Garg's Kathgulah. *MuseIndia*, 101(Online).

Mundeja, R. (2023). Beyond Taxonomies: Vagantly ‘Inhabiting’ the modernist classroom. *Literature Compass*, 1(20).

Mundeja, R. (2022). Pencilling in the Margins: Virginia Woolf’s ‘Street Haunting: A London Adventure’ and Limning the Imperial Metropole”. *dialog*, (39).

Sharma, S.K. (2023). Inter College Sports Journey of Lakshmibai College in Two Decades: An Appraisal” in the International Journal of Physiology. *Nutrition and Physical Education*, 1(8), 44-49.

Tripathy, A.K. (2022). 'Karnataka's Kudremukh Environmental Movement: Some reflections'. *Bihar Journal of Political Science*, 1-4 (IX-X).

### **Research Projects**

Project entitled, 'Stitching the Change' with the active involvement and support of the college faculty and administration was initiated in the year 2022-2023.

### **Patents Filed/Granted**

The patent number = 2021106398, granted in Australia, pertains to an innovative file security system that enhances data security and reduces cloud storage requirements, specifically designed for personal health records.

### **Seminars Organized**

Seminar entitled, 'From Euclid's Elements to Black Holes: A Journey of Geometry' was delivered by Dr. Mukund Madhav Mishra, Faculty, Hansraj College on 1 February 2023.

Seminar entitled, Project Based Learning in Mathematics' was delivered by Professor Shobha Bagai, Cluster Innovation Centre, University of Delhi on 22 February 2023.

Seminar entitled, 'Extract, Significance and Ground Application of Solid Waste Management Handling Rule 2016' was delivered by Dr Naveen Agarawal, IAS, Deputy Commissioner, MCD Keshawpuram Zone on 17 October 2022.

Seminar entitled, 'Undertaking Research at Undergraduate Level' was delivered by Prof. Bharat Singh, Professor, Department of Economics, Satyawati College 4 November 2022.

Seminar entitled, 'Different Career Options in Economics: How to ace UPSC or IES' was delivered by Mr. Samdish D Sharma, an alumnus of University of Delhi, a budding Economist, CEO and founder of "ECONOMICS FOREVER" on 15 February 2023.

### **Conferences Organized**

A conference was organized on 'Celebrating Women in Azadi ka Amrit Mahotsav', which was sponsored by ICSSR on 2 March 2023

IQAC of the college conducted a workshop on 'NEP Implementations and Admissions 2022' on 30 September 2022. IQAC also conducted another workshop on 'Academic Audit and Documentation' on 12 November 2022.

Organized a conference on 'Digital Marketing', at Delhi Institute of Digital Marketing, one of the top institutes in digital marketing, on 27 January 2023.

### **Seminar/Conference Presentations**

Dr Ruchi Mundeja presented a paper entitled 'Time-Framing Modernism through the Blurring Time-Frames of Jean Rhys's Fiction.' Presented at the SEM "Modernist Structures" Conference at Universite Caen Normandie, 15-18 June 2022.

Ujjayini Roy presented a paper entitled 'Empirical Issues in International Trade and Finance' during the 8<sup>th</sup> International Conference organized by IIFT on 15-16 December 2022.

Ujjayini Roy presented a paper entitled 'India Land Development Conference 2022: Global Pulls on Local Lands: Southern Perspectives' at the Azim Premji University, Bengaluru from 7-9 December 2022.

### **National/International MoUs Signed**

Through the 'Vidya Vistar Scheme,' college signed MoUs with institutions such as DHS Kanoi College, Dibrugarh, Assam; Patkai Christian College, Dimapur, Nagaland; Barrackpore Rastraguru Surendranath College, West Bengal; Sri Guru Ram Rai (PG) College, Dehradun, Uttarakhand; and K.S. Saket P.G. College, Ayodhya, emphasizing its commitment to academic exchange and collaborative research.

### **Other Collaborations**

College also boasts international collaborations, including partnerships with EdX courses for faculty and students and Trinity College, London.

National and state-level affiliations include official links with entities such as the Delhi State Legal Services Authority, Udaan: Film Making, Shiksha Sanskriti Uthhan Nyas, Bhartiya Anuvad Parishad, Vedic Science of Yagya by Vedmurty Centre for Innovative Research on Vedic Science, Bhartiya Shikshan Mandal, and University of Delhi's Departments of East Asian Studies and Germanic and Romance Studies.

College has established an NPTEL Local Chapter (5591) to provide students and faculty access to a variety of online courses.

Collaborations with organizations like Sewa Bharti, Genomic Valley Biotech Ltd., Aryavart Vaidic Chikitsalaya, VEDMURTY Centre For Innovative Research on Vedic Science, and WOMENNOVATOR VIRTUAL INCUBATOR LLP focus on initiatives ranging from sustainability to incubation support for entrepreneurial ventures.

**Number and percentage of students placed: 3**

**Number of Companies visited for campus recruitment: 1**

### **Extension and Outreach Activities**

To spread awareness regarding blood donation, the NSS unit organised an awareness session in collaboration with Blood Connect Foundation, on 13th June 2022.

Gandhi Jayanti was commemorated with an event titled "Ekla Chalo," where volunteers gathered at Wazirpur, took a cleanliness pledge along with village children on 2 October 2022. Subsequently, a donation drive was conducted, and materials collected from students and staff were donated to construction workers at the college.

### **Library Development**

The library facility includes OPAC, RFID Technology, NList, INFLIBNET and DELNET.

Total number of books in library: 91500

Total number of Magazine and Journals subscribed: 45

Total number of E-Journals - 500

Total number of E-books - 75000

Total number of braille books - 225

**Total Faculty Strength: 170**

### **Financial Allocation and Utilization**

Grants Allocated: Rs 47,42,58,441/-

Grants Utilized: Rs 51,63,04,530/-

### **Other Significant Information**

Department of Physical Education and Sports at our college has witnessed remarkable achievements and active student participation in various sports during the academic session 2022-23. In the post-COVID pandemic period, sports students showcased relentless perseverance, excelling in competitions at different levels. At the All-India Inter-University level, nine students represented the University of Delhi across sports such as Wrestling, Softball, and Athletics. Notable achievements include four students winning bronze in the All-India Inter-University Softball Championship and Rashi Mittal being selected for national level shooting competition. The college students also achieved success at the national, state, and district levels, securing numerous gold, silver, and bronze medals in various championships. The Department organized a range of activities, including yoga sessions, online lectures, and sports selection trials, contributing to the overall development and recognition of our sports enthusiasts. Additionally, the National Cadet Corps (NCC) played a pivotal role in instilling qualities like unity, discipline, and patriotism, with our cadets excelling in events such as the All India Thal Sainik Camp and Special National Integration Camp. The NCC unit actively participated in community engagement, cleanliness drives, and cultural events, adding a vibrant dimension to the college's extracurricular landscape.

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## **MAHARAJA AGARSEN COLLEGE**

### **Brief history of the College**

Maharaja Agrasen College was established in August 1994 as a constituent college of the University of Delhi. Initially named Co-Educational College, it was rechristened as Maharaja Agrasen College, after the great Indian ruler. Catering to the educational demands of the thickly populated East Delhi, the college

commenced its journey with 220 students enrolled in two most popular courses: B.A. (Pass) and B. Com (Hons) in a part of a school building. In 2010, the College shifted to a spacious verdant state of the art infrastructure spread over 10 acres and offers 10 courses across 15 departments to nearly 2400 students and attracts the student intelligentsia from various parts of not just Delhi, but from all parts of the country. Its phenomenal growth has been recognized in its assessment and accreditation by NAAC with Grade 'A' in 2016 and 2022 (2nd cycle) and All India Rank 52 by NIRF, and Ranks 20 in Science, 28 in Arts, and 30 in Commerce streams by MDRA, India Today in 2021. The college has a wi-fi enabled campus, recording studio, smart hybrid classrooms, a 750-seater auditorium, a contemporary ICT and media lab, sports ground, well equipped library along with a 58 seat girls hostel.

### **Major Activities and Achievements**

Maharaja Agrasen College marked yet another significant milestone as it was accredited grade 'A' by NAAC in its second cycle with an improved score of 3.14. The Himalayan Study Circle was set up to undertake multi-disciplinary research on the Himalayan ecology. Furthermore, the college was declared as a Zero Waste Campus by Municipal Corporation of Delhi. Several national level academic conferences and workshops were organised including the ICSSR sponsored National Conference on the 'Role of Jammu and Kashmir in the Freedom Movement of India', National Students' Academic Congress on 'Power of Youth: Rights and Responsibilities', National Conference on 'Media Pluralism and Diversity in the Networked Society', and the National Conference on 'Anuvad ka rozgar parak paridrishya' were highly successful and witnessed wide participation from academia and students. A seven days cultural festival 'Virasat' was organised under the aegis of SPIC MACAY and on the research front, a major research project "Delhi Diver-City: A Virtual City Compendium Project (VCCP)" was granted by ICSSR to Maharaja Agrasen College with a grant of Rs. 5,00,000/-. This year is also significant as it marks the registration of the Maharaja Agrasen College Alumni Association which strengthened the interface between the alumni and students of the college.

### **Honours/Distinctions**

PhD degree awarded to Dr Rakesh Kumar from Sharda University, Greater Noida, U.P. on 'A comparative study of Financial Inclusion of Below Poverty Line & Above Poverty Line Households of Rural Western Uttar Pradesh'.

### **Students with Distinctions**

<b>S.No.</b>	<b>Name of Students</b>	<b>Class</b>
1	Vishu Sharma	B.Sc. Mathematical Science
2	Pratik Takral	B.Com.(Hons.)
3	Devika Prakash Nayyar	B.Com.(Hons.)
4	Aashi Ansari	B.Sc. (Hons.) Electronics
5	Anshika Joshi	B.Sc. Physical Science

## Publications

Prasannan, A.R.. (2022). Metrizable and Submetrizable for point-open, open-point and  $hi$ -point-open topologies on  $C(X, Y)$ . *Communications of Korean Mathematical Society*, 37(3), 905-913.

Prasannan, A.R.. (2022). Linearly S-Closed Spaces. *Filomat*, 36(20), 6841-6854.

Yadav, S., (2022). Analysis of Resonant Curve and Phase Portrait due to Earth's Equatorial Ellipticity in the Earth-Moon System using Perturbation Technique . *Journal of Dynamical Systems and Geometric Theories*, 20(2), 275-298.

Yadav, S. (2022). Resonant Curve due to Perturbations in Geo-Synchronous Satellite including Earth's Equatorial Ellipticity and Resistive Force. *Astronomy Reports*, 66(8), 736-753.

Yadav, S. (2022). Stability Analysis of lagrangian Points of Geo-Synchronous Satellite including the Resistive Force and Earth's Equatorial Ellipticity . *New Astronomy*, 97(-), 101887.

Kumari, V., (2022). Interplay between  $r$  - ray Irradiation and 3DEG for Dosimeter Applications. *IEEE Access*, 10(-), 25811-25827.

Kumari, V., (2022). TCAD investigation for Dual-Gate MISHEMT with Improved Linearity and Current Collapse for INAs. *IETE Technical Review*, 39(-), 1383-1394.

Kumari, V., (2022). Investigation of proton irradiated dual field plate AlGaIn/ GaN HEMTs: TCAD based assessment. *Microelectronics Journal*, 122(-), 105405.

Sinha, M. (2023). Interview of Prof. Simi Malhotra on ' Literature and language in the Age of Media. *Fortel*, (46), 166-171.

Kumari, V., (2023). Sensitivity Investigation of Planer Ground Plane Junctionless Transistor (GP-JIT) for UVA Photodetector. *IEEE Sensor*, 23(-), 308-316.

## Research Projects

Indian Council of Social Science Research (ICSSR), 2022. 2 Years. Delhi Diver-City: A Virtual City Compendium Project (VCCP), Five Lakh

## Seminars Organized

Prof Anoop Pant, Professor, School of Business Studies, Sharda University, Capital Markets: Trading and Technology, Capital Markets, 22 September 2022

Prof Ashish Chandra, Professor, Department of Commerce, Delhi School of Economics, Entrepreneurship and Economic Development, Entrepreneurship, 08 July 2022

Prof Shanta Laishram, Professor, Department of Mathematics, Indian Statistical Institute, Delhi, World of Prime Numbers, Mathematics, 17 February 2023

Prof Kirti Ranjan, Department of Physics & Astrophysics, University of Delhi, Large Hadron Collider: Unravelling the Enigma of the Universe, Astrophysics, 02 February 2023

Dr Namita Vashishtha, Deputy Dean, Academic Affairs, Faculty of Law, University of Delhi, Protection of Women from Domestic Violence Act, 2005, Women's Laws and Rights, 29 November 2022

### **Conferences Organized**

'Role of Jammu and Kashmir in the Freedom Movement of India', 30 march 2023, Indian Council of Social Science Research (ICSSR)

National Students' Academic Congress on 'Power of Youth: Rights and Responsibilities, 10 april 023, Maharaja Agrasen College

National Conference on 'Media Pluralism and Diversity in the Networked Society', 12 April 2023, Maharaja Agrasen College

National Conference on 'Anuvad ka rozgar parak paridrishya', 17 April 2023, Maharaja Agrasen College.

### **Seminar/Conference Presentations**

Maneesha, Pandey, P.K. et al., A Multi-Objective Path -Planning based on Firefly Algorithm for Mobile Robots, International Conference on Advances in IoT and Security with AI (ICAISA 2023), March 24-25 2023, Deen Dayal Upadhyaya College, University of Delhi, India & National Institute Of Technology, Arunachal Pradesh, India.

Deka, N., Women, Witchcraft and Cast (e)ing Experiences: An Analysis of Mahasweta Devi's "Bayen" and Baburao Bagul's "Prisoner of Darkness", Contemporary Perspectives in English Language, Literature & Cultural Studies, 15-16 July 2022. Department of English (University Institute of Liberal Arts and Humanities), Chandigarh University, Mohali

Deka, N., The Re(e)lity of Partition: A Cinematic Response, Rethinking Partition: 75 Years, International, 3-5 November, 2022, IQAC of Mata Sundri College for Women (DUI in collaboration with Punjabi Sa hit Sabha, Delhi & Indian Council of Social Science Research (ICSSR)

Deka, N., Experiencing and Exploring a Cinematic Journey of Partition via Deepa Mehta's 1947: Earth, Borders and Conflicts in Cinema(s), National, 4-6 November, 2022. Association for Film Studies in South Asia (AFSSAI)

Paul, D., Depiction of the Disabled in Narratives of Displacement and Violence: An Analysis of Such a long Journey and Arjun, From Disabled Bodies to Able Subjects, National, 20 March 2023, Zakir Hussain Evening College.



Rajawar, S., Leadership of the Indian Diaspora in Indian National Movement, Contributions of Indian Diaspora in Freedom Struggles of India and the Rise of Global India during Amritkaal, National, 10-11 January 2023, School of Economics, Devi Ahilya Vishwavidyalaya, Indore, MP.

Maneesha, Pandey, P.K. et al., Metaheuristic techniques: review, analysis and scope of applications, International Conference on Innovations in Management, Science and Technology (ICIMST 2022), International, August 05-06 2022, Department of Computer Science and Electronics, University of Science and Technology, Meghalaya (USTM), India.

Rajawar, S., The Independence Movement of India and Korea: A Comparative Analysis, 8th AKS Interdisciplinary International Conference on Emerging Trends in Korean Studies in South Asia: Comparative and Inter-Cultural Perspectives, 23-24 July 2022, Nepal Law campus, Tribhuvan University, Kathmandu, Nepal & Centre for Korean Studies, JNU

Rajawar, S., Role and Influence of Gandhi's Indian Opinion on the Indian Diaspora in South Africa, International Conference on Mahatma Gandhi and Indian Diaspora under European Rule and Later 22-24 April 2022, Department of Political Science, Banaras Hindu University.

**Number of Companies visited for campus recruitment: 06**

### **Extension and Outreach Activities**

The NSS unit of Maharaja Agrasen College undertook the following activities during 2022-23 academic session:

The MAC-NSS organised the Plantation Drive to support the concept of Go Green and raise awareness regarding saving the environment and planted more than twenty trees were planted in this drive along with some plants and herbs. It organised a blood donation and health check-up camp in collaboration with AIIMS, Max Healthcare, Clove Dental and Centre for Sight on 7 April 2023 in the college. A Tiranga Yatra and Tiranga Distribution Drive were organised to celebrate the Har Ghar Tiranga initiative of the Government of India. The national flag was distributed amongst students, faculty, non-teaching staff members, and neighbouring communities.

The Pedal Power club organized a poetry competition and a padayatra on the occasion of the birth anniversary of Indian freedom fighter, Shaheed Bhagat Singh. The volunteers celebrated Diwali with the children taught under project Akshar. They also organized an exhibition of decorative materials, diyas, and candles made by the kids to be bought by the students and faculty. A Plog Run was conducted by the NSS Swachhta unit to keep our surroundings clean and trash free, and to raise awareness on waste management.

The equal opportunity cell of MAC in the collaboration with National Service Scheme unit organized a Workshop on Sensitizing Intellectual and Development Disability on 12 April 2023. Mock exercise for Disaster Management for an earthquake in association with National Disaster Management Authority, Ministry of Home Affairs, Govt. of India, was also organised. MAC NSS volunteers have also participated

in the events organised by the University of Delhi and the Ministry of Youth and Affairs during the 2022-23 academic session including the Centenary Celebration, international lecture series organized by the

### **Library Development**

Maharaja Agrasen College Library was established in 1994. It has a wide range collection of 46589 books of various disciplines and subscribes to a total number of 14 newspapers and 25 magazines & print journals. The library is directly connected with DU Network, users can easily access around 47000 e-journals on social science, sciences through various commercial databases. There are around 135000 e-books on (log in) basis and 5000 e-journals on (log in) basis. The audio-visual collection of the library has around 269 CD/ DVDs. The list of additions of books added recently in the library are mailed to faculty and students for their reference and News Alert is weekly provided through scanning of latest news and articles from national newspapers. The book jackets of the new books are also displayed on the board.

BIBLOGRAPHICAL SERVICE {ON DEMAND}

#### **REFERENCE SERVICES**

Ready Reference Service

Long Range Reference Service E- SERVICES

Provide remote access through DU e-tlibrary app

N-list DUIS Database Reprography Service

SDI {Selective Dissemination Information} {ON DEMAND}

URKUND Plagiarism Software for Research Paper Check.

**Total Faculty Strength: 118**

#### **Financial Allocation and Utilization**

Grant Sanctioned: 36.3 Crore

Grant Utilized: 36.5 Crore

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### **MAHARSHI VALMIKI COLLEGE OF EDUCATION**

#### **Brief history of the College**

Maharshi Valmiki College of Education was established in the year 1995 by the Govt of NCT of Delhi as a Constituent College of University of Delhi to cater education. Initially known as College of Education and housed on the Ground Floor of Bhai Parmanand Institute of Business Studies Building, Shakarpur, Delhi the college assumed its present name, Maharshi Valmiki College of Education, later in the year 1997.

Marking a humble beginning with its Bachelor of Education programme with only 38 students from the Humanities and Social Science streams, the College present annual intake is 125 and total strength is 250

of students. The college got initiated into the process of shaping its promising profile under the inspirational leadership of the philosopher, artist and teacher late Professor RP Sharma, the Founder Principal (Officer on Special Duty). The college was formally on 16 November 1995, the day since being celebrated as the Foundation Day every year. The college moved to its present location in Geeta Colony in the year 2003. The admissions to the B Ed course of the college are made through a Common Entrance Test conducted by the Faculty of Education, University of Delhi.

### **Major Activities and Achievements**

After almost two years of online teaching due to the Covid-19 pandemic, the College reopened for offline classes with full swing. An international symposium was organised in college on the theme International Discussion: Gandhi in South Africa and India, Education and Yoga: Contemporary Essentials (दक्षिण अफ्रीका और भारत में गांधी, शिक्षा और योग : समकालीन अनिवार्यता. Inter-institutional visits were scheduled for Thursday, 7 July 2022 and Friday, 8 July 2022 under Phase IV of the Field Observation Program. Students visited CIET (NCERT), Dr B.R. Ambedkar National Memorial and Gandhi Darshan. Dr. Prabhjot Kulkarni, Ex-Principal of the College conducted a workshop on “स्वयं और जीवन में विश्वास का निर्माण”. A workshop on the theme “Braille Map and cSript” for B. Ed second-year Year students (2022-23) was conducted on 17 April 2023.

Morning Assembly is a very important part of the college. Special Assemblies on the themes like Environment Day, International Yoga Day, Azadi ka Amrit Mahatsav and Har Ghar Tiranga, Non-Violence Day, National Education Day, International Day of People with Disability, International Women's Day were organized in the session 2022-2023.

### **Students with Distinctions**

Shivendra Pratap Singh of B.Ed was awarded distinction.

### **Seminar/Conference**

Workshop entitled, ‘Readiness for Interviews: Developing C.V & Resume’ with resource persons, Ms. Priyanka Singh and Ms. Shruti Pal conducted on 15 April 2022 and 4 July 2022.

Workshop entitled, ‘Creating Bulletin Boards for the Pedagogy of English Learners’ with Ms. Harshita Chandolia as the resource person conducted on 9 February 2023.

Chaired “Panel Discussion” in the Seminar supported by Bhartya Bhasha Samiti, “Expanding the domain of Indian Language in Mathematics of Science” held at Shyama Parsad Mukherjee College, University of Delhi on 18 November 2022.

### **Library Development**

In colleges, the library occupies a prominent position and it is an important and integral part of the teaching programme. College library extends opportunities for self-education to the students and faculty members. The library develops in student a sense of responsibility in the pursuit of knowledge. College library

stimulates the students to obtain, evaluate and recognize knowledge and to familiarize themselves with the trends of knowledge for further education and learning new disciplines. The College has added more than 250 books to its collection during the year 2022-2023.

**Total Faculty Strength: 10**

#### **Financial Allocation and Utilization**

Grants Allotted: Rs. 10.50 Crore

Grants Utilized: Rs. 10.27 Crore

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### **MAITREYI COLLEGE**

#### **Brief history of the College**

Maitreyi College was established in 1967. It is an integral part of the University of Delhi. It bears the name of the venerable Vedic scholar, Maitreyi. The scholar, when presented with the choice between worldly wealth and knowledge, wisely chose knowledge. In keeping with this spirit of diligence and commitment, Maitreyi College has consistently strived to instill the same values in both its faculty and students.

Commencing its journey with modest beginnings in Netaji Nagar, with a faculty comprising just seventeen teachers offering B.A. (Pass) and B.Sc. (General) programs, the College has since evolved and thrived into a prestigious institution of higher learning. Currently, Maitreyi College offers a diverse array of 18 undergraduate courses spanning the realms of Science, Commerce, and Humanities, alongside 2 postgraduate programs in Mathematics and Political Science. In the academic year 2021-22, the college boasted an enrollment of 3631 students, with 90 dedicated individuals pursuing postgraduate studies.

Maitreyi College has earned several notable distinctions. It stands proudly among the top six colleges honored with the Star status by the Department of Biotechnology (DBT), a recognition bestowed by the Government of India. Furthermore, the college attained an "A++" Grade during its second cycle of accreditation by NAAC in 2022. The institution's remarkable progress is exemplified by its consistently improving National Institutional Ranking Framework (NIRF) ranking, which ascended from an all-India overall rank of 86 in 2018-19 to an impressive 36 in 2022-23.

#### **Major Activities and Achievements**

Maitreyi College experienced a highly fruitful and gratifying year, excelling not only in academics and research but across all spheres. Impressively, 1045 students participated in the final year undergraduate examinations, with an outstanding 989 students achieving First Division, resulting in an overall pass percentage of 99.92%.

The faculty members of Maitreyi College have shone brightly, garnering accolades for their exceptional achievements in both teaching and research. Their contributions included the publication of 16 books, 80

research papers, the acquisition of 1 international and 2 national patents, the creation of 26 book chapters, and the delivery of 36 paper presentations on national and international platforms.

The institution fervently believes in providing ample opportunities and platforms for both teachers and students to augment their knowledge, refine their teaching-learning skills, and foster a research-centric mindset. Notably, the college organized a total of 2 international conferences, 81 international and national seminars & webinars, along with 11 national workshops. Moreover, 13 certificate courses were offered to enrich the learning experience. A distinguished roster of 118 esteemed national and international speakers graced the college through these conferences, workshops, and webinars, sharing their expert knowledge and experiences with our faculty and students.

Adding to our achievements, Maitreyi College proudly inaugurated its Girls Hostel. The college's green thumb was on full display at the Annual University Flower Show-2022, as it clinched numerous prizes, including the "Delhi College Cup" for Best Rock Garden, "Janaki Amma Cup" for the finest border of flowers, and Second and Third Prizes in the 'Lawn' and 'Herbal Garden' categories respectively. Additionally, the college earned 12 prizes in the cut flower category.

Beyond the confines of the classroom, Maitreyi College continued to cultivate a research-intensive atmosphere through its Centre for Research. This year witnessed the execution of 27 projects as part of the Summer Internship Programme, engaging a total of 40 faculty members and 85 students. Furthermore, the Centre for Research generously funded a total of 10 Annual Research Projects, engaging a total of 20 faculty members and 31 students, further fueling the spirit of inquiry and innovation within the institution.

### **Honours/Distinctions**

Dr. Ankita Sehrawat was conferred the Dr. Sarvepalli Radhakrishnan Best Faculty and Researcher Award by The International Multidisciplinary Research Foundation (IMRF) Institute of Higher Education and Research in 2022. Also, she received the Best Teacher Award by the Institute of Scholars, International Publishers (IP) in 2022.

Dr. Shweta Sankhwar received the Women in Academics Award 2022 at Bengal Education Conclave and Siksha Samman organized by Nikhil Bharat Shiksha Parishad in 2022.

Dr. Pawan Kumar received an Award of Excellence by the Delhi School of Communication in April 2023.

Dr. Poonam Khatana received Women's Excellence Award by Amroha Police, Uttar Pradesh Government in 2023.

Dr. A. Vineetha was awarded with Power Faculty and Researcher Award by Punalik Fithealth India Pvt Ltd in Association with Gofitness Academy and Powermoves in 2022.

### **Students with Distinctions**

Khushi Wason of B.Com (Programme) III year secured first position in the University of Delhi final examinations.

Pragya Narain Shrivastava of B.Sc (P) Life Sciences III year was an International delegate at the Conference at Harvard University and was conferred with a full merit-based scholarship under the Harvard Project for Asian and International Relations.

Antra Sharma of B.A. (H) Economics III year received the Millennium Fellowship for her project “Strimay”.

Avishi of B.A. (H) Economics III year received the Millennium Fellowship for her project “Shiksha”.

Khushi Prajapati of BSc (Hons) Zoology I year secured second position in the University of Delhi final examinations.

## **Publications**

Dr. Atika Chandra. (2022). “Is Omicron mild”? Testing this narrative with the mutational landscape of its three lineages and response to existing vaccines and therapeutic antibodies . *Journal of Medical Virology*, 94(8), 3521-3539.

Dr. Atika Chandra. (2023). Comprehending the dynamism of B chromosomes in their journey towards becoming unselfish . *Frontiers in Cell and Developmental Biology*, 10(0), 1-26.

Dr. Sandeepa Singh. (2022). Targeting envelope proteins of poxviruses to repurpose phytochemicals against monkeypox: An in silico investigation . *Frontiers in Microbiology*, 13(0), 1-19.

Dr. Monika Heikrujam . (2023). Amelioration of the physio-biochemical responses to salinity stress and computing the primary germination index components in cauliflower on seed priming. . *Heliyon*, 0(0), 0-0.

Dr. Hema Bhandari. (2022). A review on recent progressions of Bismuth ferrite modified morphologies as an effective . photocatalyst to curb water and air pollution . *Inorganic Chemistry Communications*, 144(0), 109834.

Dr. Ankita Chaudhary. (2023). Sugars in multicomponent reactions: A toolbox for diversity-oriented synthesis . *Synthese*, 55(0), 1007–1041.

Dr. Brototi Roy. (2022). Molecular cloning, characterization and 3D modelling of spotted snakehead fbn1 C-terminal region encoding asprosin and expression analysis of fbn1. . *Scientific Reports.*, 13(0), 14470.

Dr. Neelam Singh . (2022). Alkali (Na, K) doped SnO<sub>2</sub>: An investigation on the role of microstructure on electricity generation of oxide based ceramic hydroelectric cells. . *Inorganic Chemistry Communications*, 146(0), 110115.

Dr. Vasudha Agarwal . (2022). Oxygen vacancy-induced enhancement in magnetism and magneto-transport properties in Sm<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> thin films . *Applied Physics A: Materials Science and Processing.*, 128(0), 121135.

Dr. Shalini Lumb Talwar. (2022). Generation of adiabatic pulses. *Physica E: Low-Dimensional Generation of adiabatic pulses. Physica E: Low-Dimensional Systems and Nanostructures. . Physica E: Low-Dimensional Systems and Nanostructures., 144*(0), 115431.

### **Journals**

Prof. Haritma Chopra, Dr. Gopi Devdutt Tripathy, Dr. Brototi Roy, Dr. Meena Yadav, (2022). Vantage: Journal of Thematic Analysis (ISSN: 2582-7391) *Bi-annual, 2*(2), 1-139

### **Patents Filed/Granted**

German Patent, entitled "Implementing a modified CFD Model for Micro-Scale Air Pollutant Spreading in a Coastal Urban Environment" in 2022. Patent Holder: Dr. Lata Vodwal.

Indian Patent, Design on “Immunity Testing Kit for Kids”. Design No. 379780-001 in 2023. Patent Holder: Dr. Tejendra Kumar

Indian Patent, Ultraviolet (UV) Disinfectant Box. Patent No. 409373, in 2022. Patent Holders: Dr. Gita Batra Narula and Dr Swarandeeep Kaur Sethi

### **Seminars Organized**

Seminar entitled, “Digital Health” by Prof. Huiru (Jane) Zheng, School of Computing, Theme leader of Data Analytics and Systems in AI Research Centre, Ulster University on 20 September, 2022.

Seminar entitled, “Role of Women in Disaster Management” by Dr. Ahmed Al Banna, UAE Ambassador to India, and by Dr. K.S. Sukon, Director General, Open University of Mauritius on 08 September, 2022.

Seminar entitled, “Well Being is a Skill” by Prof. Richard Davidson, William James and Vilas Professor of Psychology and Psychiatry, University of Wisconsin–Madison and Founder and Director of the Center for Healthy Minds, on 07 December 2022

Seminar entitled, “Use of Yoga to Develop Scientific Epistemology for Integrative Health” by Prof. Bal Ram Singh, President of Advanced Sciences, Dartmouth, USA and Director, Botulinum Research Centre, Dartmouth, USA, on 17 January 2023.

### **Conferences Organized**

Organized the Annual international conference “Equinox” 2022 on 11 August 2022 by CFR, Maitreyi College.

Organized the First World Disability Conference (WDC) on “Contemporary Interventions in Disability Discourse” on 26 June 2022 in collaboration with Divyang Employees Welfare Association (DEWA).

### **Seminar/Conference Presentations**

Dr. Shweta Sharma presented a paper entitled “Comparative Analysis of TP53 gene Encoding for Tumour Protein p53 in Different Organisms to Understand the Molecular Mechanism of Cancer Resistance” in International Conference on Revisiting Wellbeing: Perspectives, Challenges, and the Road Ahead, organized by the Gargi College during 1-2 February 2023.

Ms. Neha presented a paper entitled “The Impact of the Institutional and Environmental Factors on the Sustainable FDI: Evidence from in ASEAN Economies” in the International Conference on Evolving Business Strategies in a Transforming Global Environment organized by Jesus and Mary College during 20-21 January 2022.

Dr. Jyotsna presented a paper entitled “Economic transformation-Embracing the change of Intra-regional trade practices: A study on India and Sri Lanka” in the International Conference on Corporate and Economic Transformation – Embracing the Change organized by Deen Dayaal Upadhyaya college, University of Delhi during 24-25 March 2022.

Ms. Ramita presented a paper entitled “Customer Perception towards Open Banking and Digital-only Banks in Delhi NCR” at International Conference on Sustainability & Digitalization organized by the Department of Management, Jamia Hamdard held on 28-29 September 2022.

Dr. Lata Vodwal presented a paper entitled “The study of molecular interactions of pesticides with Bovin beta-lactoglobulin protein as a potential pesticide carrier” in Online International Conference on "Recent Advancement in Chemical Science: health, Environment and Society" organized by Deshbandhu College University of Delhi held during 08-09 April 2022.

Dr. Anita Devi presented a paper entitled “हिंदी सिनेमा की भाषा : आज और कल” in International Conference on Bhasha ka Prashn aur 21vin Sadi ka Bharat organised by Vishv Hindi Parishad and Adhyayan Foundation at India International center during 21-22 January 2023.

Dr. Geetan Manchanda presented a paper entitled “A new high accuracy cubic spline method based on half-step discretization for the system of 1D wave equation in polar coordinates” at the International Conference on Evolution In Pure & Applied Mathematics (ICEPAM-2022) organized by the Department of Mathematics, Akal University, Talwandi Sabo, Bathinda, Punjab (India) from 16-18 November 2022.

### **National/International MoUs Signed**

MoU with Translational Health Science and Technology Institute (THSTI), Faridabad for holding training sessions. Scientists at the premier institution have conducted talks and lectures at the participating colleges on various aspects of biotechnology, immunology and other science and technology topics

MoU with “Jaagruti”, Waste Paper Recycling Services, for recycling the paper waste of the college.



MoU with ICT Academy to organize student literacy programs, power seminars and faculty development programs in association with ICT Academy.

MoU with Institute of Advanced Studies, USA for organizing 3-month certificate course in Sanskrit language to promote Sanskrit language among the youth of our country and propagate our ancient culture and values among them.

MoU with IndoGenious Talents Pvt. Ltd. for hosting exchange program for students from New-Zealand under New-Zealand Prime Minister's Scholarship Program.

MoU with National Institute of Immunology (NII), New Delhi for organizing seminars, talks and training programs in collaboration with NII.

### **Student under Exchange Program (Inbound/Outbound)**

No of Program: 01 (New Zealand Prime Minister's Scholarship for Asia)

No of Students Involved: 21

**Number and percentage of students placed: 218**

**Number of Companies visited for campus recruitment: 70**

### **Extension and Outreach Activities**

During the 2022-23 academic session, Maitreyi College orchestrated a series of impactful outreach events. The Enabling Unit at Maitreyi College stood as a vital pillar of support and guidance for both differently-abled students and faculty members. In adherence to Delhi University's new examination policy for Persons with Disabilities, the Enabling Unit renewed the Writer & Reader's Bank for the session and introduced the revolutionary Kibo XS Device—a Multilingual Scanning & Reading Device—for the benefit of visually impaired individuals. This cutting-edge technology significantly alleviated reading challenges faced by the visually impaired community.

Collaborating with the Health & Hygiene Committee of Maitreyi College, the Enabling Unit hosted two enlightening National Webinars in which “Cardiovascular Diseases and Diet” took center stage, followed by “Workplace Orthopaedic: Sports Injuries & Joint Pain”. The Enabling Unit embarked on a commendable initiative, diligently creating e-content tailored for individuals with print disabilities, which is now accessible to those in need worldwide.

In a bid to promote the virtues of social service and healthcare, a comprehensive 'Blood Donation Drive, Free Dental Check, and Mammography Examination for Health Check-up' was organized in collaboration with the Rotary Club.

In January 2023, a 'Cleanliness Drive' mobilized fifteen dedicated volunteers to spruce up the DDA Park in Satya Niketan, fostering awareness of hygiene and a pristine environment within the civil society. NOVOUDIT, a collaborative effort with Youth for Seva and NCC, Maitreyi College, was held on 29 January 2023, celebrating and nurturing the talents of young children from underprivileged backgrounds.

Drawing participation from over 3000 students across various schools, NGOs, and localities in the NCR region, the program made a significant impact.

### **Library Development**

The college library acquired 791 books (up to 31 March 2023) during the 2022-2023 session. The total collection of the library has been augmented to 1,00,437 print books. The library also subscribes to 52 Journals, including popular magazines and a collection of 22 newspapers (15 Titles) in the library. The library subscribes to the N-LIST consortium, which covers 6000+ e-journals and 1,99,500 e-books under N- list as well as 6,00,000 e-books through NDL.

The college library continues to be a member of DELNET (Developing Library Network), which specially caters to our needs through inter-library loans. The library has created its institutional repository using DSpace software which is accessible in the library only. Library users can access the previous and current year syllabus/question papers under the library tab on the college website. Besides this, the library also introduced one more Kiosk Machine (2 in total) for the Online Public Access Catalogue (OPAC) and for searching library books and to help library users know about their pending fees and dues.

**Total Faculty Strength: 193**

### **Financial Allocation and Utilization**

Grants Allocated: 73,18,37,069/-

Grants Utilised: 72,49,17,914/-

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## **MATA SUNDRI COLLEGE FOR WOMEN**

### **Brief History of the College**

Mata Sundri College for Women, named after Mata Sundri Ji, the consort of the Tenth Guru of Sikhs, Guru Gobind Singh Ji, was established to propagate the cherished ideals of service, leadership, social responsibility, and academic pursuits among young women with the motto, “Truth is the highest of all virtues but true living is higher still”.

The foundation of the college was laid by a team of dedicated, devoted, and noble Sikh leaders led by Jathedar Santokh Singh. The college commenced with only B.A.(Pass) course but moved ahead to four new courses i.e., B.A.(Hons.) in Punjabi, Hindi, Sanskrit, and History that were introduced in 1968. B.A.(Hons.) in Political Science and Philosophy were added in 1969. The college became a full-fledged constituent college of the University of Delhi when Post Graduation in Punjabi was introduced in 1976 and Master in Sanskrit began in 1978. The year 1978 also saw the addition of a B.A. (Hons.) in Mathematics and B.Com. (Pass) to the steadily increasing number of courses. B.A. (Hons.) in English was introduced in 1980 and B.A. (Hons.) in Psychology and B.Com. (Hons.) in 1985.

## Major Activities and Achievements

The College was accredited with a Grade 'A' and a CGPA of 3.18 by the NAAC. The College also initiated participation in other quality audits like NIRF and India Today. The MBA Cell, Motivation to Masters Cell, The Civil Services Society, and the CA/CS Cell remained active throughout the year and organized talks, lectures, and workshops for students.

A Research and Development Cell was established under the aegis of the Research Advisory Council to foster an environment of research in the College and monitor day-to-day research activities being undertaken by faculty and students. Rajbhasha Kriyanvayan Samiti was established to promote the use of official languages. Signage in Hindi and Punjabi is being made and official communication in Indian languages is being carried out.

## Honours/Distinctions

Professor Harpreet Kaur was conferred with the Woman of Excellence Award on International Women's Day - 2023 at a special IWD event organized by Sikh Dharma International, Global Alliance for Women Empowerment, Win-Win Women, and Global Peace and Prosperity Initiative. She also received the Outstanding Scientist Award in the 13th IKSAD Science Awards by The Institute of Economic Development and Social Research Turkey for outstanding scientific performance in research in 2023. She also received 'Vishwa Vageshwari Samman' by Vishwa Hindi Sahitya Parishad Bharat in 2023. Along with this, she received the National Gaurav Award at the 9th National Gaurav Award 2023 organized by Indian Brave Hearts NGO on 23 February 2023. She also received Samman Patar for promotion of the Punjabi language, literature, and culture by Punjabi Pracharni Sabha and Punjabi Lok Manch, Delhi on International Mother Language Day on 21 February 2022. She was also conferred with the Ambassador of Green Planet Award by BloomHo Global & Golden Signatures in 2022. Along with this she also received the Ambassador of Peace Award from Universal Peace Federation in 2022. Further, she was conferred with Appreciation for outstanding service, tireless efforts and constant support to PCRA (Petroleum Conservation Research Association) and its projects related to fuel and energy conservation in Saksham-2022 (Azadi ka Amrit Mahotsav) through Green and Clean Energy, as also appreciation by Mahatma Gandhi National Council of Rural Education, Government of India at the World Environment Day Celebrations, June 2022 for facilitating and completing the Green activities on campus.

Dr. Uzma Nadeem was conferred with the Woman of Excellence Award by Sikh Dharma Universal, Global Alliance for Women Empowerment, Global Peace and Prosperity Initiative, and Win-Win Women on International Women's Day, 2023. She also received the Outstanding Scientist Award during 13 IKSAD Science Awards organized by IKSAD and Award Commission Turkey for outstanding scientific performance in 2022.

## Publications

Kaur, H. . (2022). Bhai Kanhaiya: Pioneer of the Red Cross Movement. Khalsa . *Khalsa Samachar*, 32(35), 7-10.

Kaur, G., Sharma, U. and Singh, G. . (2023). Affective as mediator of normative commitment to behaviour relationship and professional commitment as salient predictor of citizenship behaviour: empirical confirmation. . *International Journal of Public Sector Performance Management*., 11(2), 218–232..

Gupta, P. & Gupta, S. . (2022). Deep Learning in Medical Image Classification and Object Detection: A Survey . *International Journal of Image Processing and Pattern Recognition*, 8(2), NA.

Tiwari, S., Kaur, C. . (2022). Assessment of Sports Psychological Skills between Male and Female Sports Persons . *Shodhsamhita*., IX(1), NA.

Kaur, D.. (2022). Maharani Jind Kaur: Iron Lady of the Sikh Empire . *International Journal of Research and Analytical Reviews*, NA(NA), NA.

Gupta, L. . (2022). Kartavya bodh aur Mulybodh ko Rachta Upanyas, ‘Utkoch’ . *Abhivyakti Magazine*, NA(NA), 62-64.

Kaur, G. (2022). Unit II. In H K Dass, Rajnish Verma & Dr. R. Verma (Eds.), Differential Equations: Semester 2 . *NA*, NA(NA), 92-124.

Kaur, H., Nadeem, U. and Manekeyeva, R.. (2022). Proceedings of International Scientific Research Congress-XII by Institute of Economic Development and Social Research Publications, Turkey. IKSAD Publications. . *NA*, NA(NA), NA.

Bhattacharyya, P. . (2022). Indian Cinema: A Celluloid Journey Through Time. Media and Communication: A Handbook of Students. Worldview. . *NA*, NA(NA), NA.

Gupta, P. & Gupta, S.. (2022). Deep Learning in Medical Image Classification and Object Detection: A Survey. . *International Journal of Image Processing and Pattern Recognition*., 2(8), NA.

### **Seminars Organized**

One-day seminar on “Art, Nature & ESD: Pedagogy of Hope” by Nicole Goetschi Danesi, Professor, HEP Vaud, Switzerland was organized on 03 February 2023.

“Bhartiya Bhashaon ki Ekatmakta mein Hindi ki Bhumika” by Atul Kothari, National Secretary, Shiksha Sanskriti Utthan Nyas, on Indian Languages was organized on 14 September 2022.

### **Conferences Organized**

Organized a three-day International Conference on “Rethinking Partition: 75 Years”, by IQAC in collaboration with Punjabi Sahit Sabha Delhi, and ICSSR on 03 November 2022.

Organized a two-day national conference dedicated to the 400th birth anniversary of Guru Tegh Bahadur by the Minority Cell in collaboration with the Haryana Punjabi Sahitya Akademi on 25 August 2022.

Organized the “International Modern Scientific Research Congress”, by The Department of Environmental Studies in collaboration with the Institute of Economic Development and Social Researches Turkey from 13-15 August 2022.

### **Seminar/Conference Presentations**

Prof. Harpreet Kaur presented a paper titled, “Environmental Management Through Green Infrastructure” at the Latin American International Congress on Social Science and Humanities- IV in Rio de Janeiro, Brazil from 13-15 March 2023.

Dr. Harleen Kaur presented a paper titled, “Analysing bibliometrics of Energy Efficient Consumer Behavior” at the 10th International Conference on Advances in Business and Management organized by Shaheed Bhagat Singh College, University of Delhi on 10-11 November 2022.

Ms. Shivani Verma presented a paper on “Environment Anemia due to Hard Energy Usage: Focusing on Remedial Measures” at the 3rd International E-Conference on Environment, Climate Change and Sustainability organized by IPEM Law Academy in collaboration with Eco Foundation, held on 15 October 2022.

Dr. Radhika Menon presented a paper on “Tracing Patriarchy in Family Cultures” at TEF India Dialogue- SCERT, DIET Kottayam in Kerala on 21 June 2022.

Dr. Rashmi Verma presented a paper entitled “Repeated burst error and its variants” at the International Conference on Applied Mathematics, Informatics and Computing Sciences (AMICS) organized by Bosen Academic Research Institute from 5-7 December 2022.

Dr. Daljit Kaur presented a paper on “Bhagat Bani, Guru Granth Sahib – An Explicit Legacy” at the Inter-Religious Conference at Punjabi University, Patiala from 10-11 October 2022.

Dr. Garima Mani Tripathi presented a paper on “The idea of universal language and prospects for Hindi: a philosophical study” at the International Conference on Question of Language & India in the 21st Century at 12th International Literary and Language Conference organized by the World Hindi Literary Council, New Delhi on 21 January 2023.

Dr. Iqbal Kaur presented an article, Nadeem Parmar de Novel ‘Nipatta Rukh-Ik Adhyan’ at the one-day International online seminar, Vartman Parvasi Punjabi Sahit de Vishegat Sarokar organized by Dyal Singh College on 28 September 2022.

Dr. Gurjit Kaur Presented a paper on “Surinder Geet da Kaav Sangreh: Gusthak Hawa (Alochnatmak Adhyan)” in one day International online seminar Vartman Parvasi Punjabi Sahit de Vishegat Sarokar organized by Dyal Singh College on 28 September 2022.

Dr. Neetu Sharma presented a paper on “Shiromani Akali Dal and the Partition of Punjab” at the 3-day International Conference on Rethinking Partition: 75 years at Mata Sundri College for Women from 3-5 November 2022.

### **National/International MoUs Signed**

MoU signed with Sanskrit Bharti, New Delhi to promote Sanskrit Sambhashan (spoken Sanskrit).

MoU signed with Calligraphy India for textile designing skill enhancement.

MoU signed with University of Teacher Education, State of Vaud, Switzerland (HEP) for Intercultural Exchange programme on ESD.

MoU signed with Vii Media for capacity building and organizing seminars, workshops and symposiums for academic exchange.

MoU signed with Drivv Effective Education for Capacity building, Conferences, Seminars, workshops, symposiums for academic exchange.

MoU signed with Philosophical Practitioners Association for Short term course- Introduction to philosophical Counselling.

MoU signed with Indo Global Business Council Chambers for organizing conferences, Seminars, workshops, symposiums for academic exchange.

MoU signed with Aggarwal College Ballabhgarh, Haryana for Outreach, Conduct of academic activities and capacity building- symposiums, conferences, workshops and the like.

MoU signed with Excel Range Media to create awareness of web designing, knowledge of Wordpress and Shopify.

MoU signed with Roshni -NGO for Installation of Sanitary Napkin Disposal Machine & Sanitary Napkin Vending Machine.

MoU signed with Sorditcon Private Limited for E-Waste Management Services.

MoU signed with Institute of Economic Development and Social Researches, Turkey for Cooperation Between IKSAD & MSCW for various academic activities (Research, Innovation, Publication, Conferences, Trainings, Seminars and other educational activities).

MoU signed with Udyami Helpline India for Entrepreneurship Development Programme for students.

### **Other Inter-Institutional Collaboration**

On 22 March 2023 an Advance Excel Workshop was conducted in collaboration with Appwars Technologies Pvt. Ltd. The Trainer/Speakers were Mr. Mohammad Kashif and Mr. Utkarsh Upadhyay.

International Scientific Research Congress-XII was organized 13-15 August 2022, in collaboration with the Institute of Economic Development and Social Research, Turkey.

FAMEX (Familiarization Exercise) was organised by the Department of Environmental Studies in by District Disaster Management Authority, Central Delhi in collaboration with the 8th Battalion, National Disaster Response Force (NDRF), Ghaziabad, Central Delhi on 19 January 2023 for the students, teaching and non-teaching staff members.

Hindi dept. in collaboration with 'Bhartiya Bhasha Manch' celebrated '*Matra Bhasha Pakhwada*' in February 2023.

A Certificate course on philosophical counselling was organised in collaboration with the Philosophical Practioners' Association, from 03 February 2023 onwards.

In collaboration with WELLM a webinar on the topic "Anxiety To Success: A New Paradigm" was organised on 12 September 2022.

To the celebrate 150th Birth Anniversary of Bhai Vir Singh, a program was organised in collaboration with the Bhasha Vibhag Punjab on 21 December 2022 on Vichar charcha- Bhai Vir Singh: Rachnava ate Prasingita".

A self-defence workshop was held in collaboration with Udankaar: Ek Nayi Subah and NCWEB on 18 and 19 March 2023 to commemorate Women's History Month.

On 1 March 2023, a Cyber Crime Awareness Workshop was organised in collaboration with Delhi Police.

An event dedicated to Women in the World was organised on 4 March 2023 in collaboration with DSGMC and Sikh Dharma Universal.

The Eco Club and Internal Complaints Committee organised a webinar on "Fundamental Rights and Duties with Special Emphasis on Clean Environment" in collaboration with Central District Legal Service Authority and Saahas NGO on 24 May 2022.

An awareness session on "Health & Air Pollution Widespread Awareness (H.A.W.A.)" in collaboration with Lung Care Foundation was held on 24 November 2022.

The E-waste and paper waste disposal campaign was organised on 10 January 2023.

An E-Waste Management Awareness Session was organised with special emphasis on sustainability in collaboration with Sorditcon Pvt.Ltd. on 17 January 2023.

World Water Day was observed in collaboration with the National Museum of Natural History (NMNH), New Delhi (Ministry of Environment, Forest, and Climate Change Government of India) on 22 March 2023.

**Number and percentage of students placed: 61**

**Number of Companies visited for campus recruitment: 21**

## Extension and Outreach Activities

Two workshops were organised under the ongoing School Collaboration Programme “Sahyog: A Community Outreach Initiative”. The workshop on “*Guru Gobind Singh ji and Khalsa Sajna Diwas*” by Dr. Jagjeet Kaur (Assistant Professor, Department of Punjabi) was held on 10 November and the workshop on “Vedic Maths Tricks” by Dr. Ramita Sahni, Assistant Professor, Department of Mathematics was held on 12 December 2022. These workshops were enthusiastically attended by faculty and students of our collaborating neighbourhood school.

Sangini Saheli and Delhi Police, North District organised Personal Hygiene and Menstrual Hygiene lecture by Ms. Priyal Bhardwaj for Than Singh Ki Pathshala students on 20 August 2022.

## Library Development

1399 books were added this academic year, making the total number of books in the library as 1,17,669. The college subscribes to 38 journals and magazines and 6 newspapers. DELNET (Developing Library Network) Institutional membership has been taken.

**Total Faculty Strength: 158**

## Financial Allocation and Utilization

Grants allocated: Rs. 59,24,87,348/-

Grants utilized: 59,24,87,348/-

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## MIRANDA HOUSE

### Brief history of the College

Miranda House (MH) started its existence as a hostel for women students in 1946 from an old colonial bungalow situated at 7, Probyn Road (now renamed Chhatra Marg). The college eventually started in 1948, under the stewardship of Sir Maurice Gwyer, Vice Chancellor of the University of Delhi (1938–1950). Ms. Veda Thakurdas was appointed the first principal. 122 young women were admitted into several departments: English, Economics, Hindi, History, Philosophy, Mathematics, Sanskrit, Physics and Zoology. The college pioneered basic science education for women. Today, the college has eighteen departments that span humanities, social and natural sciences, 200 faculty members and more than 5000 students.

The history of Miranda House chronicles the history of women’s education as well as that of the women’s movement in post-independence India. The foundation stone for what is now the Hostel building was laid by Edwina Mountbatten on 7 March 1948. MH has created a space for quality and holistic education in the Humanities, Social Sciences and basic Sciences that is inclusive and dedicated to turning out sensitized and capable students, who aspire to be leaders and responsible citizens of the country. It has been awarded All India Rank One amongst colleges under the National Institutional Ranking Framework (NIRF) for seven



consecutive years from 2017 to 2023. It has an Institutional Grade of A++ from NAAC and granted the Star College status by the Department of Biotechnology.

### **Major Activities and Achievements**

Miranda House (MH) has aligned its focus with the National Education Policy (NEP) 2020 by emphasizing research, skill development, and outreach activities. To support this, MH has bolstered its Multidisciplinary Research Centre, dedicated to advanced semiconductor device fabrication research conducted by Ph.D. students, in line with the Hon'ble Prime Minister's mission to enhance India's self-reliance in this field.

MH showcased India's leadership at the G20 through a series of events under the theme "Making India Count - Role of Youth, Academia, and Intellectuals." The college also signed a MoU with the Korea National Sport University, marking 50 years of India-Korea Diplomatic Relations. In addition, MH achieved remarkable success by winning eight prestigious cups at the Flower Show, including the Platinum Jubilee Cup, and Centenary Cup.

MH has been recognized as a Social Entrepreneurship, Swachhta, and Rural Engagement Cell (SES REC) Institution, and as a Sustainable Campus in key areas such as Sanitation, Hygiene, Waste Management, Water Management, Energy Management, and Greenery Management by the Mahatma Gandhi National Council of Rural Education, Government of India. Notably, MH recently earned the distinction of being the District Eco-SDG Champion 2023 with an Outstanding Performance Grade 'S' for the North Campus–Delhi District.

### **Honours/Distinctions**

Dr. Rashmi Shakya received the International Research Experience Award by DST SERB, 2022.

Prof. Anindita Sarkar received the Delhi University Teacher's Excellence Award by the University of Delhi, 2023.

Dr. Deepak received IRSD Prominent Teacher Award at the International conference IRSD held at Jamia Hamdard New Delhi, 2023.

Prof. Kalawati Saini received International, Best Research Award for the Research & Excellence in Electrochemistry, Material Chemistry, Anticancer Activity at the Royal Research Award Ceremony, ISSN IISTAC, 2022. She also received International Young Scientist Award by Science Father, a trademark of Scifax Company.

Prof. Monika Tomar received Woman in Science Research and Academics (Award) by Kamla Power Women Award NGO, March 2023.

### **Students with Distinctions**

Shalini Thakur of B. Sc. (H) Mathematics III year was awarded rank I in University of Delhi.

Samriddhi Mishra of B. Sc. (H) Mathematics III year was awarded rank II in University of Delhi.

Arshdeep Kaur of B.A. (H) Political Science III year was awarded rank I in University of Delhi.

Kaavya Khemka of B.A. Programme I year was awarded rank I in University of Delhi

Meenakshi of M. Sc. Mathematics Final Year was awarded rank I in University of Delhi.

## **Publications**

Bhatt, P., Sharma, M., Sharma, P., Rathi, B., Sharma, S. (2022). Mycobacterium tuberculosis dormancy regulon proteins Rv2627c and Rv2628 as Toll like receptor against and as potential adjuvant. *International immunopharmacology*, 112 (0), 109238.

Jain, S., Paliwal, A., Gupta, V., Tomar, M. (2022). SPR based refractive index modulation of nanostructured SiO<sub>2</sub> films grown using GLAD assisted RF sputtering technique. *Surfaces and Interfaces*, 34(2), 102355.

Jeengar, C., Jindal, K., Tomar, M. and Jha, P. (2022). Study of Intrinsic Point Defects in  $\Gamma$ -In<sub>2</sub>Se<sub>3</sub> for the Realization of an Efficient UV Photodetector. *Journal of Alloys and Compounds*, 912 (0), 165197.

Kaur, L., Rahman, J.A., Singh, A., Pathak, M., Datta, A., Singhal, R., Ojha H. (2022). Binding studies for the interaction between hazardous organophosphorus compound phosmet and lysozyme: Spectroscopic and In-silico analyses. *Journal of Molecular Liquids*, 118954(355).

Kumar, S., Kovalenk, S., Bhardwaj, S., Sethi, A., Gorobets N. Y., Poonam; Rathi B. (2022). Drug Repurposing against SARS-CoV-2 forecasted by computational approaches. *Drug Discovery Today*, 27(5), 2015-2027.

Kumari, R., Yadav, Y., Misra, R., Das, U., Adhikari, P.M., Dubey, G.P. (2022). Emerging frontiers of antibiotics use and their impacts on the human gut microbiome. *Microbiological Research*, 263(0), 127127.

Lamichhane, S., Sharma, S., Tomar, M., Chowdhuri A. (2023). Studies on energy storage properties of BFO/WO<sub>3</sub> bilayer thin film capacitor. *Energy Storage*, 5(1), 1-11.

Medha, Priyanka, Bhatt, P., Sharma, S., Sharma, M. (2023). Role of C-terminal domain of Mycobacterium tuberculosis PE6 (Rv0335c) protein in host mitochondrial stress and macrophage apoptosis. *Apoptosis: An International Journal on programmed cell death*, 28( 1-2 ), 136–165.

Oak, H. and Bansal S. (2022). Enhancing energy efficiency of Indian industries: Effectiveness of PAT scheme. *Energy Economics*, 113(C).

Yadav, S., Yadav, J., Kumar, M., and Saini, K. (2022). Synthesis and characterization of nickel oxide/cobalt oxide nanocomposite for effective degradation of methylene blue and their comparative electrochemical study as electrode material for supercapacitor application. *International Journal of Hydrogen Energy*, 47(99), 41684-41697.

## Research Projects

North Eastern Council, Government of India, 2022-2025, Establishing the Northeastern Regional Research and Resource Centre at Miranda House. Sanctioned amount of Rs. 275.40 lakhs. PI – Prof. Bijayalaxmi Nanda.

DRDO, 2019-2023, Fabrication of Lamb Wave Devices on SiO<sub>2</sub>/Si Membrane for strategic applications. Sanctioned amount of Rs. 428.03 Lakhs. PI – Prof. Monika Tomar.

DST, 2019-2023, Realization of MEMS based Dual Energy Harvester using ferroelectric and ferromagnetic thin film layered structures. Sanctioned amount of Rs. 51.48 Lakhs. PI – Prof. Monika Tomar

DST, 2021-2023, Sustainable route for pesticide management using nano based efficient pesticide formulation technique to enhance crop productivity. Sanctioned amount of Rs. 46.77 Lakhs. PI – Dr. Poonam.

SERB, 2020-2023, Lead Optimization of Potent Multistage Antimalarials. Sanctioned amount of Rs. 46.41 Lakhs. PI – Dr. Poonam.

## Patents Filed/Granted

USA Patent; Patent Holder: Ashok Kumar, Hitesh Borkar, Viabhav Rao, Monika Tomar, Vinay Gupta; Patent granted in: 20/07/2020; Title: “Multi-States Nonvolatile Opto-Ferroelectric Memory Material and Process for preparing the same thereof” (Patent no. US10115456B2, 2018/10/30) (US20170206952A1, 2017/1/13).

USA Patent; Patent Holder: Steve Bradfute, Ravi Durvasula, Praksha Kempaiah, Brijesh Rathi, Poonam, Yash Gupta; Patent granted in: 29 April 2022; Title: “Calxinin Compositions and Method of Treating Viral Infections” (Application no. PCT/US22/26943).

Patent Holder: Vinay Gupta, Monika Tomar, Ayushi Paliwal and Surbhi Jain; Patent granted in: 27 August 2020; Title: “A novel highly sensitive and reliable LRSPR biosensor for detecting uric acid and fabrication thereof” (Application no. 201911006783).

Patent Holder: Vinay Gupta, Monika Tomar, Anjali Sharma and Avneet Singh; Patent granted in: 27 August 2020; Title: “Electric field assisted low power consuming conducto-metric gas sensor” (201811006329).

Patent Holder: Vinay Gupta, Monika Tomar, Anjali Sharma, Avneet Singh, Parivesh Chugh, Jaivinder Singh, Bharthy Subramanian; Patent granted in: 08 March 2019; Title: “A sensitive, selective and rapid fuel gas sensor” (Application no. 201711011941).

Patent Holder: Neelam R Yadav, Rizwana Rehsawla, Surbhi Jain, Savita Sharma, Monika Tomar, Vinay Gupta; Patent granted in: 30 May 2020; Title: “SPR based DNA biosensor for the detection of Puccinia striiformis f. tritici, causal agent of yellow rust in wheat” (Application no. TEMP/E-1/24707/2020-DEL)

Patent Holder: Rizwana Rehsawla, Neelam R. Yadav, Nidhi Dhull, Savita Sharma, Monika Tomar, Vinay Gupta; Patent granted in: 26 June 2020; Title: “Electrochemical based genosensor for the detection of *Puccinia striiformis f. tritici*, causal agent of yellow rust in wheat” (Application no. TEMP/E-1/30053/2020-DEL).

Patent Holder: Pradip K. Jha, Monika Tomar, Kajal Jindal, Chanchal; Patent granted in: 21 July 2023; Title: “Photoelectrochemical water splitting based biosensor for detecting uric acid in the biological fluids” (Application No.: 202311040935, Publication date: 21/7/2023).

Patent Holder: Monika Tomar, Anjali Sharma, Lokesh Rana, Reema Gupta, Shweta Sharma ; Applied on: 29 March 2023; Title: “Lithium Doped Potassium Sodium Niobate Thin Film Based Mems Pressure Sensor” (Application No.- 202311023209).

Patent Holder: Monika Tomar, Lokesh Rana, Reema Gupta, Anjali Sharma, Pradip K. Jha, Manisha Bharti, A. T. Nimal, Upendra Mittal; Applied on: 10 January 2023; Title: “Lamb Wave Resonator Device for Pressure Sensing” (Application No.- 202311002112).

Patent Applied by: Monika Tomar, Lokesh Rana, Vandana, Reema Gupta, Anjali Sharma, Manisha Bharti, A. T. Nimal, Upendra Mittal, James Ajit Raymond; Applied on: 5 June 2023; Title “Integration of Niobium Lead Zirconium Titanate (PNZT) Thin Film Lamb Wave Acoustic Device” (Application No.- 202311036612).

Patent Applied by: A. T. Nimal, Upendra Mittal, Monika Tomar, Lokesh Rana, Reema Gupta, Anjali Sharma, Shweta Sharma, Manisha Bharti; Applied on: 8 December 2022; Title “Fabrication of Lamb Waver Acoustic Device using Potassium Sodium Niobate (KNN) thin films” (Application No.- 202211070947).

### **Seminars Organized**

Seminar entitled, ‘Work and Education, Global Women’s Breakfast Series: Women in STEM’ by Dr. Charlotte Yates, President & Vice-Chancellor University of Guelph, Ontario, Canada, Gender on 13 February 2023.

Seminar entitled, ‘Celebrating 50 years of India-Korea diplomatic relations: India-Korea diplomatic relations’ by Mr. Lee Sang-Hwa, Public Diplomacy Ambassador, Republic of Korea, on 24 February 2023.

Seminar entitled, ‘Start-up: Women Entrepreneurship in India, Start-Up, Sustainability, Innovation and Entrepreneurship in North-East India’ by Dr. Jitendra Singh, Minister of State for Science and Technology and Department of Personnel and Training Union Cabinet, Government of India on 28 March 2023.

Seminar entitled, ‘Health Planning, Male Health and Translational Medicine in North-East India, Translational Medicine and North-East India’ by Prof. (Dr) Sujoy K Guha, Padma Shri, Prof. Emeritus, Biomedical Engineering in the School of Medical Science and Technology, IIT (Kharagpur) Currently at SGT University, Gurugram, India on 06 December 2022.

Seminar entitled, 'Metal and Modern Medicine, Inaugural Seminar Series' by Prof A. K. Ganguli, Deputy Director (Strategy & Planning), Prof N K Jha Chair Professor, Department of Chemistry, Professor, Department of Materials Science and Engineering, Indian Institute of Technology, Delhi, organized by Rasayanika, The Chemical Society, Department of Chemistry on 19 March 2022.

### **Conferences Organized**

Organized IUPAC-GWB 2023 - International Conference on 'Recent Trends in Chemistry' on 14 February 2023, by DBT-CTEP Govt. of India, in collaboration with DRDO, Ministry of Defense, Government of India.

Organized 2nd International Conference on 'Integrative Chemistry, Biology and Translational Medicine', on December 2022, by Ministry of Defense, Government of India, in association with Hansraj College (DU), INMAS (DRDO), HeteroChem IrmoTech, Mayo Clinic (Florida, USA), University of Debrecen (Hungary), SGT University (Gurugram) and Institute of Eminence (DU).

Organized International Conference on 'Start-Ups, Sustainability, Innovation and Entrepreneurship in North-Eastern India' on 28 March 2023 by North East Regional Research and Resource Center (NERRRC), Miranda House and North Eastern Council (NEC), Shillong.

Organized National Conclave on 'Environment and Happiness' on 11 November 2022 by Bharat Vikas Parishad (Project Environment), in Collaboration with Centre for Himalayan Studies (University of Delhi) and Himalayan Study Circle, Miranda House.

Organized Ideation Conclave-I: 'Prospects and Possibilities for Research Innovation, Entrepreneurship in Northeast India' on 14 September 2022 by NERRRC, Miranda House and NEC, Shillong.

### **Seminar/Conference Presentations**

Prof. Monika Tomar was invited for a talk on "Novel MoS<sub>2</sub> and GaN based Triboelectric Nanogenerators for energy harvesting application" at International Conference on Electron Microscopy & Xli Annual Meeting of Electron Microscope Society of India (Emsi-2023) organized by Department of Physics and Astrophysics, University of Delhi from 8-10 February 2023.

Dr. Hena Oak gave a Conference Oral Presentation on "Efficiency of Indian cement firms: A DEA analysis of large cement producers of PAT Cycle I and II" in the 9th International Conference on Energy and Environment Research ICEER 2022 at Porto, Portugal on 12-16 September 2022.

Dr. Rehka Kumari was invited for an e-talk on "Role of Gut Bacterial Bacteriocins to Combat Obesity by Regulating Lipogenesis" at 7th Annual International Conference of the Indian Network of Soil Contaminated Research (INSCR 2022) from November 7 -11 November 2022.

Prof. Bashabi Gupta was invited for a talk on "Role and Contribution of Indian Diaspora in the Indian Independence Movement: Travel Diaries of Subhas Chandra Bose in Europe and the Remaking of Azad Hind Fauj in Singapore at Contributions of Indian Diaspora in Freedom Struggles of India and the Rise of

Global India during Amrit Kaal” at School of Economics, Takshashila Campus, Devi Ahilya University, Indore, Madhya Pradesh on 10-11 January 2023.

Prof. Monika Tomar was invited for a talk on “Recent Advances in Biosensors” at Continuous Education Programme (CEP) on *Recent Advances in Biosensing Approaches for Screening and Diagnostic Applications* organized by Defense Institute of Physiology and Allied Sciences (DIPAS), DRDO from 7-9 December 2022.

Dr. Anindita Sarkar was invited for a lecture on “The trajectory of groundwater development in Bangladesh” at an International Conference on *Energizing Agriculture and Enabling Just Energy Transitions in South Asia* organized by IWMI, SDC, IIT Gandhinagar, WRI, IRENA, ISA, GGGI, Ahmedabad University and GIZ, Gandhinagar, Gujarat on 6-8 February 2023.

Prof. Kalwati Saini was invited for a talk on “Green Synthesized advanced nano materials for removal of toxic pollutants from water” organized by CFEES, DRDO, Delhi during 19-23 September 2022.

Dr. Monika Sharma gave a Conference Oral Presentation on “A cell membrane associated protein PE\_PGRS45 of Mycobacterium tuberculosis is a potential target for natural antimicrobial compounds” at 2nd International Conference on *Natural Products and Human Health* organized by Deshbandhu College, University of Delhi on 4-6 November 2022.

Dr. Hena Oak gave a Conference Oral Presentation on “Energy efficiency and energy saving by Indian fertilizer plants: Role of feedstock and ownership” in the 7th International Conference on *Energy and Environmental Science (ICEES 2023)* at Changsha, China during 6-8 January 2023.

Dr. Monika Sharma gave a Conference Oral presentation on “Mycobacterium tuberculosis Rv0335c induces host mitochondrial perturbations and apoptosis: as a molecular mimic of eukaryotic Bcl2 proteins” at *49th Annual Conference and General Body Meeting of the Indian Immunology Society IMMUNOCON-2022* held at Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, during 23-26 November 2022.

### **National/International MoUs Signed**

Various MoUs have been signed with different institutions that entail exchange programme, short-term modules, summer workshops, collaborative research and global networks.

MoU with University of Guelph, Ontario, Canada (International)

MoU with Korea National Sport University, Korea (International)

Letter of Intent with Mayo Clinic, USA (International)

Letter of Intent with University of Maryland, College Park, USA (International)

MoU with Institute of Nuclear Medicine and Allied Science, Delhi (National)

MoU with CSIR-National Physical Laboratory, Delhi (National)

**Number and percentage of students placed: 146**

**Number of Companies visited for campus recruitment: 23**

### **Extension and Outreach Activities**

North East Regional Research and Resource Centre (NERRRC) has been actively engaged in empowering students, specifically from the North East Region and the community, through diverse initiatives. The Centre recently established a radio setup and offers a Radio Broadcasting Course to 30 students. Throughout 2022, NERRRC conducted skill enhancement workshops. Sikkim Project Bloom, a bamboo-based start-up initiative, focuses on sustainable products and women's empowerment. NERRRC offers research internships to 20 students in each session, providing hands-on research experience related to Northeast India.

The Centre for Environmental Studies and Disaster Management (CESDM) focuses on spreading awareness and building capacity of the college community along with outreach programmes for other stakeholders. CESDM interns have prepared the Disaster Management Plan of the college. The centre aims to continue its collaborations with various partners from government, non-government and private sector to build a sustainable and resilient community.

MH Vatavaran, the Environment Society of Miranda House, had organized various events over the year, including awareness campaigns, cleanliness drives, plantation drives and celebrated World Environment Day, World Ozone Day, World Water Day, among others. The MH Eco-Souvenir Shop was formally established within the college campus in January 2023, which offers a beautiful array of handcrafted paper products - all made from recycled paper, compost generated within the college campus, potted plants from the college nursery and various college memorabilia, all of which are available for purchase there. MH Vatavaran has continued its collaboration with WWF-India, whereby student volunteers, in collaboration with WWF- India regularly visited Sanjay Van, Delhi to work on various environmental campaigns such as butterfly habitat restoration.

Lakshita, the Enabling Society organised a three-day programme on World Braille Day including a talk on 'Representation of Disability in Literature' and a creative writing workshop; workshops on Sugamya Pustakalaya & Bookshare were also held.

NCC, Miranda House, conducted multifarious events under Azadi ka Amrit Mahotsav. Orphanage visits and donation drives were organized. Several cadets participated in Inter Directorate Sports Shooting Championship. International Yoga Day, G20 Awareness Workshop, Vriksharopan on Independence Day (under the theme-Meri Maati Mera Desh) were also celebrated by NCC, Miranda House.

NSS Miranda House continued its five different projects- Aagaz, Swachta, Saksham, Sadbhavana and Sakaar - arranging several impactful field visits to old age homes and orphanages. The society actively conducted a variety of government-led community service activities and programs throughout the year, including sanitary napkin distribution drives, Anemia and Thalassemia check-up camps, and awareness

campaigns. In the realm of Health and Wellness, two comprehensive Yoga Courses were organized, complemented by two successful blood donation camps. A stress-relieving session was also organized. A notable highlight of the year was the No Shame Movement Talk Show, addressing the issue of non-consensual intimate image abuse. Furthermore, NSS Miranda House actively participated in various activities under the Azadi ka Amrit Mahotsav, Mission Life, and Clean India 2.0 initiatives, fostering close collaboration with the communities of Dhirpur, Azadpur, and Burari in North Delhi.

Unnat Bharat Abhiyan Cell organized a Career Counselling Session in Jagatpur village with the aim to assist the class X students of the Government (Sarvodaya) School in deciding and analyzing the crucial aspects of choosing their future subjects. Also, Cleanliness Drive in SKV Village, Jagatpur: a Nukkad Natak and a poster-making competition were organized in order to make the students aware of the importance of cleanliness, waste management and plastic-related issues. A Plantation drive was also organized in Burari village. Furthermore, a collection drive was organized urging the students to donate their used books, novels, NCERT, stationery or any other reading material which could be donated to needy students in villages.

### **Library Development**

The total sanctioned Library Budget was Rs. 11,78,635/-. In the academic year 2022-2023, 1143 volumes of books were added.

#### **Total Faculty Strength: 200**

Permanent: 188, Temporary: 01, Ad hoc: 11

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 82,51,35,000/-

Grants Utilised: Rs. 89,98,40,129/-

### **Other Significant Information**

In sports, at International Level, in Asian Championships, two of MH students participated, out of which one student Yashsavi Joshi, B.A. (Hons) English - Pistol Shooting clinched a prestigious Gold Medal in 15<sup>th</sup> Asian Air Gun Championship held in Daegu, South Korea from 9<sup>th</sup> to 19<sup>th</sup> September 2022.

Saina Salonika was bestowed with the title of Woman International Chess Master (WIM) at an International Chess Championship held in Serbia.

At the national level, a total of 21 MH students participated in National Championships and secured an impressive haul, as three students secured first position, three students secured second position and five students secured third position. Similar feats were achieved at All India Intervarsity Championships, State Championship and various Delhi University Inter-College Championships

MH NCC cadets, former SGT Manasvini and JUO Amil Mariya Joy received ADG Commendation award given by Additional Director General of NCC.

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## MOTILAL NEHRU COLLEGE

### Brief History of the college

Motilal Nehru College is one of the largest constituent colleges of University of Delhi. Beginning with a humble setting in a government school building in 1964 with an enrollment of 300 students, the college shifted to its present location in 1989 and currently has enrolled over 5000 students coming from all parts of India and from abroad. College boasts a sprawling campus, huge library, technologically enabled conference room, spacious lecture theatres and excellent sports facilities. The entire campus is wi-fi enabled and all students can have free uninterrupted access to internet connectivity. Over the past fifty years, our students and faculty members have brought laurels to the institution by excelling in academics, sports, social science and cultural activities. Our alumni have also done us proud with their achievements in administration, judiciary, entrepreneurship, creativity and other areas. The current batch of enrolled students has continued with the tradition of excellence in academic and extra-curricular activities. Our students have done exceedingly well in the examinations with some securing University positions. We have scored hundred percent results in most departments.

### Honours/Distinctions

Prof. Radhika Kumar was appointed as a member of the Curriculum Review Committee for the Ambedkar Schools of Specialised Excellence under the Delhi Government.

Mr. Azad Singh has been awarded with his Ph.D. degree in the month of November 2022 from Panjab University-Chandigarh and title of his thesis is “Employment Scenario in the Changing Structure of Haryana’s GSDP: 1993-94 to 2017-18”

Prof. Radhika Kumar received a fellowship from the Institution of Eminence at the Delhi School of Public Policy and Governance, University of Delhi from 1 June 2022 to 31 May 2024.

Prof. Pawan Sinha has been Selected as Fellow at Centre for Global Studies, University of Delhi for three years. This centre is known for its researches in the field of psephology and international relations.

### Students with Distinctions

Shaurya Bhattacharya participated in the international Amateur Championship in Golf which was held in England, Europe

### Publications

Kumar, R., Raj, G., Sharma, K., Vats, P., Sanskriti, Saini, S., Deepak, S., Agrawal, S., Bhatnagar, Y. (2023). Opportunities, Optics and Identity: Vignettes from the Delhi University Students Union Elections 2023. *Mainstream Weekly*, 61(48).

Ratnani, S., Singh, V.K., Agnihotri, N.K. (2022). A Derivative spectrophotometric method for simultaneous determination of cadmium and cobalt in environmental and standard samples. *Journal of Analytical Chemistry*, 77(7), 870-873.

Jarwal, D. (2022). Unfolding ease of doing business led interactive dynamics between formal and informal economy using Leontief model. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(4), 205-212.

Kumar, D., Jarwal, D. (2022). Herding Behaviour in Equity Market: A Systematic Literature Review. *Orissa Journal of Commerce*, 43(3), 132-146.

Jarwal, D., Kahal, A. (2022). Impact of Liberalization on Dalit Entrepreneurship. *Journal of Social Inclusion Studies*, 8(2).

Sinha, P. (2022). Teacher Preparation and Teacher Education Program- Education India. *Journal of Dialogues on Education*.

Arya, V. (2023). Katyayaniya Sangyayo ka Vishleshan. *Bhartiya Bhasha, Siksha Sahitya evam Shodh*, 14(11).

Kumar, S. (2023). लेख का शीर्षक: लेखक के लिए आम जनता का हिट सर्वोपरि. पुस्तक का नाम: जिये हुए से ज्यादा कुंवर नारायण के साथ संवाद. प्रकाशक: राजकमल प्रकाशन प्रा. लि., नयी दिल्ली, भारत. ISBN: 978-81-19159-43-7.

Kumar, S. (2023). पुस्तक का नाम: हिंदी भाषा और साहित्य (क). प्रकाशक: के. एल. पचौरी प्रकाशन, गाज़ियाबाद. ISBN: 978-93-91318-54-3. काशन वर्ष: प्रथम संस्करण, 2023.

Kumar, S. (2023). पुस्तक का नाम: हिंदी भाषा और साहित्य (ख) प्रकाशक: के. एल. पचौरी प्रकाशन, गाज़ियाबाद. ISBN: 978-93-91318-69-7. प्रकाशन वर्ष: प्रथम संस्करण, 2023.

## **Research Projects**

Received a research grant from the Delhi School of Public Policy and Governance of the Institution of Eminence (IOE), University of Delhi as Principal investigator for 2022-23 titled Political Ecology of Traditional Water Systems: Exploring Possibilities and Potential in Uttar Pradesh and Haryana.

## **Seminar Organized**

An international seminar entitled, 'Indian knowledge Tradition: History, Present and Future' was delivered by Dr. Anil Kumar on 24-25 April 2023.

## **Conference Organized**

National conference on Public Policy Research, Pedagogy and Practice was organized on 15 March 2023 with the Delhi School of Public Policy and Governance, Institute of Eminence, University of Delhi and the Department of Political Science, Motilal Nehru College

Add on course on Research Methodology for the Department of Political Science in April 2023 which included a series of lectures by various resource persons.

### **Seminar/ Conference Presentations**

Prof. Pawan Sinha presented a paper on ‘Shaping the Character of Students through Human Values: Vision of NEP 2020’ in a seminar organized by Amity University, NOIDA.

Prof. Pawan Sinha presented a paper on ‘New Education Policy 2020’ in a seminar organized by Department of Elementary Education, Lady Shri Ram College, University of Delhi.

Prof. Pawan Sinha presented a paper on ‘Speaker at ULLAS (ULLAS- Understanding of Lifelong Learning for All in Society)’ during the five-day workshop for Development of Guidelines for Higher Education Institutions organized by NCERT.

Prof. Radhika Kumar presented a paper on ‘Caste, historical time, and moments of arrival’ in a conference on 'Timely Histories' organized by the Centre for the Study of Developing Societies (CSDS) and Zentrum Moderner Orient (ZMO), Germany from 12-14 October 2022.

Dr. Shashi Kumar presented a paper on ‘भारतीय ज्ञान परंपरा: इतिहास, वर्तमान और भविष्य’ विषय पर दिनांक 24-25 अप्रैल 2023 को आयोजित दो दिवसीय अंतरराष्ट्रीय सेमिनार में "भारतीय ज्ञान परंपरा और स्त्री-प्रश्न (विशेष सन्दर्भ: पंडिता रमाबाई और विवेकानंद)

Dr. Devendra Jarwal presented a paper on ‘An Analysis of CSR Accounting in India’ during the 44<sup>th</sup> All India Accounting Conference hosted by Jiwaji University Gwalior from 29-30 October 2022.

**Number and percentage of students placed: 60**

**Number of Companies visited for Campus recruitment: 53**

### **Library Development**

Library has a rich collection of books, journals and periodicals at present count, the college has 1,07,586 volumes. The library subscribes to about 86 periodicals and magazines of scientific and general interest. The library also has more than 22206 books in the book bank/student aid fund section. The library has an up-to-date online catalogue (OPAC) of its holdings for all users, 21 computer stations with internet facility are also available for the library members. The library has two computer stations with specialized software for visually challenged students. Apart from it, total number of books available in college library - 1,19,408. Library has audio-visual room. The library has an up-to-date on-line catalogue (OPAC) of its holdings for all the users. UGC is facilitating the availability of E-books in the colleges through the "National Library

and Information Services infrastructure for scholarly content (N-List)" programme funded by MHRD, Government of India.

Library is presently subscribing to about 104 periodicals, magazines. Newspapers of Library, Scientific and General Interest. Library is functioning under fully computerized environment and using 'NETLIB' Software. Library continues to follow the Open Access system which affords greater convenience to the students. Now we ensure uninterrupted book issue/return to students and staff members.

**Total Faculty Strength: 142**

**Financial Allocation and Utilization**

Grants Allocated = Rs. 58,66,43,000/-

Grants Utilized = Rs. 58,51,02,973/-

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**MOTI LAL NEHRU COLLEGE (EVENING)**

**Brief history of the College**

Motilal Nehru College (Evening) is an institution of learning that has been grooming young adults, for an intellectually and professionally productive future life, focusing alongside on their holistic growth, for over fifty years. This college, affiliated to DU, started as a boys only college, located in a school building at Moti Bagh. From a humble beginning in 1965, MLNCE has travelled a long way and evolved into one of the best evening colleges of DU, living up to its primary objective of providing the opportunity of pursuing higher education to those in jobs. The motto of the college is, 'equitable and affordable education for all, irrespective of gender, caste, class and community.'

**Major Activities and Achievements**

The college was accredited by UGC NAAC for the first time in its history since inception. It was awarded a Grade B.

A 'Rajbhasha Cell' was created under the broader framework of New Education Policy 2020. A society named Dheera was created for the practice and promotion of Yoga for mental health and physical strength.

A society named 'LokFolk' was created for the practice and promotion of Indian Folk Art forms. Department of English organised the first student film festival of MLNCE named 'Fledgling Film Festival', an initiative by The Aesthetes.

A cinematic poetry video named 'Oh Horizon' by IRIS : The Art and Literary society of MLNCE was exhibited internationally in Milan, Rome, Piacenza, and Germany as part of the 'Hair in The Wind' project. IRIS became the first cultural society of MLNCE to get exhibited internationally. The College put up a stall in the exhibition held alongside the Valedictory Ceremony of the Centenary

celebrations of University of Delhi graced by the honourable Prime Minister of India Narendra Modi. Handicraft and Folk Paintings by IRIS were the highlight of the MLNCE stall.

### **Honours/Distinctions**

Prof. Vichitra, Principal of MLNCE was honoured with 'विद्या वाचस्पति सम्मान 2023' in January 2023. She was also honoured with 'भूमिपुत्र बीजू पाटनिक अंतराष्ट्रीय महिला सशक्तिकरण सम्मान 2023' by AKS, New Delhi.

Mr. Debasish Parashar from Department of English represented India at the Indija Pro Poet -2022 International Poetry Festival held in Serbia in September, 2022. Debasish was honoured with the Special Award of Poetry of the festival.

Mr. Deepak Kumar Gupta from Department of English participated as panelist in discussion on development of Indian Braille Script under 'Sparsh Bharti Project' by IIT-MADRAS in March 2023.

Professor Pradip Sharan was invited as a Subject Matter Expert to Kumaon University in March, 2023 to talk on designing PG Courses under the framework of NEP 2020.

Mrs. Deepika Handa from Department of Political Science participated in a faculty orientation program on 'The Madan Mohan Malviya National Mission on Teachers and Teaching Meaning Research and Intellectual Property Rights' organised by Ministry of Education, GoI.

Mr. Prem Kumar from Department of History successfully defended his thesis "Aspects of Urban Landscape and Urbanism: A Study of Natya Literature" in Department of History, University of Delhi.

Professor Priya Bhalla from Department of Economic presented a paper titled 'Revisiting the Gandhian Notion of Sarvodaya : A move towards inclusive development' at 8 th Annual International Commerce Conference on 'India @ 2047 : Role of Commerce and Business' organised by Department of Commerce, Delhi School of Economics, University of Delhi.

### **Students with Distinctions**

<b>S.No.</b>	<b>Name of Students</b>	<b>Class</b>
1	Nargis shabnam was honoured with 'virusha award' by delhi university students union,	3 rd year, B.A hons (political science),
2	Shourya lamba was honoured by akhil bhartiya vidyarthi parishad for her excellence in sports	2nd year, B.A. hons (english)

Tanish Deswal secured 1 st Position in Khelo India Judo games held at Madhya Pradesh -81 weight category. He also Secured 1st Position in 38 Delhi state Judo championship.

B A ( Program)  
2nd Semester

## Publications

Priyanka Panwar. (2022-23). 'Jaa Simran, Jea Le Apni Zindagi : Women Travelers in Hindi Cinema', . 'Travel Writing: The 'Jaa Simran, Jea Le Apni Zindagi : Women Travelers in Hindi Cinema', *Dynamics of Knowledge Production* , NA(NA), NA.

K. Anuradha. (2022-23). 'Study of Effect of Gender Stereotyping Leads to Misrecognition of one's own Identity'. 'International Journal of Research in Social Science and Humanities (IJRSS)'., 4(4), NA.

Zarqua Adam. (2022-23). 'Alternative Modernism': Revisiting the 'Radical' Movement of Dadaism and Surrealism' . *EDUZONE: International Peer Reviewed / Referred Multidisciplinary Journal*, 11(NA), NA.

M.A. Honest Mohideen. (2022-23). 'Sales Training as a Critical Path to a Company's Success in Post COVID-19 Era' . *Madhya Pradesh Journal of Social Sciences*, NA(NA), NA.

Monika Gupta. (2022-23). 'Past and Future Trend of Dividend Policy (2022)', . *International Journal of Advanced Research in Commerce, Management and Social Science*., 411(NA), NA.

Narender Kumar. (2022-23). संविधान की पांचवी अनुसूची,

PESA कानून और आदिवासी स्वशासन . एजुकेशन प्लस: ए मल्टीडिसिप्लिनरी इंटरनेशनल पीयर रिव्यूड/रेफरीड जर्नल-, 12(7), NA.

Sumit Kumar, Bhavnit Kaur and Rajiv Agarwal. (2022-23). 'Effects of Viscosity and Oblateness on the Perturbed Robe's Problem with Non- Spherical Primaries, Kinemat. Phys. Celest, Bodies . *AAM*, 17(NA), NA.

## Seminars Organized

Mr. Virendra Singh Yadav, Retd. Chief Justice, Allahabad High Court, Social Exclusion in India: Past and Present., Social Exclusion in India: Past and Present., 19-04-2023

Department of commerce. Secrets of stress-free life : Evidencer from corporate world, secrets of stress-free life : Evidencer from corporate world, 28 September 2023

Vijaya Lakshmi Singh, Professor, understanding authority in historiographical tradition of ancient India, understanding authority in historiographical tradition of ancient India, 27 April 2023

## National/International MoUs Signed

IRIS: The art and Literary Society of MInce Signed an MOU with tedxdrc for social work

## Extension and Outreach Activities

07 फरवरी, 2023 पाँच प्राध्यापक एवं 32 छात्रों ने भारत सरकार के उद्यान उत्सव की पूर्व संध्या पर राष्ट्रपति भवन के प्रांगण में स्थित 'अमृत उद्यान' का भ्रमण किया।

राष्ट्रीय सेवा योजना मोतीलाल नेहरू महाविद्यालय सांध्य की टीम को मुख्य अतिथि और पूज्य संत श्री श्री रविशंकर की गरिमामयी उपस्थिति के साथ 'हर घर ध्यान' के तहत ध्यान और मानसिक स्वास्थ्य पर कार्यक्रम में भाग लेने के लिए मल्टीपरपज हॉल में 3 मार्च 2023 को आमंत्रित किया गया। श्री मनोहर लाल खट्टर जी (हरियाणा के मुख्यमंत्री) को मुख्य अतिथि के रूप में आमंत्रित किया गया था। कार्यक्रम में कुलपति महोदय एवं विश्वविद्यालय के सभी अधिकारियों ने भाग लिया। श्री श्री से ध्यान लाभ सीखने के साथ ही ध्यान करवाकर सभी को ध्यान के प्रत्यक्ष लाभ से परिचित कराया।

राष्ट्रीय सेवा योजना इकाई के सदस्यों ने कैसर सर्वाइवर के समर्थन में आयोजित कार्यक्रम cansupport walk for life#2023 में भाग लिया। 19 फरवरी 2023 को कार्यक्रम का आयोजन कर्तव्य पथ नई दिल्ली में हुआ।

दिल्ली विश्वविद्यालय के शताब्दी समारोह के अवसर पर संस्कृति परिषद 'चाणक्य' द्वारा मनोज जोशी निर्देशित 'धर्मजम' टीम द्वारा एक नाटक का आयोजन किया। टीम एनएसएस, मोतीलाल नेहरू महाविद्यालय सांध्य ने अपने स्वयंसेवकों को एक नाटक की विविधता और ताकत को समझने के लिए भेजा, यह नाटक सामाजिक पहलुओं को रोचक ढंग से समझाने में सफल रहा।

राष्ट्रीय सेवा योजना इकाई ने 16 सितंबर 2022 को महाविद्यालय के दृष्टिबाधित छात्रों के लिए 'HELP THE BLIND' फाउंडेशन द्वारा आयोजित कार्यक्रम में स्वयंसेवा की।

मोतीलाल नेहरू महाविद्यालय (सांध्य) की राष्ट्रीय सेवा योजना इकाई ने मोती बाग में 11 अगस्त को झंडा संग्रह और वितरण अभियान का आयोजन किया।

प्राचार्या प्रो. डॉ. विचित्रा के मुख्य आतिथ्य में राष्ट्रीय सेवा योजना इकाई ने अपने कार्यक्रम अधिकारी डॉ. पिंटू कुमार के मार्गदर्शन में "1 करोड़ वृक्षारोपण अभियान" के समर्थन में 3 अगस्त, 2022 को वृक्षारोपण अभियान का आयोजन किया।

राष्ट्रीय सेवा योजना महाविद्यालय इकाई ने योग शिविर का आयोजन किया और स्वयंसेवकों ने 21 जून से 27 जून 2022 तक दिल्ली विश्वविद्यालय द्वारा आयोजित योग शिविर में भी भाग लिया।

जेंडर चैंपियन क्लब के छात्र सदस्यों द्वारा दिनांक 15 नवम्बर 2022 को शाम 4 बजे OPEN MIC प्रतियोगिता का आयोजन किया गया।

अंबेडकर स्टडी सर्कल ने "Idea of India: Ambedkar's Perspective" "आइडिया ऑफ इंडिया: अंबेडकर का परिप्रेक्ष्य" विषय पर व्याख्यान का आयोजन किया, मुख्य वक्ता के रूप में श्री उर्मिलेश को आमंत्रित किया गया जो एक पत्रकार और राज्यसभा टीवी के पूर्व कार्यकारी संपादक हैं।

The Aesthetes (अंग्रेजी विभाग) ने NAAC टीम के आगमन के वक्त अपने चेहरे पर IRIS के कलाकारों से कलाकृतियां करवाई जिससे हमारे कला को आवाज मिली जिसे CHITRAGRAHINI (The Film & Photography Society) ने अपने कैमरों में कैद किया।

IRIS ने Sarvahitey NGO के साथ मिल कर अप्रैल 2023 में उनके संस्थाओं में वॉल पेंटिंग का कार्य किया।

IRIS ने Paint For Change के साथ मिल कर जनवरी 2023 में दिल्ली के विद्यालयों में वॉल पेंटिंग का कार्य किया।

8 मार्च 2023 को Milan (Italy) में अंतरराष्ट्रीय महिला दिवस के अवसर पर आयोजित Hair In The Wind में IRIS के सदस्यों द्वारा तैयार की गई एक प्रस्तुति इटालियन भाषा में अनुवाद के साथ प्रस्तुत की गई। यह प्रस्तुति Piacenza, Milan, Rome में दिखाई गई। इस प्रस्तुति को German तथा Italian मीडिया का कवरेज प्राप्त हुआ। आगे भी अभी कई अमेरिकी और यूरोपीय संस्थान इस प्रस्तुति को बढ़ावा दे रहे हैं। इसे विश्वभर के कवि और साहित्यकारों से सराहना मिली है। यह प्रस्तुति Rucksack: A Global Poetry Patchwork नामक आधिकारिक यूट्यूब चैनल पर उपलब्ध है।

IRIS के सिनेमैटिक कविता (है! दिगंत / Oh! Horizon) आधिकारिक रूप से ट्रांसनेशनल फेमिनिज्म और क्वीर राजनीति, IUAES कमीशन में प्रदर्शित की गई थी, और नोम चोम्स्की, अन्नाहिता महदवी वेस्ट और मार्गरेट ओवन जैसे दिग्गज विचारकों के साथ उनकी आधिकारिक पोर्टल पर प्रदर्शित किया गया था।

IRIS ने इस सत्र में कला और लेखन का त्योहार अथर्व मनाया। विभिन्न प्रतियोगिताएं हुईं और पहली बार इंटर कॉलेज स्तर पे "कबीरा खड़ा बाज़ार में" काव्य संध्या आयोजित की गई, इस आयोजन में सुक्रिता पॉल कुमार जी और अलीगढ़ मुस्लिम विश्वविद्यालय के सैफ इरफान साहब मुख्य अतिथि रूप में उपस्थित रहे। हमारे बहुत से अध्यापकों और छात्रों ने अपनी रचनाएं प्रस्तुत की। कला के माध्यम से चिंतन को ज़मीन देने के लिए पहली बार इस सत्र में Evening at Paris का आयोजन किया गया, इस आयोजन में Midnight in Paris सिनेमा को कॉलेज प्रांगण में प्रदर्शित किया गया।

राजनीति विज्ञान विभाग एवं आंतरिक गुणवत्ता आश्वासन प्रकोष्ठ के संयुक्त तत्वाधान में 14मार्च 2023 को 'गांधी, जलवायु परिवर्तन और सतत विकास' विषय पर व्याख्यान आयोजित किया गया जिसमें प्रसिद्ध गांधीवादी विद्वान प्रोफेसर माइकल सोनलिटनर के (पूर्व प्रोफेसर, पोर्टलैंड कम्युनिटी कॉलेज, ओरेगन, यूएसए) महत्वपूर्ण विचार सुनने का अवसर प्राप्त हुआ।

B.A. ENGLISH (HONS) VAC Ecology and Literature के छात्रों को Eco-Heritage walk पर लोधी गार्डन प्राध्यापक देवाशीष पाराशर एवं प्राध्यापिका प्रियंका पंवर लेकर गए।

दिनांक 27अप्रैल, 2023 को अर्थशास्त्र विभाग की सोसाइटी अर्थशास्त्र ने Eco Fest का आयोजन किया, फेस्ट में Public Policy विषय पर सेमीनार का आयोजन किया गया। मुख्य वक्ता यश अग्रवाल थे।

## Library Development

इस सत्र में पुस्तकालय परामर्शदाता समिति के संयोजक डॉ. राजेश कुमार तथा सह संयोजक प्रोफेसर बृज किशोर हैं। पुस्तकालय का संचालन श्री राजेश हांडू, प्रशासनिक अधिकारी की देखरेख में होता है जिनके परामर्श और सुझाव पुस्तकालय को समय-समय पर मिलते रहे हैं और पुस्तकालय का कार्य सुचारू रूप से चल रहा है। महाविद्यालय की पुस्तकालय बहुत समृद्ध होने के साथ-साथ पूर्णतः वातानुकूलित है। पुस्तकालय गेट पर



छात्रों कर्मचारियों एवं प्राध्यापकों के लिए शीतल पेयजल की व्यवस्था है। हमारे पुस्तकालय में प्राध्यापकों के लिए अलग से एक पठन एवं मंत्रणा कक्ष की व्यवस्था है। पुस्तकालय विभाग में फोटो स्टेट की व्यवस्था भी उपलब्ध है। पुस्तकालय में सभी राष्ट्रीय प्रमुख समाचार पत्र एवं पत्रिकाएँ आती हैं। पुस्तकालय में यू.जी.सी. द्वारा संचालित इन्फ्लेबनेट (INFLIBNET) एन-लिस्ट (NLIST) का नवीनीकरण भी कराया गया है। एन-लिस्ट में अनगिनत ई-जर्नल्स (पिरोडिकल्स) तथा एक करोड़ से अधिक ई-बुक्स उपलब्ध हैं। एन-लिस्ट देखने के लिए प्राध्यापकों एवं छात्रों को यूजर आई.डी. दी गई जिससे इस सेवा का लाभ प्राध्यापकों एवं छात्रों को मिल रहा है। पुस्तकालय के नोटिस बोर्ड के समीप ओपेक (OPAC) मशीन रखी है जिससे टीचर्स और विद्यार्थी ओपेक (OPAC) में पुस्तकें सर्च कर सकते हैं। कालेज पुस्तकालय में 77,669 पुस्तकों का अनूठा संग्रह है। जिसमें वाणिज्य, इतिहास, राजनीतिशास्त्र, अर्थशास्त्र, कम्प्यूटर, गणित, स्पोर्ट्स सहित विशेषकर अंग्रेजी एवं हिन्दी साहित्य का उत्तम संग्रह है। 2022-23 सत्र में 705 नई पुस्तकें खरीदी गईं। पुस्तकालय स्टाफ की संख्या कम होने के बावजूद, पुस्तकालय सेवाएं एक दिन के लिए भी बाधित नहीं हुईं। समस्त पुस्तकालय स्टाफ इसके लिए बधाई का पात्र हैं।

**Total Faculty Strength: 84**

### **Financial Allocation and Utilization**

Grant Sanctioned: ₹ 28.9 Crore

Grant Utilized: ₹ 23.2 Crore

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## **PANDIT DEENDAYAL UPADHYAYA NATIONAL INSTITUTE FOR PERSONS WITH PHYSICAL DISABILITIES**

### **Brief history**

Pt. Deendayal Upadhyaya National Institute for Persons with Physical Disabilities (Divyangjan) was established as a non-governmental organization in the year 1960 by the Society for Crippled and Handicapped. The Government of India took its administrative and financial control in 1975 and registered it as a society in the year 1976 under Societies Registration Act 1860.

Currently, the institute offers degree-level courses in Physiotherapy, Occupational Therapy, and Prosthetics & Orthotics, all of which are accredited by the University of Delhi. Pt. Deendayal Upadhyaya National Institute for Persons with Physical Disabilities (Divyangjan) provides comprehensive rehabilitation services to persons with locomotor disabilities, children with cerebral palsy, persons with cured Hansen's disease and associated problems like speech and hearing impairments. It also provides required therapy and aids & appliances to improve mobility and helps in physical restoration.

The institute provides undergraduate courses, including Bachelor of Physiotherapy (BPT), Bachelor of Occupational Therapy, and Bachelor of Prosthetics & Orthotics (BPO), each with a duration of 4 ½ years. Additionally, it offers a Master's in Prosthetics & Orthotics (MPO) program lasting 2 years. The institute operates under the financial jurisdiction of the Department of Empowerment of Persons with Disabilities (Divyangjan), which falls under the Ministry of Social Justice and Empowerment, Government of India.

## Major Activities and Achievements

The Institute offers a comprehensive range of rehabilitation services, including the assessment of individuals with physical impairments to identify their specific rehabilitation needs and develop appropriate management plans. Additionally, the Institute conducts workshops for the fabrication of orthotic and prosthetic devices such as calipers, splints, artificial limbs, ambulatory aids, and mobility devices. Outpatient services encompass Physiotherapy, Occupational Therapy, and Speech Therapy. The Institute also provides social, psychological, and vocational counseling services. It houses a Cross Disability Early Intervention Centre (CDIC) for children with disabilities aged 0-06 years under PDUNIPPD (D). Moreover, the Institute is in the process of initiating postgraduate courses in Physiotherapy and Occupational Therapy.

## Students with Distinctions

Ms. Fiona Verma of BPO course got first position with 82.57% in the merit list of 14<sup>th</sup> Batch

Mr. Arhan Datt Anand of BPT course got 1<sup>st</sup> position with 77% in the list of 28<sup>th</sup> Batch

Ms. Kanishka Mehta of BPT course got 1<sup>st</sup> position with 77% in the merit list of 28<sup>th</sup> Batch

Ms. Rashmiya M of MPO course got 1<sup>st</sup> position with 72.72% in the merit list of 04<sup>th</sup> Batch

## Publications

Amit Kumar Vimal, Sharma S, Gahlawat B, Pandian G, Sural S.. (11 2022 Nov. ). The Effect of Customized and Silicon Insoles on Mid-and Hindfoot in Adult Flexible Pes Planovalgus . *Indian Journal of Orthopaedics*, 56(1), 1897-1905.

Prasad Bisal O, Nayak S, Kumar Das R.. (11 Feb 2023). Orthotic and Prosthetic Management in Brachial Plexus Injury: Recent Trends . *intech open*, DOI: 10.5772/intechopen. 109701 (1), NA.

Das, Rajesh & Nayak, Smita. (2022). Impact of COVID -19 on Prosthetics and Orthotics Rehabilitation in India: A Cross-Sectional Study. . *International Journal of Health Sciences*, 12(1), 57-61.

Kamal Narayan Arya, Shanta Pandian, Akshay Kumar Joshi GG Agarwal, Neera Chaudhary. (2022). Active Sensory Therapies enhancing Upper limb Recovery among Poststroke Subjects: A Systematic Review . *Annals of Neurosciences*, Volume: 2(29), 104-115,.

Madhuchhanda Mohanty, and Prakash Kumar. (--). Multi-Component Interventions in older Adult having Subjective Cognitive Decline (SCD)-A Review Article . *Geriatrics (Basel)*, Published online 2022 Dec.27, ---(10.3390/geriatrics8010004), ---.

Gupta, S., & Sharma, S.. (1st April 2022). An Evidence-Based Approach To The Role Of Physiotherapy In ICU . *Int J Physiother Res*, (2),(10), 4150-61.

Sharma, M., Rathore, A., Sharma, S., Reddy, K. R., Sadhu, V., & Kulkarni, R. V.(2022). ((2nd June, 2022)). Asthma Epidemiology, Etiology, Pathophysiology and Management in the Current Scenario. . *In Smart Nanodevices for Point-of-Care Applications*, ---(--), (pp. 13-24)..

Sharma, M., Rathore, A., Sharma, S., Reddy, K. R., & Sadhu, V. (2022). ((3rd June, 2022) ). Current and Future Prospects in the Treatment of Chronic Obstructive Pulmonary Disorders. . *In Smart Nanodevices for Point-of-Care Applications*, ---(--), (pp. 75-100)..

Anoop Aggarwal et al.2022, . ((June 2022)). Comparative Performance of The Tug Test Based on The Radiological Severity And The Gender, Among Patients With Tibio-Femoral Osteoarthritis. . *Int J Recent Sci Res.*, (06),(13), pp. 1484-1487..

Anoop Aggarwal et al.2022,. ((July 2022)). Association Between BMI And Radiological Severity of Tibio-Femoral Osteoarthritis-Original Research Article. . *Int J Recent Sci Res.*, (07),(13), pp. 1781-1785..

### **Research Projects**

Indian Council of Medical Research, Conducting a Randomized Controlled Trial on Task-based and Magnified Mirror Therapy for Unilateral Spatial Neglect among Post-Stroke Subjects. Sanctioned Amount: Rs. 7 lakhs. PI: Dr. Kamal Narayan Arya, Lecturer, Occupational Therapy.

### **Seminars Organized**

Seminar entitled "Advancement in Spinal Orthosis" by Mrs. Shivani Sharma, Demonstrator (P&O) PDUNIPPD, on 25 April 2022.

Seminar titled "Current Treatment Methods for Cerebral Palsy (CP)" in collaboration with the International Committee of the Red Cross, New Delhi, India, and Human Study Germany. Speakers include Cristian Schlierf from Germany and faculties from PDUNIPPD, New Delhi on 26 September 2022.

### **National/International MoUs Signed**

MoU with ISIC hospital is under process.

### **Other Inter-Institutional Collaboration**

The Institute has renewed the collaboration with MAMC, Hospital and LNJP Hospital, Delhi for regular Medical classes of its students.

**Number and percentage of students placed: 98%**

**Number of Companies visited for campus recruitment: 05**

### **Extension and Outreach Activities**

Various satellite and regional centers like the Satellite Centre, Narela, Satellite Centre, Nilkheri, Satellite Centre Seemapuri, Satellite Centre, Taok and Southern Regional Centre, Secunderabad worked for various community outreach activities throughout the year.

Narela, Satellite Centre is working as community-based rehabilitation centre and provides Rehabilitation services in the areas of Physiotherapy, Occupational Therapy, Prosthetics and Orthotics, Audiometry & Speech therapy, Psychological counseling and Social work. Along with these services it also conducted awareness and assessment camps, aids and appliances distribution camps, job fairs and self employment camps in collaboration with other NGOs and Institutes.

### **Library Development**

The Library has a collection of 15253 books of professional and non-professional subjects as on 31 March 2023 in the field of OT/PT/P&O/Rehabilitation and other allied subjects. During the year 2023 a total of 298 professional books with a number of copies were added.

The library subscribes to 11 Professional Foreign Journals (in print form) in the field of OT/PT/P&O and Rehabilitation every year. In addition, it is providing reference service, Internet/Print Out and Photocopy facility to its users as per library rules.

### **Total Faculty Strength: 39**

BPO: 11, BPT: 14, BOT: 04

### **Financial Allocation and Utilization**

Grants Allocated: Rs 29.43 crore

Grants Utilized: Rs. 28.81 crore

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## **P.G.D.A.V. COLLEGE**

### **Brief history of the College**

PGDAV College is one of the oldest colleges of the University of Delhi. PGDAV is an integral part of the rich heritage of the Dayanand Anglo Vedic movement. The great saint and the founder of Arya Samaj, Maharshi Dayanand Saraswati's vision for modern global education within the Indian milieu is an inspiring gospel for our mission at PGDAV. The college proffers a combination of Shiksha and samskara- modern education embedded in Indian values for the nation-building and welfare of society.

The foundation of PGDAV College was laid on August 17, 1957, at Chitra Gupta Road, presently the headquarters of Dayanand Anglo Vedic College Managing Committee. The college made a humble beginning with five rooms, seven teachers, 65 students and two programs. Later on, many other courses,

such as B.A. (Hons) Mathematics, B.Com, B.Com (Hons), B.A. (Hons) Hindi and B.A. (Hons) Economics, among others, were introduced. Presently, we have 12 undergraduate and four postgraduate programs taught by 13 different departments. The number of regular students has gradually increased to nearly 4,000; this excludes centres of Non-Collegiate Women's Education Board, School of Open Learning, University of Delhi, and Indira Gandhi National Open University, which have additional 8,000 students on roll for the weekend and other holiday teachings.

### **Major Activities and Achievements**

PGDAV College has successfully completed the promotions of 130 faculty members and 11 non-teaching staff, in addition to appointing 40 permanent faculty members in different departments. Our students' results have been satisfactory, and one of our students was awarded the Gold Medal by the University of Delhi. Many seminars, talks, and extra-academic activities were organised to celebrate the 200 years of birth of Maharshi Dayanand Saraswati.

Focus on infrastructural development was the key highlight of this academic year. A new user-interactive, accessible and bilingual- website has been designed and launched. New administrative block was built to make student dealings more interactive and hassle free. The staff room was fully renovated to make the academic environment more effective. A new conference room was built in the library to facilitate research activities in the college. We built a new environmental science lab and a computer lab to cater to the needs of students. The new sports complex, well equipped with four floodlights to facilitate day-night matches and a synthetic running track on the ground's periphery, was inaugurated. We were issued a certificate of Sustainable Campus. The college has also been declared as a zero-waste management institute by the Municipal Corporation of Delhi.

### **Honours/Distinctions**

Prof. Krishan Sharma, Principal of the College, received the 1st Savitribai Phule International Award in January 2023 for taking measures to enhance the quality of education among girl students. She was also awarded the Shashakt Mahila Samman by Bharat Vikas Parishad in July 2022.

### **Publications**

Chauhan, V. (2022). Playing to the Gallery: Visual-Culture, Aesthetics, and the Spectacle: (Re)Reading Commonwealth Games 2010, New Delhi. *Summerhill*, 27 (2), 97-103.

Chauhan, V. (2022). Prajamandal Aandolan, Itihass Lekhan aur Jan-itiha. *Itihas Drishti*, 1 (20-21), 69-79.

Daga, S., Yadav, K. and Yadav, B. (2022). Behavioral Finance and Future Research Agenda: A Bibliometric Analysis. *IUP Journal of Applied Finance*, 4 (28), 55-69.

Mahajan, A., Chand, P. (2022). COVID - 19 and Disparities in India: An Analysis. *Prabandhan: Indian Journal of Management*, 15(12)(12 ), 54-61.

Mishra, N.S. and Deo, N. (2022). Approximation by Generalized Baskakov Kantorovich Operators of Arbitrary Order. *Bulletin of the Iranian Mathematical Society*, 48(6), 3839-3854.

Nanda, S. and Jain, A. (2022). Navigating Covid-2019: Key challenges and solutions for HR professionals in the “New Normal” 2022. *Journal of Management Research and Analysis*, 3 (9), 157-161.

Singh, C.P. (2022). Integration of Travancore and Hyderabad. *Manthan*, 43 (4 October -December 2022), 78-89.

Singh, C.P. (2022). British Press and the Public Debate on Indian Revolt of 1857. *History Today*, 23 (No. 23, 2022), 80-87.

Singh, S., Kumar, M., Sethi, P.K. and Singh, V. (2022). To Explore the relationship between heart rates of female yoga practitioners upon yoga intervention. *Neuroquantology*, 20 (22), 3509-3513.

Solkhe, M. and Taneja, G.L. (2022). Economic Analysis of a Reliability Model for a System with Conditional Warranty and Consideration of Insurance with Depreciation. *NeuroQuantology*, 20 (22), 1310-1317.

## **Research Projects**

Collaborative Project with Birmingham City University; Arts and Humanities Research Council and Innovate UK, funded 9-month Research Project entitled, “India-UK Creative Industries @75: Opportunities and Challenges”. Sanctioned amount of Rs. 50,00,000. Co-investigator: Dr. Vishal Chauhan, Department of History.

## **Seminars Organized**

Seminar entitled, “An introduction to non-euclidean geometry”, by Prof. Krishnendu Gongopadhyay, Head, Dept. of Mathematical Science, IISER, Mohali, on 11 April 2022.

Seminar entitled, :”Mind Management” by Prof. Ajay Kumar Singh, Head and Dean, Dept. of Commerce, University of Delhi, on 26 April 2022

Seminar on International Day for Biological Diversity by T.K. Roy, Environmentalist, on 22 May 2022

Seminar entitled, “Rashtra Nirmaan mein Mahilayon ki Bhoomika Vaishwik” by Dr. G.S. Chauhan, Joint Secretary, UGC, on 10 September 2022

Seminar entitled, “Tomar evam Chauhan Raajvansh ke entargat Gauravshaali Dilli”, by Dr. Ajay Kumar Singh, Swami Shraddhanand College, on 22 February 2023.

## **Seminar/Conference Presentations**

Dr. Gaurav Kumar presented a paper titled “Anthropogenic Effects on Environment and Biodiversity, Socio-Ecological Concerns and Solutions” at the International Conference organised by Kota Experts Environment Impact Assessment Division (KEEAD), held at Government Rajendra College Bathinda, Punjab, India on 22-23 April 2022.

### **National/International MoUs Signed**

The College has signed a Memorandum of Understanding (MoU) with Pt. Ravishankar Shukla University, Raipur to establish academic cooperation

The College has signed a Memorandum of Understanding (MoU) with the University of Tyumen, Russia to foster the education and research of our students.

**Number and percentage of students placed: 195**

**Number of Companies visited for campus recruitment: 135**

### **Library Development**

College Library has a treasure trove of 1,03,907 books and 4,534 bound volumes of Journals. A total of 1871 books worth Rs.14,17,361 were purchased in this session. About 65 periodicals and 18 newspapers are regularly subscribed. The library is computerized and is open on all working days from 9 am to 5 pm. Faculty and students have free access to both conventional as well as electronic resources like the e-resources of Delhi University Library System (DULS), DU e-Library, N-LIST e-resources, DELNET e-resources etc. This year 1213 students and faculty members were linked to N LIST resources with a total of 5624 member user from the college.. Library is treasured with very valuable ‘Talking Gita’ Signature Edition which is available in 15 Languages. Two units of new OPAC are procured by the library. These are having latest features like touch screen to enable users to locate library resources easily.

Library Book Bank: We have a very rich book bank collection of 12,497 books for needy students. They avail this facility twice in a year.

Library Services to Differently Abled User: The college library supports the differently abled users through numerous assistive devices and softwares like Braille s/w JAWS, ANGEL DAISY Reader, MP3 Recorder, Laptops, Zoom Ex Instant Text Reader, Lex Portable Camera, etc. for the teaching and learning. Access to Braille Library and Sound Recording Facility is also provided to visually impaired students. Five computer work stations are dedicated for this purpose. Library also subscribes to ‘White Print’, an English Braille magazine.

Library Activities: Continuous orientation programs are conducted to guide students to use the library resources effectively. Celebrating 75 Years of India’s Independence, college library organized one week Book Exhibition on the theme “Azadi Ki Kahani, Pustako Ki Zubani” from 11-18 August 22. The college library organized a two-day Book Fair on 18-19 January 2023. Celebrating Azadi Ka Amritmahotsav, the College library has developed special corner having collection of books on India’s struggle for freedom, its freedom fighters, forgotten hero’s under the banner “Swatantrata Sahitya Pustak Dirgha”.

**Total Faculty Strength: 176**

**Financial Allocation and Utilization:**

Grants Allocated: 50,85,82,000/-

Grants Utilised: 50,85,82,000/-

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**P.G.D.A.V. COLLEGE (EVENING)**

**Brief history of the College**

PGDAV College (Eve) is an illustrious member of the vast DAV family - the largest non-government educational organization in the country. It derives its vision from the great ideas on education propounded by the renowned social reformer Maharishi Dayanand Saraswati. These ideas led to the growth of the DAV movement which began with the founding of the 'Dayanand Anglo Vedic College Trust and Management Society' at Lahore in 1886. The Evening Classes were started on 18 July 1958 with a mission to provide quality higher education.

DAV institutions derive their inspiration from the Vedas, the oldest sources of knowledge in the world. A new academic session starts with a yajna, seeking guidance in our journey toward self-discovery, maturity, and learning. Yajna is our conscious choice in our pursuit of more. The objective of the college is not just to help the students to excel academically but to lead them to an overall development so that they mature into responsible human beings and citizens. The college subscribes to the view that the aim of education is to imbibe values leading to good character.

**Major Activities and Achievements**

The college has introduced many supplementary courses with the objective of nurturing and highlighting the natural talent and creative skills of the students for their holistic personality development. In pursuance of this idea, 'Legal Awareness' course was started in the college in 2016. Since then, a total of 12 batches have been completed. The college wishes to provide the students with an ideal, stress-free atmosphere, proper guidance, and counseling (academic as well as non-academic). For this purpose, the college has been following the mentor-mentee practice for the last several years. The system has provided the students with emotional as well as physical support whenever required. P.G.D.A.V. College (Evening) formed the Youth Parliament Society in May 2022 with the aim of spreading the spirit of democracy amongst the students. The College registered for the Youth Parliament Sitting under the National Youth Parliament Scheme of the Ministry of Parliamentary Affairs.

The college has been certified as a zero-waste campus by the Municipal Corporation of Delhi (Central Zone). Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Education, Govt. of India has recognized the college as a member of the National Entrepreneurship Mission. The organization has also recognized the sustainable initiatives taken by the college.



## Honours/Distinctions

Dr. Meena Sharma was awarded the “National Women’s Excellence Award 2022” at the International Women’s Day Celebration organized by the International Human Rights Ambassador Organisation on 12 March 2023. Also, she was awarded “Samvidhan Samman Puruskar – 2023” at Samvidhan ka Samaroh organized by Dr. Ambedkar Foundation, Ministry of Social Justice and Empowerment, Government of India on 17 March 2023 at Rajbhawan, Goa. She received “Nari Shakti Puraskar – 2023” from DC Consultant & Startify Consultant on 25 March 2023 in Vivekananda Institute of Professional Studies, Rohini. She has been selected as a Lifetime Member of Eudoxia Research University in USA.

## Research Projects

Dr. Sonika Nagpal submitted a minor research project titled “Chatbot Application in Digital Learning Environment: A Quantitative Assessment of Attributes and Outcomes” as Co-PI to the Institute of Eminence, University of Delhi in June 2022.

## Publications

Dr Dimple Gupta . (2023). Guru Nanakdevke Sahitya me Manviya Mulya . *Sahriday, Volume 58*(Bhartiya Sant Parampara aur Shree Guru Nanakdev ), page no-32.

Hari Pradap . (2023). Deformable Laplace Transform and its Applications . *international journal De Gruyter (SCI), NA(NA)*, page no-30.

Aditya Pratap Singh. (2022). Hilbert transformer designing approach of arbitrary order for DST . *Industrial Engineering Journal (UGC LISTED, vol 15*(Issue 12 ), page no-17.

Dr Sonika Nagpal. (2022). Chatbot for Educational Services: Confirmation and Assessment of Quality Dimensions . *IITM Journal of Business Studies, NA(NA)*, page no-55.

Dr Meena Sharma . (2023). Hindi: Paramparik Gyan Se Kratim Medha Tak . *Nayi Dhara, NA(NA)*, page no-13.

Dr. Mayank Pandey . (2023). Concepts of circular economy for sustainable management of electronic wastes: challenges and management options . *Environmental Science and Pollution Research,, NA(NA)*, page no-20.

Dr. Mayank Pandey. (2022). Assessment of air quality before and during COVID-19 induced lockdown in Jaipur, India. Mapan . *Journal H Index: 17, NA(NA)*, page no-27.

Dr. Mayank Pandey . (2022). Energy: Present and Future Demands in ‘Advanced Nanocatalysts for Biodiesel Production’ . *CRC Press (Taylor & Francis Group),, NA(NA)*, page no-35.

Dr. Tarun Kumar deep . (2023). Guntraya Ka Swaroop, IMR . *IMR, Vol-2, ( Issue 99 )*, page no-40.

## **Patents Filed/Granted**

01 and National: Patent published on 13 May 2022 vide Application No. 202211026041 for the Invention titled, “Methodology for Cost Management for Integration of Products.” Patent holders are Prof. R.K. Gupta, Dr. Rakesh Kumar Gupta and Dr. Pranav Mishra.

## **Seminars Organized**

Seminar entitled “Management Aptitude Test (MAT) Gateway to a Successful Career in Management (MBA/PGDM)” by Mr. Sidharth Saxena, Deputy Director, All India Management Association on 27 January 2023.

Seminar entitled “Destiny: Do we make it or does it make us?” by Mr. Padmalochan Das on 20 January 2023.

Seminar entitled “Insolvency and Bankruptcy Code 2016” by Dr. Sudhi Sharma on 21 September 2022.

Seminar entitled “Gandhi aur Shiksha” by Prof. K.P. Singh, Director of Gandhi Bhawan on 06 September 2022.

Seminar entitled “How to crack tough competitive exams” by CA Shruti Gupta and Samdish D Sharma on 18 January 2023.

## **Conferences Organized**

Organized one-day conference on “Data Analytics using R Software” on 17 January 2023.

Organized one-day conference on “Pedagogical Training on ICT Tools for Effective Teaching-Learning” on 06 September 2022.

Organized a conference on “National Educational Policy (NEP) 2020” on 07 October 2022.

Organized conference on “Bhartiya Bhashaye Aur Bhartiya Gyan Parampara” on 04 September 2022.

Organized conference on “Bhartiya Bhashaye Aur Bhartiya Gyan Parampara” on 10 February 2023 in collaboration with ICCHR.

On 06 September 2022 Department of political science collaborated with Gandhi Study Circle and Gandhi Bhawan, University of Delhi and organized a seminar titled 'Gandhi aur Shiksha' in the college auditorium. The keynote speaker of the day was Prof. K.P. Singh, Director of Gandhi Bhawan, University of Delhi

Arundhati Bhartiya Gyan Parampara Kendra and Bhartiya Bhasha Samiti, Ministry of Education, Government of India jointly organized a two-day national seminar on 'Bhartiya Bhashaein aur Bhartiya Gyan Parampara' on 10-11 February 2023.

The Marketing and Consumer Awareness Club, in collaboration with Placement and Internship Cell and Commerce Association, organised a seminar on the topic "First Step Towards Financial Independence" on 31 March 2023 by the company Money Mileage.

### **Seminar/Conference Presentations**

Dr. Meena Sharma participated and presented a paper titled “Hindi: Paramparik Gyan Se Kratim Medha Tak” at the 12th World Hindi Conference jointly organized by Foreign Ministry, Government of India and Fiji government held between 15-17 February 2023.

Dr. Hari Pratap was invited as a keynote speaker for a webinar organized on the topic "Fractional Derivatives and Their Shortcomings" by the Department of Mathematics, S.V.R.M College, Nagaram on 29 August 2022.

Dr. Shruti Vip, delivered a series of lectures on the topics “An Introduction to Art in the Indian Subcontinent” (24 lectures) and “Making of Contemporary India” (6 lectures) as a part of the online lecture series of UGC, CEC from August 2022 to April 2023.

Dr. Shruti Vip delivered a special lecture on Republic Day on 25 January 2023 under the aegis of Inter University Accelerator Centre, UGC, CEC Distance Learning.

Dr. Shruti Vip presented a paper on the topic “Artistic Expression and Indian Nationalism-Some Reflections on Abanindranath Tagore” in the two-day national conference held from 10-11 February 2023, organized in PGDAV (Evening) College, held under the aegis of Bhartiya Bhasha Samiti, Ministry of Education, Government of India and Arundhati Bhartiya Gyan Parampara Kendra, PGDAV Evening College.

Dr. Samsher Singh presented a paper on the topic “Aadhunik Rashtra Nirmata: Dr. Bhim Rao Ambedkar” organized by Dr. Bhim Rao Ambedkar study circle in April 2023.

Aditya Pratap Singh acted as a resource person in a one-week online faculty development program on the topic “Pedagogical Training on ICT Tools For Effective Teaching Learning” jointly organized by P.G.D.A.V. College (Eve.) and Maharaja Agrasen Institute of Management Studies held between 6 – 12 December 2022.

Parmeed Singh Participated as a resource person to take the workshop on “Digital Identity in the Virtual World” at the Department of Social Work, University of Delhi on 19 November 2022.

### **National/International MoUs Signed**

Signed an MoU with Maharaja Agrasen Institute of Management Studies in August 2022 to Promote academic and educational cooperation

Signed an MoU with Prajapita Brahma Kumaris Ishwariya Vishwa Vidyalaya in October 2022 for partnering for spiritual empowerment

Signed an MoU with Indian Pollution Control Association (IPCA) in September 2022 in the field of promoting environment awareness

Signed an MoU with ISKON in November 2022 to promote mutual cooperation for the spiritual empowerment

Signed an MoU with Safe Water Network India in November 2022 for water management

Signed an MoU with M/S Ideas Inc. Management Pvt. Ltd. In December 2022 for prepaid card solution and online collection of fees.

### **Other Inter-Institutional Collaboration**

Collaborated with Mahatma Hansraj Faculty Development Centre, Hansraj College, University Of Delhi for an Online Workshop on "National Education Policy (NEP) 2020 on 01 June 2022.

During the session 2022 -2023, Gandhi Study Circle of the college has actively participated in the various programmes organised by Gandhi Sadan, University of Delhi and Gandhi Smriti.

A seven-day workshop on 'Skill Development and Data Analytics' was organized in the college from 12-19 September 2022 by the Institution's Innovation Council (IIC), Women Development Cell (WDC), and World University Service (WUS), in collaboration with Learning Links Foundation (LLF), a non-profit organization dedicated to enriching lives through learning.

A two-week FDP, from 23 January to 06 February 2023 was organized jointly by Arundhati Bhartiya Gyan Parampara Kendra and Pt. Madanmohan Malviya National Mission for Teachers and Education, Mahatma Gandhi International Hindi University, Wardha on the topic 'Bhartiya Parampara aur Vishwaguru Bharat'.

Kalanjali organized a Kavya Goshthi in collaboration with Rashtriya Kavi Sangam on 7 February 2023. More than 15 young poets, mainly students and researchers from different colleges, departments and universities and students of our college recited their poems in this Goshthi.

The Culture and Ethics Cell in collaboration with Drishyam (Film Making & Photography ) and ISKCON, East of Kailash, New Delhi organized An Add-On course based on the theme "Viveksheel Yuva: Vishwaguru Bharat" for bringing awareness related to Ancient Vedic Wisdom amongst students, adding value in their holistic development and expanding the probability of students becoming valuable assets for the country.

**Number and percentage of students placed: 31**

**Number of Companies visited for campus recruitment: 2**

### **Extension and Outreach Activities**

The Culture and Ethics Cell started an add-on course on “Mind Management Through Shri Bhagavad Gita” in April 2022, in collaboration with ISKCON, East of Kailash, New Delhi. The collaboration also resulted in a visit to ISKCON temple premises (East of Kailash) on 27 January 2023 to connect students with sources of wisdom, expand the probability of spiritual upliftment, and add value to their holistic development. The visit included a darshan of deities, followed by a visit to the world’s largest Bhagavad Gita comprising 670 pages and weighing 800 kg, and its precise explanation by ISKCON devotees.

NSS Unit of P.G.D.A.V. College (Evening) has performed several events in the year 2022-23. The tenure started with the visit of volunteers to the National War Memorial in July to pay respect to the martyrs of the Kargil War. To celebrate Independence Week it organized Tiranga rallies in Nehru Nagar, conducted Swachata Drive, and Plantation Drive in the primary schools of Sarai Kale Khan, a cleanliness drive in Humayun Tomb, and a documentary screening on 12 August 2022. Also, the volunteers participated in the Tiranga rally organized by the University of Delhi and attended Yuva Samvad by the Ministry of Youth and Sports Affairs. On 28 August 2022, it organized a sports day with slum kids which had competitions like the 100-meter race, and 3-leg race to promote sports and remember the contribution of Major Dhyan Chand. The students were given certificates as well. In September, the Swachhta Pledge was taken in front of the NSS Wall. On 10 September a seminar on Anti Addiction/Nasha Mukti Bharat Abhiyan was organized. The unit celebrated Children’s Day by collecting goodies and distributing them among the slum kids nearby. In December, the kids taught under Project Paathshala performed in the Atal Foundation at the Society of International Law’s auditorium. In February, under project ‘Khushi’, NSS collected clothes which were distributed among the slum kids and their parents.

### **Library Development**

College Library organised a programme: Know your Library, for first-year students of Academic year 2022-23. The aim of the program was to inform the students about the efficient use of library resources. The library of college contains 57491 books, 55 journals/magazines, and 4489 book bank.

**Total Faculty Strength: 79**

### **Financial Allocation and Utilization**

Grants allocated: 29,85,52,915/-

Grants utilized: 28,01,33,895/-

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## **RAJDHANI COLLEGE**

### **Brief history of the College**

Rajdhani College was established in 1964 by the Delhi Administration in Kirti Nagar, New Delhi under the name of Government College and was renamed as Rajdhani College when the Delhi administration vested its governance in an autonomous Governing Body. Rajdhani College is a constituent college of the University of Delhi and has completed 50 glorious years of academic excellence. The College is situated in West Delhi on Mahatma Gandhi Marg (Ring Road) near Raja Garden, New Delhi and is accessible from all corners of Delhi.

The college complex has an air-conditioned Seminar/Conference Room, an air-conditioned Auditorium, a well-stocked Library with Computer & Internet facility with access to more than one lac scholarly books and e-books on various subjects. The college has well-equipped Science Laboratories, as well as Math and Computer Laboratories.

A Robotics laboratory in collaboration with e-Yantra IIT Bombay was established in 2013. It was formally inaugurated on 16th January 2015. This lab is also a part of an initiative of the Ministry of Human Resource Development (MHRD) through National Mission on Education through ICT (NMEICT) to promote education in embedded systems and robotics throughout the country. To facilitate recreation the college has a beautiful playground for outdoor sports activities like cricket, football, hockey, volley ball, etc.

We offer courses in: Commerce, Humanities, and Social Science, and Science Stream. Among the different honours courses the college offers Bachelor with Honours Commerce, Bachelor with Honours in English, Hindi, Sanskrit, History, Political Science, Economics, and Bachelor with Honours in Chemistry, Physics, Mathematics and Electronics. The college also offers post graduate courses in English, Hindi, History and Commerce. For an overall development of the students co-curricular activities are organised through various societies. Every department has its own society which conducts regular academic programmes and events relating to its subject area.

### **Major Activities and Achievements**

This year, the college inaugurated the IGNOU Study Centre at college to cater to the academic needs of the students in distant learning mode. The College also installed five water coolers for hygienic drinking water with proper storage to take care of the basic needs of our students. We also installed 3 flood lights in the Sports Ground to offer a proper space to our sportsperson for practice. To inspire the youth towards collective progress, peace and harmony, our National Flag was installed in the college premises. To beautify the campus, a Selfie-Point themed “I Love Rajdhani College” has been installed recently.

The college received the Appreciation Certificate for submitting a video on the topic, Karigari (Skill) and Karobari (Entrepreneurship) in February 2023 from the Mahatma Gandhi National Council of Rural Education, Department of Higher Education, Government of India.

## Honours/Distinctions

Dr. Sonia Lumb was awarded, Dr. Sarvepalli Radhakrishnan Best Teacher & Researcher Award 2022, in Physics by the International Multidisciplinary Research Foundation (IMRF) Institute of Higher Education and Research, India on 05 September 2022.

## Publications

Dr. Rachna Sethi (Associate Professor) . (2023). Language Politics and Polarizations in Anita Desai's In Custody" in Language and Language Teaching . *Language and Language Teaching*, 12(23), 41-48.

Dr. Bharti Sharma (Assistant Professor) . (2023). 21 st Century Humans and/vs the Environment' in Earth Root magazine . *Earth Root magazine*, 22(0), 8-10.

Dr. Satish Kumar (Assistant Professor). (2022). सूक्तसाहचर्ये लोककथा परम्परा . *Vedanjali*, 18(9), 184-187.

Prof. Suman Kumar is Co-Author . (2022). नोर्डकत सम्बन्ध वैश्वक नेतृ व की ववदेश नीतत" . *News Times Post*, -( ), 20-21.

Dr. Sonia Bhandari . (2022). Social and Economic Maxims of ICT in education . *Economic Maxims*, -(1), -.

Prof. Sonia Lumb (Associate Professor) . (2022). Generation of adiabatic pulses' . *Physica*, 144(1), 115431.

Dr. Divya Singh (Associate Professor) . (2022). Evolution of plasma wave oscillations in Terahertz Frequency Regime in the wake of ultra short laser irradiation on air plasma . *Evolution of plasma wave oscillations in Terahertz Frequency Regime in the wake of ultra short laser irradiation on air plasma*, 271(1), 511-519.

Prof. Rajesh Giri. (2023). Effect of Electric and Magnetic Field on Thermal Property of Two Dimensional Harmonic Oscillator . *Result in Physics*, 45(2), 1-12.

Prof. Rajesh Giri . (2023). Insights into the Electronic Properties of Coumarins: A Comparative Study' in Phys . *Physical Chemistry Research*, 11(2), 267-286.

Prof. Urvashi Arora . (2022). 'High precision implicit method for 3D quasilinear hyperbolic equations on a dissimilar domain: Application to 3D telegraphic equation' . *Computers and Mathematics*, 122(1), 93-116.

## Research Projects

IoE scheme 2022-2023 (IoE grant number: IoE/2021/12/FRP-47) on the topic "Synthesis, Characterization of Y III – substituted Arsenotungstate and its catalytic application in thioether oxidation". Sanctioned Amount: Rs. 5 Lakh. Principal Investigator: Dr. Mukesh Kumar Saini, Department of Chemistry.

## **Seminars Organized**

Seminar entitled, “CYBERWARE was organized by YUVA, The social welfare and youth development society on 27 September 2022. The speakers were Prof. Sunaina Kanojia and Mr. Atul Verma

Seminar entitled, “Frontier in Social Sciences” was organized by, Majma-Al-Bahrayn (Departmental society of History Department), along with Committee on Extension Lecture Series, on 03 November 2022. The speakers were by Dr. Dhanajay Rai and Dr. Sanjiv Rai.

## **Conferences Organized**

Organised an ICSSR sponsored two-days International Conference on “Rethinking Contemporary Global Concerns: Universal Basic Income, Universal Citizenship and Global Justice” by Department of Political Science from 28 - 29 April 2022.

Organised a three-day International Conference on “Sustainable Future in the Post Pandemic Era: Life Skills as Strategic Enablers” by the Department of Political Science in collaboration with the Indian Association of Life Skills Education (IALSE), United Nations Population Fund and ICSSR from 4-6 November 2022.

Organised an International Conference on “Sustainable Development in Commerce, Management and Technology” jointly with Indian Commerce Association, Delhi NCR Chapter, Pinaki Technno, India on 27 February 2023.

Political Science Department partnered with the Comparative Federalist Research Group, Department of Political Science, University of Delhi and Research Development Cell, Rajdhani College in organising the International Colloquium on “The Historic Unification Process of the European Union”, which was organised in Satyakam building, University of Delhi on 5 December, 2022.

## **Seminar/Conference Presentations**

Mukesh Kumar Saini presented a poster on research work in the International Conference on “Nano Medicine: Chemistry Medicine Interface (NCMI-2022)” held on 06 December 2022 at the Department of Chemistry, University of Delhi.

Dr. Sasmita Mohanty presented a paper at the ICSSR Sponsored Two-Day National Seminar on Celebrating Women in Azadi ka Amrit Mahotsav on the topic “Women and National Movement: The Case of Odisha” organised by the Department of Political Science, Lakshmibai College, University of Delhi from 2-3 March 2023.

Dr. Rachna Sethi delivered a lecture on “Gender and Urban Cartographies: Feminist Reading of Spaces” at the National Webinar on Debates on Sex and Gender: Feminist Perspectives organised by Kamakhyanagar College (Odisha) on 02 December 2022.



Dr. Ved Mitra Shukla presented a paper titled “Partition in Translation: Rereading Hindi Long Poem ‘Ek Agnikaand Jagahen Badalata’ in English” in 3 Day International Conference on Rethinking Partition:75 Years, organised by Mata Sundri College for Women, University of Delhi in collaboration with Punjabi Sahit Sabha, Delhi & Indian Council of Social Science Research (ICSSR) during 3-5 November 2022.

Dr. Jasvir Tyagi presented a paper on “Social media and literature” in International conference on Role of journalism in Nation building, organised by the Department of communication and media studies at Gautam Buddha University in collaboration with SAARC Journalist Forum, on 10-11 January 2023.

Dr. Divya Singh delivered a lecture in the International Conference on Nanomedicine: Chemistry Medicine Interface (NCMI-2022) on paper entitled “THz technology in Biomedicine” organised by the Department of Chemistry, University of Delhi on 06 December 2022.

Prof. Nawal Kishore delivered a lecture in the International Conference on Trends in Federalism: Expanding Horizon, Exploring New Terrains on “The Party Politics in Bihar: A Regional Perspective” organised by the Department of Political Science, Shaheed Bhagat Singh College, in collaboration with Comparativist Federalist Research Group on 10 December 2022.

Ms. Mhadeno Jungi presented a paper at the ICSSR Sponsored two-day National Seminar on Celebrating Women in Azadi ka Amrit Mahotsav on “The Wife, the Mother and the Women in the Indian National Movement” organised by the Department of Political Science, Lakshmibai College, University of Delhi from 2-3 March 2023.

**Number and percentage of students placed: 85**

**Number of Companies visited for campus recruitment: 370**

### **Extension and Outreach Activities**

On 13 February, *Yuva*, The social welfare and youth development society, organised a visit to an old age home under ‘SADBHAV’ where they visited Mata Ram Beti Old Age Home. They had a fruitful experience playing Antakshari, dancing etc. In order to commemorate Har Ghar Tiranga initiative and celebrate 75 years of independence, युवा conducted Tiranga Yatra on 13 August 2022 from College to Bali Nagar and back to college. This initiative helped invoke the feelings of patriotism in people.

Also, the volunteers joined their hands for a noble cause in the presence of Mr. Anurag Singh Thakur, Minister of Youth Affairs and Sports, GOI, at the Red Fort on 19 October 2022 where Swachh Bharat campaign 2.0 was launched.

The college volunteers also did a food donation drive at Chandni Chowk, Delhi and served 60 needy and poor people. On 7 November 2022, slides on the occasion of National Cancer Awareness Day were released in order to make people aware of the cancer prevention and early detection of the general public. On 11 November 2022, people were asked to donate for MUSKURAHAT 4.0 - A Visit to Orphanage to put smiles on the dull faces of the Children.

## **Library Development**

The college has shown capability to adapt according to emerging technologies. The library has more than 1.35+ lakh scholarly books on various subjects and subscribes to 36 newspapers and more than 60 periodicals to cater to the information needs of the library users.

This year our college library also become a member of DELNET (Developing Library Network) through this library users may have access to more than 3.5 crore catalogue records of books, journals, articles, etc. through Discovery Portal and more than one crore and fifty lakh full-text, e-books, e-journals, and e-articles through Knowledge Gainer Portal.

In addition to this college library is also a member of the N-List programme of UGC INFLIBNET, through which the users of the library can access 6000+ e-journals and 1,99,000+ e-books with remote login facility.

Reading room of the library is fully air conditioned and our library now also has an exclusive air conditioned faculty reading corner. Our college library is an automated library, where users can access the library in an automated manner. An exclusive reading corner has been introduced for differently abled students and teaching staff, where internet-enabled high speed computers with scanners and printers are made available for them. Our college library also provides in house reprography service to its users.

**Total Faculty Strength: 138**

Permanent: 84, Adhocs: 54

## **Financial Allocation and Utilization**

Grants Allocated: Rs 65,57,30,000/-

Grants Utilised: Rs 65,06,71,936/-

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## **RAJKUMARI AMRIT KAUR COLLEGE OF NURSING**

### **Brief history of the College**

The College was established in 1946 and initially B.Sc. (Hons.) Nursing programme was formulated to train young women as professional nurses for meeting the health needs of the country. In 1959, the University approved the initiation of two years Master of Nursing programme, M.Phil, in Nursing was started in 1986 as a foundation course for undertaking doctoral work and in the year 1992, Doctoral programme in nursing was started under Department of Nursing, University of Delhi. The college is also in process of being established as centre of excellence in Nursing by the Ministry of Health & Family Welfare. The College was selected as one of the sub-recipient for the GFATM (Global Fund for AIDS, Tuberculosis and Malaria) project under INC.

## Major Activities and Achievements

Rajkumari Amrit Kaur College of Nursing has been providing quality nursing education for the for the last 77 years. The College offers regular Programmes i.e. B.Sc.(H) Nursing, M.Sc. Nursing. The revised curriculum for both B.Sc.(H) Nursing and M.Sc. Nursing under semester system is running. College is nominated in collaboration with MOHFW to train the master trainers for 'National Emergency Life Support for Nurses'. Rural Teaching Centre at Chhawla village under RHTC Najafgarh for the purpose of providing objective oriented community health experience it continue functioning during pandemic also college is designated as study center by IGNOU. College participated in various programs like 77th TNAI in national conference and 50th SNA General committee meeting, blood donation week, world kidney day, perfect health mela etc.

## Honours/Distinctions

Mrs. Archana Maju and Ms. Dipti Luthra M.Sc. Nursing 1st year 2. Mrs. Jisha Srivastava and Ms Pasang M.Sc. Nursing 2nd year 3. Ms. Shruti and Ms. Priya B.Sc. (H) Nursing 1st year 4. Ms. Neyati and Ms. Stanzin B.Sc. (H) Nursing 2nd year 5. Ms. Chanchal Parasher and Ms. Divya Boora B.Sc. (H) Nursing 3rd year 6. Ms. Rashmi and Ms. Rajani B.Sc. (H) Nursing 4th year

## Students with Distinctions

Archana Maju of M.Sc Nursing 1st yr was awarded First rank in RAK college of Nursing. She scored 895 marks out of 1100.

Jisha Srivastava of M.Sc Nursing 2nd yr was awarded First rank in RAK college of Nursing. She scored 1566 marks out of 1900.

Neyati of B.Sc. (H) Nursing 2nd yr was awarded second rank in RAK college of Nursing. She scored 645 marks out of 900.

Chanchal of B.Sc. (H) Nursing 3rd yr was awarded Second rank in RAK college of Nursing. She scored 706 marks out of 900.

Divya Boora of B.Sc. (H) Nursing 3rd yr was awarded first rank in RAK college of Nursing. She scored 707 marks out of 900.

## Publications

Madhumita, D. et al. (April, 2022). A study to assess the effectiveness of a mobile App CANScreen on selected common cancer screening procedures and preventive measures in terms of knowledge and practice among undergraduate students. *International Journal of nursing and midwifery research*. 11(09): 11-23.

Madhumita, D. et al. (June, 2022). A study to assess the effectiveness of skill based training program for first responder on selected emergencies in terms of knowledge and practice of college students of selected district of Haryana. *International Journal of scientific research*. 11(06): 10-22.

## **Journals:**

### **Research Projects**

Self-funded project entitled, “A Study to assess the post Covid Health Problems and to Evaluate the effectiveness of an educational package on post Covid Rehabilitate among post Covid patents in terms of knowledge and practice in selected rural community of Delhi”. Sanctioned amount Nil. PI: Sam Sneha Sara

Self-funded project entitled, “A study to assess the association between menstrual problems and selected factors and to evaluate the effectiveness of planned teaching program on menstrual problem and their management”. Sanctioned amount Nil. PI: Lalrindiki K

Self-funded project entitled, “A study to evaluate the effect of music therapy on mental health problems among older adults during covid-19 in selected non-government old-age home in Delhi”. Sanctioned amount Nil. PI: Shalini

Self-funded project entitled, “A study to identify musculoskeletal problems and to evaluate the effectiveness of information booklet on Body Mechanics in terms of Knowledge and practice among nurses working in selected hospital in Haryana”. Sanctioned amount Nil. PI: Shruti Sharma

Self-funded project entitled, “An experimental study to evaluate the effectiveness of concept mapping as a teaching strategy to improve the critical thinking skills of nursing students in selected nursing Institution of Delhi”. Sanctioned amount Nil. PI: RT Smitha

### **Conferences Organized**

Organized one day conference on ‘Critical care beyond basis: Nurse practitioner in fore front’ on 6 February 2023.

Organized one day conference on ‘Emergency care: upskilling makes the difference’ on 31 January 2023.

### **Seminar/Conference Presentations**

Dr. Mrs. Daisy Thomas presented a paper titled “National workshop on emergency care: upskilling makes the difference” and “National workshop on critical care beyond basis: Nurse practitioner in fore front” from 2-9 February 2023.

Mrs. Sarita Shokanda presented a paper titled “National workshop on critical care beyond basis: Nurse practitioner in fore front” from 9 February 2023.

Mrs. Madhumita Dey participated as resource person in scientific oral paper presentation in “National workshop on emergency care: upskilling makes the difference” and “National workshop on critical care beyond basis: Nurse practitioner in fore front” from 2-9 February 2023.

Mrs. Mitali Biswas participated as resource person in scientific oral paper presentation in “National workshop on emergency care: upskilling makes the difference” on 2 February 2023.

**Number and percentage of students placed: 100**

**Number of Companies visited for campus recruitment: 1**

### **Extension and Outreach Activities**

The Rural Teaching Centre was established in 1950 for the purpose of providing objective oriented rural community health experience to the students. It covers population of Approx., 23,000 and is situated 35 kms away from the college. The center provides an integrated comprehensive health and family welfare service to the community. Special emphasis is given on MCH services, family planning, immunization, family welfare services, nutrition, adolescent girl’s health and health education programme by the students and staff of rural unit in collaboration with the staff of RHTC, Najafgarh. Staff and students also participated in National Health Programmes like Malaria control programme, Dengue control programme, Revised National Tuberculosis control programme; AIDS control programme, Diarrheal Disease control and Intensified Pulse Polio programme etc. The centre also has DOTS and Microscopic Centre for screening and treatment of T.B. & MDR TB patients RFTC Chhawla is also a ‘Team Movement Point’ for National Pulse Polio Programme covering 10 villages.

### **Library Development**

Total No. of Books in library: 21,956

Total No. of Magazine and Journals subscribed: 32

**Total Faculty Strength: 29**

### **Financial Allocation and Utilization**

Grants Allotted: 35 Crore

Grants Utilized: 34.67 Crore

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## **RAMANUJAN COLLEGE**

### **Brief history of the College**

Ramanujan College, formerly known as Deshbandhu College (Evening), was established in 1958 by the Ministry of Rehabilitation, Government of India in the memory of Late Lala Deshbandhu Gupta, a freedom fighter. As an Evening college, it operated from the premises of Deshbandhu College that functioned in the morning hours. It became a co-educational institution in 1994. Fully-funded by the UGC, it has been maintained by the University of Delhi since 1972.

In the year 2010, the College got a new identity when the University of Delhi along with UGC and MoE (erstwhile MHRD) renamed Deshbandhu College (Evening) as Ramanujan College, and allocated a separate space of seven acres of land within the existing College campus in Kalkaji, New Delhi. From an evening College, it became a full-fledged morning College in 2012. In the initial years, the college offered only six undergraduate courses, namely, B.Com., B.A. Programme, B. Com (Honours) and B.A (Honours) in English, Political Science, Hindi. Currently, the College has added ten more courses in the last decade, namely: B.A. (Honours) in Applied Psychology, Philosophy and Economics; B.Sc. (Honours) in Statistics, Mathematics, Computer Science and Environmental Science; Bachelor in Management Studies (BMS); and B. Voc. in Banking Operations and Software Development. The college also runs a Master's programme in Hindi.

### **Major Activities and Achievements**

The college continued to build its knowledge infrastructure. Rs 3.5 crores was invested in the Research Development and Services Cell which now covers 17 domains ranging from Sustainable Development and Policy Research and Praxis, Digital Transformation Lab, Fintech Division and a Centre for Folk Culture Studies. 3 international MOUs were signed with Meta, Linux Foundation and Open-Air Interface, taking the total to 7. Rs 2.08 crores were spent on IT infrastructure and Studio enhancement. Rs 36 lakhs was spent to set up a state-of-the-art Skill Development Centre to run online skilling courses in New Generation technologies, Social Science, and ancient Indian Knowledge Systems. Under Vidya-Vistar, tie-ups were completed with 31 institutions across India. The Institution's Innovation Cell was set up in October.

32 National MoUs were signed for conducting collaborative Faculty Enrichment Programmes. 130 programmes (FDPs, FIPs, Refresher Courses, Workshops and Conferences) were conducted by the Teaching Learning Centre (TLC) benefiting around 31,357 participants across India. An MOU was signed with the Central Bank of India to train 40,000 employees through a 2-month online Certificate course on "Fundamentals of ESG and Sustainability."

A laboratory was set up for the Environmental Science Department which maintains an on-campus Miyawaki forest. The library RFID system was also upgraded. One more Academic block is under construction.

### **Honours/Distinctions**

Dr. Sunita Pooniya was conferred with Academic Excellence Award 2022 by Environment and Social Development Association (ESDA), Delhi during the world Environment Summit from 15-16 October 2022.

Dr. Ajay Kumar received Best Academician Award for valuable contribution to Education, other Academic activities and Innovation in Research, given by Social Research Foundation, Kanpur (Uttar Pradesh) India, on 25 September 2022.

Dr. Moirangthem Jiban Singh was awarded the Paryavaran Rakshak Award by Student for Development, Delhi during Srishti Manthan, on 23 January 2023 at ECA Daulat Ram College, University of Delhi.

## Students with Distinctions

Tushar Middha of B.A.(Hons) Philosophy, Batch 2019-2022, was conferred a gold medal (Indian Philosophical Congress Medal) for acquiring first position in the University of Delhi in 2022.

## Research Projects

Ms. Isha Gupta received International Research Grant Award for the Project entitled, “The Rise of Business Services and Structural Transformation in India, Kenya and South Africa: Role of Female Labour Supply”, sponsored by CEPR (Centre for Economic Policy & Research), Europe. Grant amount: 1000 Pounds.

TLC Ramanujan College, 2 years duration project entitled “Impact Assessment of Climatic Variability on Tea Production in the Darjeeling Region of West Bengal using Artificial Intelligence and Machine Learning Techniques”. Sanctioned amount of Rs 1000000. PI: Dr. Netrananda Sahu, Co-PI: Dr. Rajiv Nayan. Sanctioning Institution: Ramanujan College, University of Delhi.

TLC Ramanujan College, 2 years duration project entitled “Soundscape Ecology of Tehri Garhwal District of Uttarakhand”. Sanctioned amount of Rs 1000000. PI: Dr. Nikhil Kumar Rajput. Sanctioning Institution: Ramanujan College, University of Delhi.

## Publications

Omisha Sangeet, Shyodan Singh. (2022). Experiences of single-parent children in the current Indian context . *Journal of Family Medicine and Primary Care*, 11(7), 3790–3794.

S. Kumar and V. Kumar, H. M. Srivastava and N. E. Cho. (2022). Hermitian-Toeplitz and Hankel determinants for starlike functions associated with a rational function . *Journal of Nonlinear and Convex Analysis*, 23(12), 2815–2833.

D. Kumar, V. Kumar and L. N. Das. (2022). Hermitian-Toeplitz determinants and some coefficient functionals for the starlike functions . *Application in Mathematics*, 68(1), 289–304.

V. Kumar, R. Srivastava and N. E. Cho. (2022). Littlewood-Paley conjecture associated with certain classes of analytic functions . *Boletín de la Sociedad Matemática Mexicana*, 28(13), 16pp.

Rajesh Singh, Purnima Gupta and S. Arumugam. (2022). Truly Non-trivial Graphoidal Graphs. *AKCE International Journal of Graphs and Combinatorics*, 19(2), 112-117.

Bullo Kano. (2023). Can a Machine be Intelligent?: Analysing Notions in AI Discourse . *Journal of Comparative Literature and Aesthetics*, 96(2), 90-97.

Ajay Kumar. (2023). Ambedkar’s Approach to International Relations and India’s Foreign Policy. *British Journal of Philosophy, Sociology and History*, 3(1), 17-31.

Singh, Kanwal Jeet & Gunasekaran, Vembanan. (2023). Entrepreneurship and Employment Skills: Role of National Education Policy (NEP) 2020 . *International Journal of Advanced Research*, 11(7), 708-711.

Sakshi Soni, Ashish Kumar Shukla and Kapil Kumar. (2023). RELIABILITY PAPER Estimation and prediction in generalized half logistic lifetime model using hybrid censored data. *International Journal of Quality & Reliability Management*, published online(<https://doi.org/10.1108/IJQRM-05-2022-0149>), 15pp.

Ananda, Prabuddh and Ranjan, Tulika. (2022). Menstruation, Advertising and Problematic Frameworks . *International Journal of Trends in English Language and Literature*, 4(3), 28-43.

### **Journals**

Prof. (Dr.) S. P. Aggarwal. (2022). International Journal of Applied Ethics (ISSN: 2321-2497). *Annual*, 9(1), 1-33

Prof. (Dr.) S. P. Aggarwal (India) & Prof. (Dr.) Deepak Khazanchi (International) (2022). Ramanujan International Journal of Business and Research (RIJBR) ISSN print: 2455-5959 ISSN online: 2583-0171. *Annual*, 7(1), 1-82

### **Seminars Organized**

Seminar entitled “Planning for Human Rights of Vulnerable Groups in Disaster Affected Areas” by Prof. B. Zutshi, Former Professor, Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi on International Human Rights Day on 09 December 2022.

Seminar entitled “Ethics and Values in Public Governance” by Mrs. Vinod Jindal, former Director at Ministry of Urban Development on 06 February 2023.

Seminar entitled “Personality Development and Improved IQ, EQ, HQ and SQ through Sahaja Yoga Meditation” by Mr. Anish Kohli, TEDx speaker and Director of an Australian MNCs India unit on 11 March 2023.

### **Conferences Organized**

International Conference on “Graphs, Networks and Combinatorics (ICGNC 2023)”, organized on 10 January 2023, in collaboration with Indian Oil, SERB, DRDO and PNB.

### **Seminar/Conference Presentations**

Dr. Sandeep Thakur presented a paper on "Influence of regional tectonics, sedimentation and human intervention in smaller seabound river systems: A case study from Subarnarekha River" at the E-conference on River Mouth Systems and Marginal Seas – Natural Drivers and Human Impacts, organized by University of Szczecin, Helmholtz Zentrum Hereon from 5-7 December 2022.



Dr. Neha Singh presented a paper on the Idea of Bharat entitled “Women, the Denominator of Ambedkar’s Social Endosmosis” in the two-day National Seminar on Marginalisation and Social Inclusion: The Cultivation of Indian Social Cultural Thought, organised by the Centre for the Study of Social Exclusion and Inclusive Policy, JNU in collaboration with Social Studies Foundation from 13 -14 April 2022.

Dr. Pallavi Mahajan presented papers on “Role of Human Capital in Promoting Sustainable Economic Development”, “Market Economy and Challenges of Sustainability” and “Renewable and clean energy: a leap forward towards green living” in the International Conference on Technological Transformation and Sustainability: Perspectives and Challenges, organised by DAV Centenary College, Faridabad, sponsored by the Department of Higher Education, Haryana, held on 31 March 2023.

Preksha Mishra, presented papers on “Income and Employment loss due to Covid-19 using PLFS 2019-20 to 2021-22: A re-estimation”, and “Rural diversification and Employment story in India” at Indian Society of Labour Economics Conference in March 2023.

Preksha Mishra presented a paper titled “Persistent Vulnerabilities in the world of work and contemporary capitalism: Some reflections from India” at Indian Society of Labour Economics Conference in 2022.

Aastha Jain presented a paper on the “Role of FDI and Industrial Policy in India’s Automobile Industry” at 5th Annual National Conference organised by Rashtriya Samaj Vigyan Parishad (RSVP) in collaboration with Hansraj College, University of Delhi in October 2022.

Preksha Mishra was a speaker at a Webinar on “Social Security and informal workers” organised by ActionAid India in September 2022.

### **National/International MoUs Signed**

Associate Membership form signed on 09 June 2022 between Ramanujan College, University of Delhi and OpenAirInterface Software Alliance C/O EURECOM Campus SophiaTech, France for Research & Development in Emerging Technologies like 5G, AR/VR, Blockchain.

### **Other Inter-Institutional Collaboration**

The college has signed more than 30 National MoUs with Colleges/Universities across the country for conducting collaborative Faculty Enrichment Programmes, under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

**Number and percentage of students placed: 254**

**Number of Companies visited for campus recruitment: 146**

### **Extension and Outreach Activities**

The Centre for Social Innovation ran the project “Pathshala” in which students conducted around 50 teaching sessions in slums. A four-week-long teaching-learning initiative for the children of the

construction workers on the College campus was organised by the Department of English. On 21 October 2022, a Diwali surprise was arranged by the Department of English for the underprivileged children of the construction workers at the College.

Tatva Society conducted 2 Clean-up drives in Sanjay Van on 22 January and 26 February 2023 and one in Central Ridge Forest on 12 February 2023. It also joined the Delhi Chapter of the global movement led by Fridays for Future. They participated in the Research team and conducted research over the environmental issues in Delhi and the potential solutions. Ten volunteers also participated in the United Eco Warriors march from ITO metro station to the Delhi Secretariat, performed some arts like Poetry and Chalk Graffiti, and presented the memorandum to the Government of Delhi.

Girl-Up Ramanujan conducted a pad donation drive at Coolie camp, Vasant Kunj on 14 November 2022. The Department of English, in collaboration with the School of Happiness and Equal Opportunity Cell, organised an event called “Lovehap” for the differently-abled children of Chetna Welfare, Faridabad on 30 November 2022.

On 20 July 2022, National Outreach Programme members visited the residents of Panchvati Old Age Home and shared their knowledge of mobile phones with the elderly. On 23 October 2022, they organized a Diwali celebration there. On 30 December 2022, the Society welcomed the new year, in the company of the elderly residents. On 14 August 2023 they collaborated with children of Coolie Camp to organize an Independence Day Celebration.

### **Library Development**

The college library purchased 606 books this year, making the total number of books in the college library as 40,000. The library web page and WEBOPAC are more customized and users can find all relevant information about the library. More work has also been done on DSPACE which is the Ramanujan Institutional Repository where previous year's question papers, news clippings, faculty publications and Ramanujan College journals are now available. This year, the library conducted orientation programs to teach students how to use the library resources. The college library also organized a Book Fair on 18-19 October 2022, to promote library users and provide them with a wider platform for book selection. A three-day KOHA workshop for library employees was also organized from 8-10 February 2023.

**Total Faculty Strength: 127**

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 42,36,59,954/-

Grants Utilised: Rs. 42,54,41,237/-,

Carry Forward Grant: Rs. 2,79,63,255/-

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## RAMJAS COLLEGE

### Brief History of the College

Ramjas College is situated in Delhi's northern ridge in the lap of the Aravalli mountain range. As one among the oldest institutions of Delhi University, the college has been serving the nation since its foundation on 14 May 1917 by the great educationalist and philanthropist Lala Rai Kedar Nath in the memory of his father Lala Ramjas Mal. The foundation stone of the college was laid by Mahatma Gandhi at a hillock called Kala Pahad which later came to be called as Anand Parbat. After the handing over of Anand Parbat to the British Army for military use during the World War II, Ramjas College was relocated to its present location in the year 1950. This new building was inaugurated in 1951 by Dr. Rajendra Prasad, the first president of India. The College also takes pride in having been associated with Dr. B. R. Ambedkar, the chief architect of the Indian Constitution, who adorned the Governing Body of this institution. The students of Ramjas College joined the Indian independence movement and actively participated in the Quit India Movement of 1942. The college also played a key role in several new initiatives at the university level such as the conception of the idea leading to the formation of Staff Council as a statutory body in all affiliated colleges of Delhi University. In the year 2017, a grand celebration was organized to commemorate the journey of 100 years by Ramjas College and subsequently the Department of Posts, Government of India released a postage stamp to mark the centenary of the institution.

Located in the north campus of Delhi University, it attracts the talents from far and wide across the globe. This renowned temple of learning for the period covering more than a century holds credit of making leaders who have left their imprints in different spheres of life. The college maintains an efficient academic ecosystem by harnessing the potential of human resources of the students, faculties and non-teaching staff. This has helped in creating a healthy teaching-learning environment at this home for the pursuit of knowledge.

The heritage building of the college with its added new structures equipped with essential facilities, provide an ideal atmosphere for teaching, research and conducting outreach programmes. The institution is gifted with a spacious campus, state-of-the-art infrastructure, dedicated faculty and non-teaching staff marching together towards integrating the principles, values and practices of sustainable development into all aspects of teaching and learning. The college provides diverse forms of opportunities to students through various clubs and societies in order to enhance their knowledge and skills, reach excellence in different fields, and achieve all-round development. It has adequate facilities supported by advanced technology which makes it a premier institute for learning.

The college at present offers the following courses to the students of undergraduate and postgraduate levels in various streams of science, arts and commerce along with certificate and diploma courses in foreign languages.

### Major Activities and Achievements

During the academic year 2022-2023, 18 Books/Chapter in Books and 140 Research Papers in UGC Care List have been published; 1 Research Project was awarded, and more than 30 Seminars/Conferences were organised.

## Honours/Distinctions

Dr. P. C. Tulsian awarded with “Excellence Award for in-service Teacher in College” by University of Delhi. He also got the BEST SCHOLAR AWARD by INSPIRA-IRA Academic Excellence Award-June 2022.

Prof. Suresh Kumar awarded with “Lifetime Achievement Award” by MAESASS-2023.

Prof. Hardeep Kaur award by Zoological Society of India for Outstanding Research and Academic Contribution in the field of Molecular/Fungal Biology in 2023.

## Students with Distinctions

Harshit Singh of B.Sc. (Hons) Statistics III year has got 1st Position with CGPA of 9.676.

Nishtha Jain of B.Sc. Life Sciences III year has got 1st position with CGPA of 9.439.

Drishti Sunder Phukan of B.Sc. (Hons) Mathematics has got 1st position with CGPA of 9.581.

Ekta Sharma of B.Com. (Hons) III year has secured 1st position with CGPA of 8.973.

Jaiveer Singh of BA (Hons) Political Science III year has secured 1st position with CGPA of 8.176.

## Publications

Khanna, M. K., Sharma, S., Dutta, S., et al. (2023). An investigation of dielectric properties of ultrathin TiO<sub>x</sub>-SiO<sub>x</sub> nanocomposite layers on Si substrate. *Journal of Materials Science: Materials in Electronics*. 34(NA): Article No. 490.

Khanna, M. K., Kumar, V., Gupta, A. (2023). Interacting with Futuristic Topological Quantum Materials: A Potential Candidate for Spintronics Devices. *Magnetochemistry*. 9(3): 73.

Kaur, H. (2023). Candida auris in Dog ears. *Journal of Fungi*. 9(7): 720.

Kaur, H. (2023). Identification of Sesamin from Sesamum indicum as a Potent Antifungal Agent Using an Integrated in Silico and Biological Screening Platform. *Molecules*. 28(12): 4658.

Ratnani, S. (2022). Challenges and opportunities in using ionic liquids-modified carbon allotropes as emerging anticorrosive nanomaterials. *Materials Letters*. 328(NA): 133213.

Neelima. (2022). Well-Posedness And Tamed Schemes For McKean–Vlasov. *The Annals of Applied Probability*. 32(5): 3283-3330.

Dua, S., Kumar, P., Pani, B., Kaur, A., et al. (2023). Stability of carbon quantum dots: a critical review. *RSC Advances*. NA(13): 13845-13861.

Singh, S. (2023). The study of remote working outcome and its influence on firm performance. *Social Sciences & Humanities Open*. 8(1): 100528.

Singh, O. (September 2022). New taxonomic information of Cryphodera kalesari (Nemotoda; Heteroderidae). *Nematology*. 24(9): 1-10.

Rajor, H. (2023). Investigation of Congo Red Toxicity towards Different Living Organisms: A Review. *Processes*. 11(3): 807.

## **Journals**

Ramjas Economic Review. *Annual*.

## **Research Projects**

Government of India, Ministry of Fisheries, Animal Husbandry and Dairying Department of Animal Husbandry and Dairying funded 3 Years project entitled, 'Production of Cow-Bioplastic from Cow-Dung and its Applications in Different Areas.' Sanctioned amount of 1 crore eighty-five thousand. PI: Dr. Suchi Verma

## **Seminars Organized**

Seminar entitled, 'Environment and Climate Sustainability: Challenges and Prospects' by Prof. Shachi Shah, Director, School of Interdisciplinary and Transdisciplinary Studies IGNOU, New Delhi organized under the aegis of IQAC Ramjas College on 15 April 2023.

Seminar entitled, 'Career Opportunities in Civil Services' by Ms Vishakha Yadav, Additional Deputy Commissioner (ADC) Deomali, Arunachal Pradesh organized under the aegis of IQAC Ramjas College on 25 March 2023.

Seminar entitled, 'Search for Happiness' by Dr. Sanjay Tyagi, Associate Professor, Department of Physics, Sri Aurobindo College, University of Delhi And Dr. Sukriti Chauhan, CEO, ETI organized under the aegis of IQAC Ramjas College on 20 March 2023.

Seminar entitled, 'Biological Resources and IPR Laws: Status Opportunities and Challenges' by Dr. Arun Kumar Maurya, Assistant Professor, Department of Botany, Multanimal Modi College, Modinagar organized under the aegis of IQAC Ramjas College on 7 February 2023.

Seminar entitled, 'National Education Policy: Opportunities and Challenges, Quality based education and global competencies' by Prof. Bal Ram Singh, Institute of Advanced Sciences and Botulinum Research Centre, Dartmouth, MA, USA organized under the aegis of IQAC Ramjas College on 2 February 2023.

## **Conferences Organized**

Organised a one day conference Annual Conference on "Remembering Architecture, Excavating Memory" by Department of English organized on 24 February 2023.

Annual Winter Conference by Department of Economics organized on 24 February 2023.

### **Seminar/Conference Presentations**

Dr. Alok Kumar Singh presented a paper titled "Human health in the Perspective of Air Pollution" in Conference on VAYU: THE VITAL LIFE FORCE held on 2-4 December 2022.

Dr. Amit Bhattacharya presented a paper in 108th Indian Science congress 2023 as Science Communicator from 5-6 January 2023.

Dr. Sheetal Budhiraja presented a poster on "Delivery of Active Compound Loaded Calcium Phosphate Nanoparticles across Blood Brain Barrier" in International Conference on Green Technology: Issues and Challenges, Centre for International Cooperation, Ch. Charan Singh University, Meerut on 22-24 September 2022.

Dr. Sheetal Budhiraja presented a poster on "Use of Nanotechnology in Theragnosis and Treatment of Cancer and its future perspectives" in International Conference on Smart Materials- Perspectives and Prospectives on 28 March 2023 in Department of Chemistry, University of Delhi.

Dr. Amit Bhattacharya delivered a series of Lectures on "Understanding of Enzymes", "Karyotyping for chromosomal Abnormalities" and Cellular Processes: An overview" on 21 November 2022, 30 January, 20 March, 6 July 2023.

Dr. Sonia Goel presented a paper titled "Occupational Choices of Women Working in Urban Informal Sector in India" in "National Conference in "Contemporary Issues in Economic Theory and Policy Department of Economics, St Xavier's University, Kolkata in collaboration with the Jesuit Economic Association of India on 25 March 2023.

Dr. Amanjeet Panghal presented a poster in International Conference on Radiation Awareness and Detection in Natural Environment from 2-4 March 2023.

Dr. Tarun Kumar presented a paper titled "Dynamics of Double Nitrogen Vacancy Centre in a Photonic Crystal Nanocavity: Optical Bistability and Four Wave" in International Conference on Nanotechnology: Opportunities and Challenges organised by Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Milia Islamia from 28-30 November 2022.

Invited lecture by Dr. Sharf Ilahi Siddiqui on "Water for a Sustainable World" in Online Summer Programme by Kyung Hee University, Office of International Affairs, South Korea on 3 August 2022.

Dr. Surender Singh presented a paper titled "Resource Mobilisation vs. Aam Aadmi: A Study of Individual Income Tax Assesseees in India during the post-Covid Liberalisation Period" in National Seminar on Aatma

Nirbhar Bharat: Building Resilience, Sustainability and Global Competitiveness at Central University of Jharkand, Ranchi, held from 11-12 November 2022.

### **National/International MoUs Signed**

**MoU with Mahatma Hansraj Faculty Development Centre (National):** Hansraj College, University of Delhi and Ramjas College, University of Delhi collaborated for conduct of a Faculty Development Programme on "Computer Algebra System" from 22 March - 3 April 2023 and on "Principles of Radiation Detection and Measurement and Experimental Techniques" (via online mode) from 3-9 April 2023.

**MoU with University of Stellenbosch (International):** Memorandum of Understanding with University of Stellenbosch, South Africa was signed on 1 March 2023.

**MoU with Central University of Haryana (National):** MoU between Ramjas College, University of Delhi, Delhi and Central University of Haryana, Mahendergarh, was done in 2023.

**MoU with Gautam Buddha University (National):** MoU between Ramjas College, University of Delhi, Delhi and Gautam Buddha University, Greater Noida (UP) signed on 20 June 2023.

**MoU with Delhi Institute of Advanced Studies (DIAS) (National):** MoU between Ramjas College and Delhi Institute of Advanced Studies (DIAS), with students and faculty from Commerce Department for Online Session on 'Relevance of Indian Knowledge System in Personal Growth' was held on 28 June 2023

**MoU with Gitarattan International Business School (National):** Ramjas College and Gitarattan International Business School (giBS) for lecture on 'Breaking Gender Stereotypes: Awareness and Acceptance' collaborated on 6 June 2023

**MoU with Sahaja Yoga Organisation (National):** Genesis, The Life Science Society, Ramjas College and Sahaja Yoga Organisation for Plantation drive and lecture on 'A unique experience of stress management through Sahaja Yoga' collaborated on 22 March 2023.

**MoU with Academy Of Nanotechnology And Waste Water Innovations (Anwwi), Johannesburg, South Africa (International):** Ramjas College in collaboration with ACADEMY OF NANOTECHNOLOGY AND WASTE WATER INNOVATIONS (ANWWI), JOHANNESBURG, SOUTH AFRICA for "Lecture on 'Integrated Approach for Management of Cancer Hospital Aqueous Waste'" signed on 1 June 2023

**MoU with Centre for Social Development (National):** Ramjas College in collaboration with Centre for Social Development for Lecture Series on Unsung Heroes on 27 May 2023

### **Other Inter-Institutional Collaboration**

Ramjas College collaborated with Deen Dayal Upadhyaya College, Gargi College, Kirori Mal College, IIT Roorkee, PG Department of Zoology (MU), PhiXgen Pvt. Ltd. for OUTREACH: Microsphere: an international outreach program on occasion of International Microorganism Day on 17 September 2022.

Women's Development Cell, Ramjas College, under the aegis of IQAC collaborated with Directorate of Family Welfare, Govt. of Delhi, State Blood Cell, National Health Mission and Genetics Division, Department of Pediatrics, Lok Nayak Hospital, and Bhoree Living Humanly Foundation organized Thalassemia Screening Camp & Awareness Drive (WDC) on 1 March 2023.

NSS Unit of Ramjas College collaborated with Dr. Ram Manohar Lal Lohia Hospital organised Blood Donation Camp on 27 March 2023.

NSS Unit, Ramjas College collaborated with NCC and Reach Foundation organised event 'Youth Consultation: Health, TB and Youth in India' on 29 March 2023. IQAC, Faculty and Students of Commerce Department collaborated with AON for Industrial Visit to Aon, Noida on 31 May 2023.

**Number and percentage of students placed: 145**

**Number of Companies visited for campus recruitment: 80**

### **Extension and Outreach Activities**

In the academic year 2022-23, 33 extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS, NCC etc have been organised. Apart from academic facets, the college promotes extension activities to serve society and to sensitize students towards social service and responsibilities. Students enthusiastically take part in community outreach programmes addressing different human-centered and ethical issues. Numerous recognitions have been conferred to the college for significant contributions to community service. The college's extension activities are directed towards creativity, scientific acumen and community outreach. DST-INSPIRE Science camps, seminars/webinars and workshops are organised on regular basis. Furthermore, college believes that energy and engagement of youth can make path breaking changes in alleviating the problems of society. Various community outreach programmes like gender sensitization, blood donation camps, environmental and health awareness campaigns are conducted through the National Service Scheme, ENACTUS, Eco Club and Gender Sensitisation Committee (GSC). Extension activities are encouraged to be taken up by the students in order to fulfill the aspirations of vision and mission statements of the institution.

Our NSS Unit student volunteers take up social service activities such as special camps in adopted villages, service to orphanages, tree plantation, yoga classes, and flood relief camps. All these programs develop a sense of responsibility, accountability, integrity and human values.

Medical camps are organized in neighborhood for benefit of society as part of NSS activities.

The college has organized a cleanliness drive under 'Swachh Bharat Abhiyan'. The main purpose of this campaign was to create awareness about cleanliness and its impact on health.



Mental health awareness workshops have been organised around important issues like suicide prevention, mental health literacy, managing anxiety, sleep problems, examination stress, developing gratitude, empathic communication, personal and social trauma like riots and Covid19.

Community and environmental conservation events such as International Peace Day, Seeding Awareness, Plantation Drive and Holistic Wellness workshops have been organised by NSS.

Several ongoing projects are underway through the initiatives of NSS. Project Samvridhhi and Navannamardhan aim at providing educational support to the underprivileged through workshops, literacy classes and skills-based knowledge, as well as celebrating events with children in the downtrodden areas. Project Parivesh is an environmental protection programme which enables spread of awareness regarding conservation and ecology. Project Sashakt is for the upgradation and provision of educational materials for differently abled individuals. Project Indranush aims at spreading awareness regarding diseases, healthcare and vaccines.

The Ramjas NSS Unit organized activities like Literacy Classes for children of weaker sections, Leadership Workshops, Summer Camps, National Awareness Programmes, Diwali Mela, Swacchta Pakhwada, Activeness, Cleanliness, Simplicity & Humility, Integrity & Patriotism, Fraternity, Ahimsa, Nukkad Natak, Blood Donation, Praise, Self Reliant, Debate competition on social issues, Donation Drive, Self Defence training, Disaster Management training, various webinars related to the growth and development of volunteers as well as society etc.

ENACTUS Ramjas qualified as a finalist in EWC and represented India at the Global Stage in Enactus World Cup, 2022. We were among the Top 4 teams in the Race to Feed the Planet and Top 5 in the Race to Climate Action.

### **Library Development**

Ramjas College was the first institution in the University of Delhi to adopt complete automation of library (since 2000) with vast collection of books.

The ILMS software used for automation is TROODON version 3.0. This software has different modules like acquisition, maintenance, circulation, serials, online public access catalogue (OPAC) kiosk that helps to search and locate the books in library. It also alerts students via reminder SMS for book return. This software supports Devanagari and other Indian languages.

In 2022-23, ACs, double footstep for PwD, wall fans, PC and information kiosk were installed. The library is now fully air conditioned and Wi-fi enabled. The Entry register is kept at main entrance to record the daily attendance of the students and teachers separately.

The library has provision of different seating areas for students and faculty with desktop facility.

The college library has a rich collection of more than 1,33,585 books. It also has rare book collection section of old books that are no more available in markets. It subscribes to 18 newspapers and several magazines.

The collection for science subjects includes books from disciplines like Botany, Zoology, Physics, Chemistry, Electronics, Anthropology, Life Sciences, Physical Sciences, Geology etc. It also has an exhaustive collection of academic and supplementary texts for Commerce and for Humanities subjects like English, Hindi, Sanskrit, History, Economics, and Philosophy.

Apart from the in-house collection, the library has full access to thousands of journals online through N-LIST databases. N-list is a comprehensive database where users of Ramjas College can access more than 6000+ e-journals, 199500 e-books through the National Digital Library. It covers all the disciplines i.e., Pure Science, Social Sciences and Humanities Including Languages and Linguistics.

Library has subscription to LEX software from University of Delhi that allows students to convert e- books to pdf which can be downloaded for study material.

To facilitate the availability of ample learning resources for people with print disabilities library has provision of Braille books / Dictionary and Braille desktops.

To ensure ease of accessibility, visually challenged students are provided with recording devices, ANGEL to record their lectures. The average daily user count in the library is approximate 308. One of the future expansion programmes of the library is to update the complete automation of library usage enabling self-check-in and check-out with the help of an Electronic Security Gate.

Total No. of Books in library: 1,03,000

Total No. of Magazine and Journals subscribed: 6,293 (N-List)

**Total faculty strength: 229**

#### **Financial Allocation and Utilization**

Grants allocated: Rs. 72 Crore

Grants utilized: Rs. 99.9 Crore

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### **RAM LAL ANAND COLLEGE**

#### **Brief history of the College**

Ram Lal Anand (RLA) College founded in 1964 by Late Shri Ram Lal Anand, a senior advocate in the Supreme Court of India, initially managed by the Ram Lal Anand Trust and taken over by the University of Delhi in 1973 and thereafter being run as a University of Delhi maintained Institution with 100 % funding from UGC, Government of India. It is a multi-disciplinary, co-educational institution with more than 2700 students pursuing 14 Undergraduate programs in Humanities, Commerce, Management and Sciences. College campus is spread over ten acres of land with green lawns and elegant buildings located next to South Campus, University of Delhi and is connected to Durgabai Deshmukh, South Campus metro station. The college is completely wi-fi enabled with excellent infrastructure, including 40 ICT-enabled classrooms linked to LAN, including 10 smart classrooms, Media production centre, state of the art well-equipped labs in the departments

of Statistics, Microbiology, Computer Science, Commerce, Geology, Mathematics, and Hindi Patrakarita, Seminar Rooms, Amphitheatres, Library, Playground and Cafeteria. College has been recognised as a sustainable campus by Ministry of Education and as “Model College” for best facilities for PwD students by the Commissioner for PwD, Delhi. The college has so far offered 55 job-oriented add on skill development courses for students. Promotion of research and innovation is among the best practices of the college. College actively funds small research projects, summer research internship programmes and facilitates start-ups.

### **Major Activities and Achievements**

College implemented four-year undergraduate program under “Undergraduate Curriculum Framework 2022” based on National Education Policy 2020 offering wide choices to students with GE, SEC, VAC, DSE course options. During the academic session 2022-23, 829 students were admitted in undergraduate programmes and 6 students admitted to the PG programme in Hindi making a total strength of 2600 with 40% girls. Besides, five Ph.D. students were enrolled under the supervision of the faculty members. Ninety two students received scholarships under Central Government and State Govt Organizations.

RLA is the first college of University of Delhi to start a Community Radio “TARANG” which is aired on FM frequency 90.0. Spanning over a radius spread onto 10 kms the unique educational and infotainment channel is also made available across the country via AndroidApp & I Store app.

College offered nine add-on skill development certificate courses, training more than 450 students; 56 Students were benefited through Summer Research Internships offered through Research and IPR cell. First one week Hands-on workshop in the series of 100 Days Training and Skill Enhancement Festival to celebrate 100 Years of University of Delhi was organised on “Basic Techniques in Microbiology” with Centre for Innovation in Infectious Disease Research, Education and training (CIIDRET) and Delhi School for Skill Enhancement & Entrepreneurship Development (IoE- DSSEED), University of Delhi.

College initiated the process of ISO 21000-2018 certification for management system for educational organizations (EOMS) with 11 faculty members completing its Onsite Internal Auditor Training Program. Three FDPs on Data analysis using R, NEP 2020: New Trends in Higher Education, Babsaheb Ambedkar and his visionary India: From perception to Inception in association with TLC, Ramanujan College were conducted. A workshop on “Prashanik Hindi” was conducted on 23-24 June 2022 with experts from Kendriya Hindi Prashikhan Sansthan, Raj Bhasha Vibhag, Greh Mantralaya, Govt of India for non-teaching staff.

Educational trips to industries and academic institutions including Verka Milk Plant, Chandigarh and Mohali, THSTI (Translational Health Science and Technology Institute), Gandhi Museum, Bharat Darshan Park, National Science Centre, Manali, Almora and nearby areas were organized to make students understand the relevance and application of their studies and to expose them to different cultures, traditions, and perspectives. A Swatchta Action Plan Committee (Implementation and Monitoring) with 6 subcommittees constituted to look after all aspects of sustainable development. Infrastructural upgradations include purchase of 62 desktop computers, 10 smartboards, Excellent sports ground with 3 cricket pitches for Net practice, 2 pitches for tournaments, football ground, volleyball ground and a ground each for kho-kho and kabaddi; Sanction of two Computer Labs with 80 computer units, Yoga and Activity room and a Gym ; Landscaping and enrichment of herbal garden undertaken.

## Honours/Distinctions

Dr. Pratik Kumar, Assistant Professor, Department of History was awarded with NMML Fellowship by Nehru Memorial and Museum Library, Teen Murti in the month of August 2022.

Prof. Perna Diwan, Department of Microbiology, was awarded “Best Teacher Award at state level” for session 2021-22 by Microbiologists Society, India in January 2023.

Dr Nidhi S Chandra got the best researcher award from VDGGOOD Professional Association, India on 30 November 2022 by VDGGOOD Professional Association, India.

Dr Sandeep Bhatt, has been awarded with his Ph.D. degree during session 2022-23.

## Students with Distinctions

Abhilash Jeas George, B.Sc (Hons) Microbiology III year awarded with University Gold Medal and certificate in the 99<sup>th</sup> Convocation ceremony held on 25 February 2023 for securing highest position in the University examination.

Saumya Samridhi, B.Sc (Hons) Microbiology III year selected for JNCASR Summer research fellowship 2022 and ACBR summer undergraduate research fellowship 2022 and got 2<sup>nd</sup> position in the Agar Art competition “Bioartist” organised by IIT Delhi.

Akshit Kotach, B. Sc (Hons) Mathematics, II year (NCC cadet) was selected for RD camp and Republic Day parade, New Delhi on 26th Jan, 2023.

Sumit Kumar Sinha, BMS I year bagged the Silver medal in 12<sup>th</sup> Jharkhand State Judo Championship 2022 organised by Indian Olympic association & Judo union of Asia at Dhanbad from 18-20 November 2022

Gouripriya Menon, B.Sc. (Hons) Geology III year bagged prestigious Erasmus Mundus International Scholarship, European Union, France & Sweden, 27 March 2023.

## Research Publications

Bhat, S., Saha, S., Garg, T., Sehrawat, H., Chopade, B.A., Gupta, V. (2023). Insights into the challenging multi-country outbreak of Mpox: a comprehensive review. *J Med Microbiol*, 72(6).

Gupta, I., Baranwal, P., Singh, G., Gupta, V. (2023). Mucormycosis, past and present: a comprehensive review. *Future Microbiology*, 18, 217-234.

Kapoor, S., Singh, A., Gupta, V. (2023). In silico evaluation of potential intervention against SARS-CoV-2 RNA-dependent RNA polymerase. *Physics and chemistry of the earth*, 129,103350.

Diwan, P., Nirwan, M., Bahuguna, M., Kumari, S.P., Gupta, R.K. (2023). Evaluating alterations of oral microbiome and its link to oral cancer among Betel Quid Chewers: Prospecting Reversal through Probiotic Intervention. *Pathogens*, 8(12), 996.

Bahuguna, M., Hooda, S., Mohan, L., Gupta, R.K., Diwan, P. (2023). Identifying oral microbiome alterations in adult betel quid chewing population of Delhi, India. *Plos One*, 1(18), e0278221.

Hooda, S., Malik, G., Saini, P., Grewall, A., Pandey, V.C. (2023). Cyanobacteria as a potential bioasset for restoring degraded land. *Land Degradation & Development*, 12(34), 3435-3450.

Pant, R.R., Bishwakarma, K., Kandel, K., Poudel, S., Nepal, J., Neupane, B.B., Singh, V.B. (2023). Seasonal variations and health risk assessment of trace elements in the Badigad River, lesser Himalayas, Nepal. *Acta Geochimica*, 42, 689-703.

Kumari, R., Suman, K., Karmakar, S., Lakra, S. G., Saurav, G.K., Mahto, B.K. (2023). Regulation and safety measures for nanotechnology-based agri-products. *Frontiers in Genome Editing*, 5, e1200987.

Jain, R., Bisht, T., Gupta, S., Diwan, P., Kumar, S. (2023). A Cross-Sectional study of North-East Region of India: Strengthening National Integration through National Cadet Corps (NCC). *Man and Society*, XVIII, 81-110.

## **Journals**

RLA Samachar. Annual, 1(1), 1-4

Sambhav. Bi-annua, 16(2), 1-32

## **Research Projects**

Project entitled, ‘Assessment and Monitoring of Depth of Anaesthesia using Explainable’ sponsored by ICMR, Government of India in the year 2022-24, for Rs.19.55 lakhs

Project entitled, ‘Resistome Metagenomic profiling of bioaerosols in metro network in Delhi-NCR (COVID-19) in India’ sponsored by ICMR, Government of India for the period 2021-24 for Rs. 56 lakhs.

Project entitled, ‘Development of computational framework for COVID-19 multi-omics data analysis in collaboration with IBAB, Bengaluru and sponsored by ICMR, Government of India for the period 2021-23 for Rs. 28.30 lakhs

Project entitled, ‘Targeting biofilm formation by inhibiting Cysteine biosynthesis pathway enzymes in ESKAPE pathogens with natural products’ and sponsored by ICMR, Government of India for the period 2020-23 and for Rs. 24 lakhs.

Project entitled, ‘Enhancement of Livelihood Opportunities through Sustainable Development using Multifaceted Support Plans for Village Cluster around Patiya in Takula Block, Almora District, Uttarakhand’

and sponsored by the National Mission on Himalayan studies (NMHS) by MOEF&CC, Government of India for the period 2019-2022 and for Rs. 199 lakhs.

### **Patents Filed / Granted**

Prof. Vandana Gupta, Department of Microbiology granted a patent “Method of screening inhibitors against Hepatitis C virus” in January 2023 filed on 30 March 2017, Patent no: 418733

### **Seminars Organized**

Seminar entitled, ‘Probiotics: Current understanding and future prospects, Role of probiotics in neonatal and child health for the North Zone’ was delivered by Dr. Bhabatosh Das, Associate Professor, from THSTI on 12 April 2023.

Seminar entitled, ‘How to plan and conduct a preclinical/clinical study involving consumable probiotic preparations in children, role of probiotics in neonatal and child health for the North Zone’ was delivered by Dr. Sucheta Banerjee Kurundkar, Head, Training CDSA from THSTI on 12 April 2023.

Seminar entitled, ‘Saga of Ozone layer Science and Policy’ was delivered by Dr. Amit Kumar Mishra, Assistant Professor School of Environmental Science Jawaharlal Nehru University on 6 September 2022.

Seminar entitled, ‘Block-chain Expert, Cryptography: A recent trend in Mathematics’ was delivered by Prof. R. K. Sharma, Professor at Indian Institute of Technology, Delhi on 9 September 2022.

Seminar entitled, ‘Stories Matter, How to be the Author of your own story’ was delivered by Ms Indu Punj, Founder on 3 February 2023.

### **Seminar/Conference Presentations**

Prof. Perna Diwan presented a paper entitled, ‘A strategy for efficient air sampling and metagenomic DNA extraction’ in the 63<sup>rd</sup> Annual International Conference of Association of Microbiologists of India (AMI) “Microbial technologies for sustainable biosphere” held from 2-4 February 2023 at Rohtak, India.

Prof. Perna Diwan presented a paper entitled, ‘Whole metagenome sequencing based analysis of water from urban STP to assess community characteristics and resistance gene repertoire’ in the 63<sup>rd</sup> Annual International Conference of Association of Microbiologists of India (AMI) “Microbial technologies for sustainable biosphere” held from 2-4 February 2023 at Rohtak, India.

Prof. Rakesh Kumar Gupta presented a paper entitled, ‘Mapping of air microbiome in OPDs of government hospitals through metagenomics approach: A special emphasis to resistance’ in the 63<sup>rd</sup> Annual International Conference of Association of Microbiologists of India (AMI) “Microbial technologies for sustainable biosphere” held from 2-4 February 2023 at Rohtak, India.

Dr. Vandana Gupta presented a paper entitled, ‘Growth and sustainability: our innovations’ during the Vishwa Guru Bharat: Use of Indian Knowledge in Developing Interventions and Innovations for Contemporary World

organized by Aryabhatta College, University of Delhi in association with Bharatiya Shikshan Mandal, Delhi Prant and ICSSR Delhi on 13-14 December 2022.

Dr. Nidhi S. Chandra, presented a paper entitled, ‘Screening of *in vitro* antimicrobial activity of extract of Rauwolfia serpentina in methanol against *Escherichia coli* and *Staphylococcus aureus*’ during the 63<sup>rd</sup> Annual AMI Conference titled "Microbial Technologies for sustainable Biosphere MICROBIO Tech-2023" organized by the Association of Microbiologists (AMI) India MDU Rohtak, Haryana on 2-4 February 2023

Dr. Shalini Swami presented a paper entitled, ‘*In silico* therapeutic approach for potential interventions against SARS CoV-2 Receptor Binding Domain of Delta variant (B.1.617.2)’ during the 63<sup>rd</sup> Annual AMI Conference titled "Microbial Technologies for sustainable Biosphere MICROBIO Tech-2023" organized by the Association of Microbiologists (AMI) India MDU Rohtak, Haryana on 2-4 February 2023.

Ms. Shikha Verma presented a paper entitled, ‘Hybrid Approach for Classification of Medical Imaging data using Machine Learning Techniques Presentation Machine Intelligence and Data Science Applications (MIDAS-2022)’ at the Conference organized by University of Versailles – Paris Saclay, France and UPES, Dehradun on 7 December 2022.

Dr. Prabhas K. Pande presented a paper entitled, ‘Preserve Geoheritage and Geodiversity in the Himalayas’ during the International Conference on Sustainable Geotourism organized by Ram Lal Anand College at Almora, Uttarakhand on 2-3 December 2022.

Dr. Lemmi-won Zimik presented a paper entitled, ‘Ukhrul District in the Himalayas: A Promising Place for Geotourism’ at an International Conference on Sustainable Geotourism organized by Ram Lal Anand College at Almora, Uttarakhand on 2-3 December 2022.

Dr. Prabhas K. Pande presented a paper entitled, ‘Activism through Curriculum: A case study of NCERT’ during the workshop on History Curriculum: Recent Perspectives and Challenges organized by Sanchi-Buddhist University of Indic Studies, Madhav Nidhi and Akhil Bhartiya Itihas Sankalan Yojna, Sanchi on 6-7 May 2022.

### **National/International MoUs Signed**

MoU signed with Ladli foundation on 27 January 2022

MoU signed with Satva-The Sustainable Initiative Sustainable trust of India (SIT) on 2 February 2022.

MoU signed with Teaching Learning Centre, Ramanujan College, University of Delhi and Dr. Ambedkar Chair in Social Justice, Indian Institute of Public Administration on 7 December 2021.

Continuing MOU with Virtual lab, IIT Delhi.

Continuing MOU with Translational Health Science and Technology Institute (THSTI) under Science SETU.

### **Other Inter-Institutional Collaboration**

College has collaboration with Vigyan Prasar; Department of East Asian Studies, University of Delhi; Teaching Learning Centre (TLC), Ramanujan College (Under PMMMNMTT scheme); Department of Biotechnology, IIIT; School of Biotechnology, GGSIP University, New Delhi, India; Centre for Innovation in Infectious Disease Research, Education and Training, University of Delhi South Campus; St Edmunds College Shillong, Meghalaya; ICT Academy; Translational Health Science and Technology Institute (THSTI) under Science Setu; National Institute of Plant Genome Research (NIPGR) Under Science Setu; Calyxpod; Virtual Labs (IIT Delhi); Amar Ujala Publications limited; Family of Disabled (FOD); Molitics; Dr. Ambedkar Chair in social justice Indian Institute of Public Administration; School of Computer and System Sciences (SC & SS), JNU.

**Number and percentage of students placed: 70**

**Number of Companies visited for campus recruitment: 25**

### **Extension and Outreach Activities**

One week Hands-on Summer Training workshop “Exploring and Identifying Microbial diversity” conducted from 13- 17 July 2022 under DBT Star College Scheme. Twenty five students of B.Sc. (Hons) Microbiology IV semester completed the workshop.

An outreach workshop titled “Journey to the Microbial Realm” was conducted for class 8<sup>th</sup> students of Apeejay school students on 9 September 2022 by Department of Microbiology, under DBT Star scheme. Five teachers conducted the workshop and four students volunteered for training more than 120 school students.

Under Spic Macay RLA Chapter, a number of events were conducted including Kangra Miniature painting workshop of 4 days, Concert of Pandit Pradeep Barot (Sarod) under Rendezvous series of Spic Macay and Mohan Veena recital by Pandit Vishwa Mohan Bhatt., and Qawali concert by Hasnain Nizami Qawali group during two days college festival, held on 22-23 March 2023.

An outreach workshop titled “How Microorganism Look, Grow and Replicate” was conducted for 20 students of class 11<sup>th</sup> students and teachers of Ramjas International School on 11 October 2022 under DBT Star scheme.

An outreach workshop titled “How Microorganism Look, Grow and Replicate” was conducted for class 12<sup>th</sup> students of Darbari Lal DAV School on 02 November 2022 under DBT Star College Scheme in which 33 students and one teacher participated.

On 17 January 2023, 19 students and 2 faculty members visited college from St. Edmund College, Shillong, Meghalaya. They were shown small scale fermenter, streak plate technique, colony counter and anaerobic gas Pak System at microbiology lab. Then they visited geology lab and fascinated with the crystal structures seen under microscope and rock specimens in geology lab.

Several literacy workshops for slum dwellers, self-defence camp, blood donation camps, swachhta camps, waste segregation, e-waste management, mass adoption of underprivileged girls, swachhta drives and events for promotion of Hindi, etc. were conducted under different societies and NSS.



## **Library Development**

A total of 1338 books (text and reference) were purchased with a total expenditure of Rs. 11,091,98/- in the library. Book bank facility developed for the needy students who will be given set of books for the core courses for the whole semester

**Total Faculty Strength: 90**

### **Financial Allocation and Utilization**

Grants Allocated = Rs. 33,64,00,000/-

Grants Utilized = Rs. 32,19,51,258/-

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## **SATYAWATI COLLEGE**

### **Brief history of the College**

Satyawati College is a constituent college of the University of Delhi. It was established in 1972 by the Government of Delhi. The college is named after a great freedom fighter, Behen (Sister) Satyawati, granddaughter of Swami Shraddhanand, who worked in close association with leaders like Mahatma Gandhi, Jawahar Lal Nehru, Jai Prakash Narain, and Sarojini Naidu. She toiled incessantly, till her death at the age of 39, towards uprooting poverty, ignorance, and communalism. She was named Toofani Behen (Stormy Sister) by Mahatma Gandhi for her zeal and determination. Satyawati Devi was an ardent freedom fighter from Delhi who was instrumental in encouraging a large number of women to participate in the 'Civil Disobedience Movement. Her commitment to national liberation and her dedication to women's freedom remain awe-inspiring. Her speeches and acts of defiance during the time of the freedom struggle embody the spirit of the college.

Satyawati College, run by the Delhi Government, is a highly esteemed off-campus institution affiliated with the University of Delhi. The college is situated in the heart of Ashok Vihar, North Delhi, and occupies a vast campus spanning 10 acres. The college is co-educational and appeals to students from diverse social backgrounds. There are a total of eleven departments and numerous courses available. In addition to their outstanding academic accomplishments, our students also demonstrate exceptional success in extracurricular activities. The college fosters an inclusive environment for students from various socio-economic, cultural, and geographical backgrounds, facilitating positive interactions among them.

The college also boasts its splendid, cutting-edge Dr. K.P. Bhatt Satya Auditorium, which is regarded as one of the finest in the University of Delhi. The spacious theatre is capable of accommodating events in the realms of academia, the arts, and other extracurricular activities. The college has established a comprehensive sports department in a separate building to encourage students to succeed in sports and promote their overall development. Additionally, it addresses the specific requirements for training individuals with disabilities. The college possesses a contemporary and well-furnished seminar room, a computer laboratory, and a fully automated and air-conditioned Dr. Haldar Memorial Library that houses a wide range of books and periodicals. Additional amenities include a seminar room, canteen, bank,

photocopier, and more. The college provides wireless internet access throughout the campus for both students and faculty. Numerous student-focused organisations, including department-based clubs and organisations like Arts and Culture, Debating, Dramatics, Film and Photography, NSS, NCC, and North East Society, enrich the college. These societies collectively create a vibrant and dynamic environment for our students. The college aims to cultivate creative and critical thinking skills among the students through a series of activities. A committed group of educators actively strives towards the holistic growth of pupils, empowering them to excel in their respective domains.

### **Major Activities and Achievements**

The college has received an A+ accreditation from NAAC during its second cycle. The University of Delhi has successfully completed the promotion of eight teachers from the rank of assistant professor (AL-12) to associate professor (AL-13A) in accordance with its requirements. Acquired and implemented the installation of 10 water coolers on the college premises to cater to the needs of the students. Guest faculty appointments were made on various occasions. Multiple research initiatives have been conducted and received approval. Coordinated a diverse range of seminars and conferences. The college has organised an annual event and hosted Sandeep Suri Cricket Tournament.

### **Students with Distinctions**

Nilesh Kumar of B.Sc. (Hons) III year scored 9.784 CGPA.

Tannu Kumari and Pallavi of B.Com. (P) III year scored 9.41 CGPA.

Bhavya Aggarwal of B.Com. (Hons.) II year scored 9.41 CGPA.

Harsh Vardhan of B.A (Hons) Economics, III year scored 9.25 CGPA.

Bhavya Aggarwal of B.Com (Hons) scored 9.18 CGPA.

### **Publications**

Singh, R. (2022). Trajectory of leptin and leptin receptor in vertebrates: Structure, function and their regulation. *Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular*. 257: 110652.

Jain, K. (2022). The Bigger Fall: Covid-19 vs Global Financial Crisis (08-09) Impact on Indian MSMEs. *Journal of positive school psychology*. 6(2): 2571-2584.

Goswami, A. (2022). Investor's Psychology in Portfolio Optimization: A Goal Programming. *Journal of Positive School Psychology*. 6(6): 2369-2382.

Saratchand, C. (2022). A Theoretical Consideration of the Socialist Market Economy. *International Critical Thought*. 12(2): 287-304.

Saratchand, C. (2022). The struggle against corporate encroachment in Indian agriculture. *Capital & Class*. 46(2): 159-165.

Ram, R. (2022). Beyond the Market: The Quest for Survivability of Informal Workers. *International Journal of Mechanical Engineering*. 7: 659-667.

Kumar, R. (2022). E-commerce and Online Shopping to Analyse Consumer Shopping Behaviour in Rural Rajasthan: An Empirical Study. *International Journal of Mechanical Engineering*. 7(1): 7026-7031.

Upadhyay, A. (2022). Women as Pioneers in Willa Cather's O'Pioneers and My Antonia. *International Journal of Creative Research Thoughts*. 12(10): 847-853.

Batra, L. and Taneja, H.C. (2022). Comparison between Information Theoretic Measures to Assess Financial Markets. *FinTech*. 1(2): 137-154.

### **Research Projects**

ICSSR funded project entitled, "Media And The Marginalised: A Study Of The Internet Era For Marginalised Section". Sanctioned amount of Rs. 5 lakhs. PI: Dr. Swadesh Singh (Department of Political Science)

ICSSR funded project entitled, "An Empirical Analysis Of Saving And Investment Pattern Of Households Residing In The National Capital region". Sanctioned amount of Rs. 4 lakhs PI: Dr. Ashutosh Goswami (Department of Commerce)

ICMR funded project entitled, "Underlying Mechanism Genotoxicity included by Non-ionizing electromagnetic radiation in human monocytic cell line (THP-1)". Sanctioned amount of Rs. 1 Crore, fourteen lakhs and forty-eight thousand. PI: Dr. Rajeev Singh (Department of Environmental Studies)

ICMR funded project entitled, "Modulation of Human ovarian granulosa cell (COV424) development and endocrine functions induced by non-ionizing electro-magnetic radiation". Sanctioned amount of Rs. 1 crore, ten lakhs and eighty-six thousand. PI: Dr. Rajeev Singh (Department of Environmental Studies)

### **Seminars Organized**

Seminar entitled, 'Quest for Meaning of Life' by Prof. Madan Lal, Professor, Department of Commerce at DSE organized on 2 September 2022.

Seminar entitled, 'Career in Data Science, To Educate students with future prospective in the field of data science' by Dr. Amlesh Kanekar, Director of Academics, MDAE organized on 13 October 2022.

Seminar entitled, 'Do Nights have History' by Dr. Arun Kumar, Assistant professor of History, University of Nottingham, UK organized on 5 September 2022.

Seminar entitled, 'Story of Sanskrit' by Prof. Gishri Nath Jha, Chairman, Commission for Scientific and Technical Terminology organized on 21 February 2023.

Seminar entitled, 'Research Methodology through Indic Perspective' by Prof. Himanshu Roy, Professor, Political Science, DDU organized on 22 February 2023.

### **Conferences Organized**

Organized one day conference on 'The Truth of The Greatest Hindu King of Medieval Bharat' by Dr. Omendra Ratnu, Columnist, Author of Maharana of Mewar, Chairman of Centre for Social Development on 25 March 2023.

**Other Inter-Institutional Collaboration: 16**

**Number and percentage of students placed: 6**

**Number of Companies visited for campus recruitment: 36**

### **Library Development**

The library boasts a substantial seating capacity, accommodating over 120 people, and also features a dedicated reading area exclusively for faculty members. The collection currently comprises over seventy-eight thousand items and continues to expand annually with new acquisitions. The library boasts a remarkable assortment of reference materials, including books, encyclopaedias, dictionaries, atlases, and yearbooks. The library has a subscription to a combined total of 25 newspapers and 20 magazines and journals. The institution provides tailored computer systems equipped with internet access and educational resources, including Braille reading materials, specifically designed to meet the needs of our students with disabilities. In addition to this, it is also equipped with current teaching and learning tools, such as an LCD projector and a computer cabin. The library grants customers access to premium electronic databases subscribed to by the Delhi University Library System (DULS). The library is equipped with two reading halls, one designated for students and the other for teachers. The Online Public Access Catalogue (OPAC) is implemented to facilitate convenient user access to books.

Total No. of Books in library: 80,859

Total No. of Magazine and Journals subscribed: 25

**Total Faculty Strength: 134**

### **Financial Allocation and Utilization**

Grants allotted: Rs. 50.67 Crore

Grants utilized: Rs. 56.16 Crore

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## SATYAWATI COLLEGE (EVENING)

### Major Activities and Achievements

While imparting quality education to the students, many of the teachers have participated and presented research papers at various national and international academic and scholarly conferences, seminars and workshops, both in India and abroad. Some of them, also, have authored and/or co-authored academic articles and books.

The academic results of the college have constantly shown remarkable progress with number of students in various departments securing outstanding marks in various courses and disciplines.

The college has established its reputation in various fields such as Sports, NCC, Dramatics and Debate. The college has set up the benchmark for excellence in Judo and Weight Lifting. Our students have excelled in Wrestling, Weight Lifting, Body Building, Kabaddi, Archery and Judo at Inter-University, National and International level.

The N.C.C. unit has provided ample opportunities to the cadets to participate in important all India Camps including Republic Day Camp, Prime Minister's Rally (2023), Amar Jawan Jyoti Camp (India Gate), Para sailing & Para slithering camp etc.

### Students with Distinctions:

Cadet Supreet kumar Jha, Cadet Bharat Singh Koshiyari, Cadet Jay Kumar, Cadet Abhishek Yadav and CDT Akash participated in PM Rally Culture.

### Publications:

Mittal, P. (2023) Readiness and Challenges of E-Learning during the COVID-19 Pandemic Era: A Space Analysis in Peninsular Malaysia. *International Journal of Environmental Research and Public Health*. 20(2): 905.

Mittal, P. (2022) Online Learning for Enhancing Employability Skills in Higher Education Students: The Mediating Role Of Learning Analytics. *TEM Journal*. 11(4): 1469-1476 .

Ranjan, S. (2022) Agripreneurship Advancement Creating Living for Indigenous Youth: Restrictions and Solutions. *Seybold Report*. 17(8): 468-485.

Singh, B., Kaushik, A. (2022) Suitability Assessment of Some Tree Species In Traffic Area Verges Of Delhi, India For Air Pollution Tolerance-Cum-Performance For Green Urban Planning. *International Journal of Geography, Geology and Environment*. 4(2): 122-134.

Ashok, A., N. Negi (2023) The Question of the Author: A Comparative Study between Roland Barthes's 'The Death of the Author' and Michel Foucault's 'What is an Author?'. *International Journal of Multicultural Literature*. 13(1): 75.

Tarika (2022) Following Gandhi's Footsteps: Indian Feminist Writers' Rebellion Through History'. *International Journal on Multicultural Literature*. 12(2): 103.

Anamika (2023). *Trin Dhari Ot*. Vani Prakashan: New Delhi

Anamika (2022). *Band Raaston ka Safar*. Rajkamal Prakashan: New Delhi.

Gupta, Khushbu (2023). Indian Women in Political Arena chapter in edited book *Indian Thoughts on Feminism*. Research in Indian Wisdom: New Delhi ISBN: 978-81-955489-2-7.

### **Research Projects**

ICSSR funded project entitled, 'Student community engagement initiatives in Swachh Bharat Abhiyan: Environment and Sustainability campaigns in higher education institutions. PI: Prof. Prabhat Mittal (Department of Commerce)

### **Seminars Organized**

Seminar entitled, 'The Forms of Resistance and the Mughal State' by Prof. Shalin Jain, Department of History, University of Delhi organized by Department of History on 9 November 2022.

Seminar entitled, 'Intellectual Foundation of Gandhian Nationalism: Early Interventions' by Prof. Salil Mishra, Ambedkar University and Prof. Ajit Jha, Satyawati College organized by Department of History on 22 February 2023.

Workshop conducted on 'Solid Waste Management' by Mr. Madhukar Varshney and Madhuri Varshney, Founders, The Rise Foundation, New Delhi organized by Department of Environmental Studies in association with Rise Foundation on 15 February 2023.

Webinar organized on 'Understanding Union Budget-2022 in the context of Data Analysis' by Dr. Indu Chaudhary organized by Department of Economics on 5 March 2022.

Webinar organized on 'Gender Equality' by Ms Shubhika, Co-founder of FIFE, New Delhi organized by Gender Champions Unit, Satyawati College (E) on 10 March 2023.

### **Conferences Organized**

Panel Discussion on Movie titled, 'Subhas Chandra Bose: The Mystery' organized by Department of Political Science on 17 March 2023.

### **Seminar/Conference Presentations**

Neerja Singh delivered a presidential Address of 'Modern India Session' at Uttar Pradesh History Congress, organized by Rohilkhand University, Bareilly, U.P from 8-9 November 2022.

Neerja Singh delivered a lecture titled, 'Sardar Patel: Challenges of Emerging Nation and Nation- Building' at NMML, Teen Murti, New Delhi organized by Ministry of Culture under Public Lecture series, Azadi ka Amrit Mahotsav on 16 December 2022.

Durgesh Verma presented a paper titled "Changing Trends of Political Parties and Party System in India" in the ICSSR sponsored two day International Seminar organised by IIPA, New Delhi from 14-16 March 2023.

Lavisha Verma presented a paper titled 'Public Facilitation Centres: An ethnographic Perspective' in the International Conference organised by Vivekanand College, University of Delhi from 2-3 February 2023.

**Number and percentage of students placed: 50**

**Number of Companies visited for campus recruitment**

4 companies visited the campus in the year 2022-23. Companies visiting the campus were Future Buddy, Corporate Service Employment, RTS Manpower KC GlobEd and My Ways

### **Library Development**

The college library has added 2200 new books on various subjects to its collection. The library subscribes to six journals of various disciplines, one journal (Reliance Drishti) for blind students, twenty-two magazines and twenty-three newspapers. To provide hassle free access to visually impaired students the library has also subscribed Indo-NVD software screen reading software with 14 voices in 10 languages). The library is also the member of N – LIST programme. The programme is funded by the MHRD under NMEICT to extend access to selected e-resources to colleges. It has subsumed under UGC-INFONET-Digital Library Consortium as college component from year 2014 being funded by UGC. The library offers an open access facility and OPAC facility to the users for the available collection. It has also started the PayTm facility to pay fine online for books return after due date. Recently library has opened a new Journal and magazine section for users, where they can read newspapers, magazines and journals subscribed by the library. The Previous year's question papers are also made available in digital form for easy dissemination among the students and teachers.

Total No. of Books in library: 83456

Total No. of Magazine and Journals subscribed: 28

**Faculty Strength: 125**

### **Financial Allocation and Utilization**

Grant allocated: Rs. 30.06 Crore

Grants utilized: Rs. 30.84 Crore

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## **SCHOOL OF OPEN LEARNING**

### **Brief history of the College**

School of Open Learning [a part of the Campus of Open Learning] formerly known as The School of Correspondence Courses and Continuing Education, established under the University of Delhi in 1962, is a pioneer Institution in the field of Distance Education in India. The admission process for various courses in the School is governed by the norms established by the University of Delhi. The examination is also conducted by the University of Delhi. The University of Delhi confers the degree to the students of the School as it does in

the case of its other constituent colleges. There is no differentiation in the course curriculum followed by the School of Open Learning and other constituent colleges and Departments of the University of Delhi. In an effort to reach out to a larger number of students the school is in the process of opening up Study Center in the Eastern and the Western part of the National Capital Region of Delhi.

### **Major Activities and Achievements**

Delhi University's School of Open Learning (SOL) has successfully completed 60 years of its establishment. On the occasion, the varsity rewarded retiring teachers, non-teaching staff and 170 toppers of the last five years. School started six new programmes during the year 2022-23, namely, MBA, BBA, BMS, B.A. (Hons.) Economics, B.Lib. and M.Lib. Department of Distance and Continuing Education, School of Open Learning, University of Delhi prepared E-Content, audio-video Lectures for new courses.

**Students with Distinctions: 01**

### **Seminars Organized**

Seminar entitled, 'A Political Analysis of Russia-Ukraine Crisis', was delivered by Prof. Artur Demchuk, Head of the Department of Comparative Politics, Faculty of Political Science, Moscow State University, Russia, India Celebrating Azadi ka Amrit Mahotsav @ 75 years on 11 May 2022.

Seminar entitled, 'Revisiting Sri Aurobindo's Philosophy of Education in the 21st Century' was delivered by Prof. Payal Mago, Director, Campus of Open Learning, University of Delhi, celebrating the 75 years of India's independence, 150<sup>th</sup> Birth anniversary of Sri Aurobindo on 12 July 2022.

**Number and percentage of students placed: 280**

**Number of Companies visited for campus recruitment: 16**

### **Extension and Outreach Activities**

The Open Learning Development Centre started ET-Lab for serving as a prominent hub for pioneering and progressing educational technology, not only inside our University but also at a National level. Main functions of ET-Lab are: Instructional Resource Design, Provision and Maintenance of AV Equipment, Video and Computer based educational packages, Faculty and Professional Training, Video conferencing for Faculty selection interviews and meetings, E-learning and MOOCs, Sponsored and Research Projects.

### **Library Development**

SOL library is a knowledge resources centre with print and digital resources related to the disciplines of the courses of SOL. During the year 2022-23, SOL added 6740 important books and subscribed new Journals and Newsletters. SOL developed 2 new libraries i.e. West Regional Centre and Library and OLDC.

Library OLDC preserves and makes digital content available. Its goal is to promote library science research, content development, education and innovative technology and engaging programmers. This report covers significant accomplishments, difficulties and future. OLDC added 396 rare and important books to library,



enhancing the academic resources in this field. RFID-tagged all rare and fragile materials to make them available to Online Library Discovery Catalogue (OLDC) users.

To enhance technology, OLDC implemented cutting-edge computer systems that allow smooth access to the Digital University Library System (DULS) electronic journals and databases, boosting academic community's research options. Library Management System, KOHA was upgraded to streamline and improve services. This upgrade has sped up OPAC searches and improved circulation services.

**Faculty Strength:** permanent faculty = 17, temporary faculty = 1, Ad-hoc faculty = 19

### **Financial Allocation and Utilization**

No grant has been received from the UGC since 1997-98 onwards

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## **SHAHEED BHAGAT SINGH COLLEGE**

### **Brief history of the College**

Shaheed Bhagat Singh College, named after the great son of India, Shaheed-e-Aazam, Sardar Bhagat Singh, was established as a coeducational college in 1967 and functions as a constituent college of University of Delhi. It acquired postgraduate status in record minimum time of 09 years. The College takes pride in having an accomplished faculty. The college is NAAC Accredited 'A' Grade college with fully computerized library, seminar room, computer labs, Geography lab and impressive infrastructure including big sports ground with cricket pitch, volley-ball court, basket-ball court and a lawn tennis court.

The college functions through various Committees of faculty members. Students are also encouraged to volunteer for some committees under the guidance of competent faculty members. Ample opportunity is provided for talent to grow in cultural and their co-curricular activities. Over the years, in order to promote independence of thought and vision, the college has distinguished itself in diverse academic and professional fields by providing a vibrant and intellectually stimulating academic culture. The college is proud of its alumni engaged meaningfully in diverse fields of business, culture and society at large. The pass-outs are placed at senior positions in Government, Judiciary, Business, Industry and Politics.

### **Major Activities and Achievements**

Shaheed Bhagat Singh College has been imparting higher education in Commerce, Humanities, and Social Sciences for over five decades now. Learning from our online and offline experiences, we endeavour to provide a vibrant student-centric pedagogy and environment for the overall development of all our students.

The year 2022-23 was special for many of our faculty members as several promotions were cleared this year. A total of 22 faculty members, at various levels (Level-11, Level-12, Level-13A, and Level-14), have been promoted. Further, Academic year 2022-23 was notable due to the appointment of new faculty members. There have been a total of 64 appointments so far, which includes 36 in the Commerce department, 15 in the Economics department, 9 in the Geography and 4 in the Mathematics department.

The 56th Annual Day of the College was celebrated on 26th April, 2023, at the Siri Fort Auditorium. The event was graced with the esteemed presence of Mr. Ashok Bajpai, Member of Rajya Sabha. The college also took many initiatives to develop new ways of making the campus eco-friendly. In order to become more ecologically conscious, the college has banned the use of plastic bottles.

### **Honours/Distinctions**

Prof. Pooja Goel was conferred the College Teacher's Award for providing meritorious services to the Profession for the year 2021-2022 by the University of Delhi in March 2023.

Prof. Ruchi Gupta was conferred the Best Reviewer Award for the year 2022 by the renowned International Journal of Consumer Studies (ABDC-A journal, Impact Factor: 7.096, Cite Score: 10.0). Ten academicians have been recognized worldwide for the award. She is the only one from India to receive this award for the year 2022.

Dr. Amrita Bajaj was conferred with Distinguished Teacher's Award by Deccan Geographical Society of India at the 17th Deccan Geographical Society International Conference organized by Banaras Hindu University, Varanasi.

### **Students with Distinctions**

Dharya Sharma of BCom (H) Batch 2020-23 was conferred a gold medal for the outstanding research work in 3-month internship at the International Institute of SDGs and Public Policy Research.

### **Publications**

Aggarwal, N. (2023). Blockchain technology and software engineering practices: a systematic review of literature using topic modelling approach. *International Journal of System Assurance Engineering and Management*, 14(0), 1-17.

Goel, P. (2022). Being socially responsible: How green self-identity and locus of control impact green purchasing intentions?. *Journal of Cleaner Production*, 35(7), Article No. 131895.

Goel, P. (2022). As you sow, so shall you reap: Assessing drivers of socially responsible investment attitude and intention. *Technological Forecasting and Social Change*, 18(4), Article No. 122030.

Goel, P. (2022). Understanding Transport Users' Preferences for Adopting Electric Vehicle Based Mobility for Sustainable City: A Moderated Moderated-Mediation Model. *Journal of Transport Geography*, 10(6), Article No. 103520.

Goel, P. (2022). Food Wastage Avoidance Behavior: How Different are Generation Z Travelers?. *Journal of Sustainable Tourism*., Taylor & Francis Online, Published online: 15 March 2023

Kumar, R. (2023). Social entrepreneurship and the capability approach: An empirical study. *Academy of Marketing Studies Journal*, 27(3), 1-20.

Kumar, S. (2022). Long 30 term climate change assessment during 1907-2015 in the Kumaun Himalaya region, Uttarakhand in the special issue" in the special issue "Sustaining Himalayan Environment and Future Earth". *International Journal of Ecology and Environmental Sciences*, 49(2), Online.

Mal, S. (2022). Estimation of spatio-temporal variability in land surface temperature over the Ganga River Basin using MODIS data. *Geocarto International*, 37(13), 3817-3839.

Mal, S. (2022). The Egyptian Journal of Remote Sensing and Space Sciences Trends in land surface temperature and its drivers over the High Mountain Asia. *The Egyptian Journal of Remote Sensing and Space Sciences*, 25(3), 717-729.

Setia, N. (2022). A High accuracy variable mesh numerical approximation for two-point nonlinear BVPs with mixed boundary condition. *Soft Computing and Modelling (Springer Nature)*, 26(19), 9805–9821.

Sharma, S. (2022). *Journal of Business Studies*, XII(1), 70

## **Journals**

*Journal of Business Studies*. ISSN No. 0975-0150. Editor: Dr. Sonika Sharma.

## **Research Projects**

National Commission for Women funded one year project entitled "A Study on Working and Effectiveness of Women Police station (WPS) in Himachal Pradesh: step facilitating Social Justice". Sanctioned Amount of Rs. 12,21,000. PI: Dr. Suneel Kumar (Dept. of Commerce)

ICSSR sponsored project of 24 months' duration entitled, "Empowering Women through the internet amid their victimization in cyber space: An investigation into use of internet and digital literacy among rural women in the state of Himachal Pradesh". Sanctioned Amount of Rs. 6,00,000. PI: Dr. Suneel Kumar (Dept. of Commerce)

ICSSR sponsored project of 6 months' duration entitled, "Socio- Economic and Cultural System of Bharia Tribes of Patakot Vally (Madhya Pradesh): Strategies for Sustainable Development". Sanctioned amount of Rs. 1,00,000. PI: Dr. Amrita Bajaj (Dep. of Geography)

## **Seminars Organized**

Seminar entitled, "Modules of Writing Research Paper, Research and Research Design" by Dr. Montu Bose, Department of Business and Sustainability, organised at TERI School of Advanced Studies, New Delhi on 5 September 2022

Seminar entitled, "Women and Health Care Gender Equality" by Ms. Rituparna Neog, Queer rights Activist from Assam, poet, storyteller & Development Sector Worker on 23 September 2022

Seminar entitled, "Breast Cancer: Problem & Cure, Women and Health Care" by Dr. Geeta Kadayaprath, Head, Breast Surgical Oncology, Max Super Specialty Hospital Patparganj on 11 October 2022

Seminar entitled, “The scope and provocation of civil services, Higher Education and Employment” by Mr. Sachin Badshah, IPS Gujarat (2004), DIGP of CISF, organized on 16 November 2022

Seminar entitled, “Women’s Unpaid Labor in Contemporary India” by Ms. Shweta Raj, General Secretary, Dilli Asha Kaamgaar Union & Prof. Archana Prasad, Professor, Centre for Informal Sector and Labor Studies, JNU by Women Development Cell on 27 January 2023

### **Conferences Organized**

Organised one day conference on “Business Practices in the Era of Sustainable Development Goals 2030 and new age technologies” by the Commerce Association on 10 November 2022.

Organised one day conference on “Trends in Federalism: Expanding Horizons, Exploring New Terrains” in collaboration with Bharati College (DU), Satyawati College (DU) and ARSD college (DU) on 10 December 2022.

### **Seminar/Conference Presentations**

Professor Shikha Gupta presented a paper titled “ESG Funds: A Route to Sustainable Development”, at the 4th International CEO (Communication, Economics, Organization) Social Sciences Congress organized by Mohanlal Sukhadia University, Alfred Nobel University, Samarkand Branch of Tashkent University of Economics, International Gorazde University from 20-22 May 2022.

Professor Shikha Gupta presented a paper titled “An Investigation into ESG Practices of Select Indian Companies: A Cross-sector Analysis”, at the International Conference on Sustainable Goals 2022 organized by the Indian Institute of Management (IIM), Bodhgaya and University of Cambridge on 17 September 2022.

Professor Shikha Gupta presented a paper titled “Do Mergers and Acquisitions Impact Performance? An Examination of a Case in Point”, at the International Conference on Green Technology, Agriculture Information Technology, Business Management and Social Sciences organized by Research Education Solutions, Society for Ecological Sustainability and Centurion University on 17 July 2022.

Professor Nilanjana Mukherjee, presented a paper titled “Spatialising the Great Indian Desert” in a workshop conducted in Regensburg University, Germany, on “State Descriptions Revisited: Historical Forms of Territorial Representations” from 29-30 September 2022.

Dr Aariti Saini presented the paper titled “The Role of Health-Related Perceptions on Mobile Payment Adoption: Evidence from the Mobile Banking Industry in Sri Lanka” at the Banking & Insurance Session of the Interdisciplinary Conference of Management Researchers, conducted by Faculty of Management Studies, Sabaragamuwa University of Sri Lanka in association with Emerald Publishing 16-17 November 2022

Professor Vishwa Raj Sharma, presented a paper titled “Regional Geography in India” during ICSSR-JSPS Joint Research Program in the field of Social Sciences entitled “Tradition and Succession of Regional Geography in India” hosted by Kwansei Gakuin University, Kobe, Japan during 11-17 March, 2023.

Professor Vishwa Raj Sharma presented a paper titled “Past Experiences, Present Challenges and Future Prospects of Urbanization in India” in the International Geographical Congress (IGC), held at Paris, France during 18-22 July 2022.

Dr. Rityusha Mani Tiwary presented a paper titled “China’s State Capitalism and Global Capital: Domestic Transformations and Foreign Policy Readjustments” in the International Seminar on China’s Domestic Governance, organised by the Institute of Chinese Studies in collaboration with the Centre for Policy Research on 9-10 September 2022.

Dr. Rityusha Mani Tiwary presented a paper titled "China's Image War - Contradictions in Coverage on the Origins of Covid -19" for Panel "Beyond Global IR? - Dialogue and Contention for a More Inclusive Discipline" in 64th International Studies Association Annual Convention: Real Struggles, High Stakes: Cooperation, Contention, and Creativity, held at Montréal, Québec, Canada during 15-18 March 2023.

Dr. Rityusha Mani Tiwary, presented papers titled “Nehru and third world Internationalism”; “BRICS, NAM and other emerging forces in a global restructuring”, and “Regional responses to COVID in South Asia” in the Bandung-Belgrade-Havana at the Global History and Perspective Conference organised by the Bandung Network in collaboration with ARSIP, National Republic of Indonesia, Universitas Padjadjaran, Bandung, Universitas Airlangga, Surabaya and Universitas Udayana, Bali during 7-14 November 2022.

### **National/International MoUs Signed**

**MoU with BSU, UK (International):** Memorandum of Understanding (MoU) was signed between SBSC and Bath Spa University, UK in February, 2022. The MoU seeks to facilitate cooperation in any subject through promotion of exchange of information and academic materials and exchange related to faculty, administrative staff, research staff, visiting scholars, students and others, with the mutual cooperation of both institutions.

**Number and percentage of students placed: 203**

**Number of Companies visited for campus recruitment: 70**

### **Extension and Outreach Activities**

The NSS unit of the college conducted various youth awareness activities such as lectures on social and sociological issues, essay writing competitions, debate competitions, blood donation camps, book donation drives, donation drives for disaster-affected victims and educational classes for the children of slum area.

**Provide Quality Education in Slum Area:** NSS members volunteered to provide quality education to 70 students, 50 of which were class 10th girls, and the remaining were students of class 4th and 5th. These volunteers started teaching in March and are providing their services to this date with various organisations.

**Clothes and Books Donation Drive:** NSS SBSC organized a Clothes and Books Donation Drive in the month of May. For this, books and clothes were collected from college students in the college premises itself. Around 14 ardent volunteers contributed to this campaign, ensuring that we were able to distribute 160 books and 100 clothing items to the NGO's underprivileged children.

Project Kabil: Twelve volunteers from Project Kabil, an initiative by NSS SBSC, brought forth their substantial skills and knowledge to teach 49 children of standard 10th in the J block, Sangam Vihar.

### **Library Development**

The library is a growing organism and like every year this year too, library has grown in terms of its resources and services. In 2022-23, Library added 1501 titles in the collection of different disciplines like Commerce, Economics, Mathematics, Geography, Political Science, History, English and Hindi. In our effort to welcome and honour the demand of our students and faculty members, 368 titles have also been added in our Reference Section comprising of competitive entrance books; general knowledge books; yearbooks; reports; atlases; etc.

During this year, another notable milestone was achieved. The data of our library has been migrated on Cloud in KOHA Library Management Software from LSEase (LibSys Library Management Software). Koha is international open software with better services. It is a user-friendly interface. It provides an e-mail alert service, an online reservation facility with web OPAC for book searching. It sends the e-mail automatically and alerts users for overdue, check-outs and check-in. Koha allows the user to send online suggestions for purchasing books.

Furthermore, this year, the timing of Reading Hall has been extended from 4:30 pm to 8 pm. More than 80 students are taking benefits of the extended services and library resources daily after 4:30 pm.

Total No. of Books in library: 68739

Total No. of Magazine and Journals subscribed: 72 Periodicals, comprising of 54 Journals and 18 Magazines

**Faculty Strength:** Permanent Faculty: 150, Adhoc Faculty: 20, Guest Faculty: 17

### **Financial Allocation and Utilization**

Grants Allocated: Rs. 69,92,00,000

Grants Utilised: Rs. 69,92,00,000

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## **SHAHEED BHAGAT SINGH COLLEGE (EVENING)**

### **Brief history of the College**

Shaheed Bhagat Singh Evening College is a leading College of the University of Delhi which offers Under-Graduate Courses in Commerce, Arts and Geography. It was established on 16th July, 1973 by the then Delhi Administration as one of the constituent Colleges of University of Delhi. It was made a co-educational Institution in the year 1996-97. The College is committed to the philosophy and ideals of Shaheed Bhagat Singh and strives hard to inculcate these values amongst students. It has been a long and arduous journey from a small number of students in 1973 to the current strength of more than 2500 students. There are close

to 100 highly accomplished and motivated faculty members supported by a team of hard working dedicated and efficient administrative staff.

### **Major Activities and Achievements**

The College completed its 50 years and celebrated such a grand milestone of Golden Jubilee at Dr. Bhimrao Ambedkar International Research Centre on 16 July 2022. The Chief Guest of the occasion was Prof. Yogesh Singh, Vice-Chancellor of the University of Delhi.

The IQAC of the College granted 12 Inter-Disciplinary innovative projects to teachers and students in clustered manner aimed at promoting research activities at the College level. These projects were successfully undertaken and completed in due time.

The College added Computer Labs, LED Interactive Panels, Girls' Common Room, Solar Lights under its infrastructural Development programme.

### **Honours/Distinctions**

Prof. S.K. Bandooni & Prof. V.S. Negi of the Department of Geography were honoured with Maharishi Ved Vyas Samman Award 2023 in recognition of exceptional contribution towards promoting education in Gaon Vapasi Samwad organised by Village Herwal Gaon, Tehri Garhwal, Uttarakhand.

### **Students with Distinctions**

Kashish Pahwa of B.Com. (Hons.) III year scored 9.32 CGPA.  
Shruti Rani of B.Com. (Hons.) III year scored 9.27 CGPA.  
Pratiksha Yadav of B.Com. (Hons.) III year scored 9.25 CGPA.  
Yash Khandelwal of B. Com. (Hons.) III year scored 9.20 CGPA.  
Sakshi Suri of B.A Programme, III year scored 8.80 CGPA.

### **Seminar/Conference Presentations**

Dr. Sunil Kumar presented a paper titled "An Empirical Study of Religious and Adventure Tourism in Himalayan Region" at One Day International Multi-Disciplinary Conference organised by Bundelkhand College, Jhansi, U.P. on 29 May 2022.

Prof. C.S. Dubey presented a paper titled "Witch Craft & Magic: A Post Colonial Study" at International Conference organised by International Conference of Comparative Literature Society, Bhubaneswar on 21 April 2023.

Dr. Sunil Kumar presented a paper titled "An Analysis of Pilgrimage Tourism in Himachal Pradesh and Uttarakhand" at One Day International Multi-Disciplinary Conference organised by Bundelkhand College, Jhansi, U.P. on 29 May 2022.

Dr. Anupama M. Hasija presented a research paper titled "Bio Diversity Conservation in Anthropocene Era: A case Study of Yamuna Bio Diversity Park, New Delhi" at IGU Thematic Conference 2022 organised

by Deptt. of Geography, Central University of Haryana, Mahendergarh, Haryana from 24-25 November 2022.

Prof. Poonam Chaudhary presented a paper titled "Amrit Mahotsav Ki Prishthbhoomi par Aatm Nirbhar Bharat Ka Sankalp" at International Conference on Infrastructure, Information and Innovation for Building New Bharat at Gandhi Bhawan, University of Delhi from 10-12 November 2022.

**Number and percentage of students placed: 250**

**Number of Companies visited for campus recruitment: 52**

### **Library Development**

Library upgraded software capabilities with its new Web Page which is available on the College Website, with new facility of Web OPAC for remote access. The library has been made accessible to the students from 8.00 am to 9.00 pm.

Total No. of Books in library: 55643

Total No. of Magazine and Journals subscribed: 43

**Faculty Strength: 104**

### **Financial Allocation and Utilization**

Grants allocated: Rs. 30.24 Crore

Grants utilized: Rs. 34.26 Crore

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## **SHAHEED RAJGURU COLLEGE OF APPLIED SCIENCES FOR WOMEN**

### **Brief history of the College**

Shaheed Rajguru College of Applied Sciences for Women is a dynamic institution dedicated to providing quality education, fostering character development, and promoting diverse learning experiences. Offering a diverse range of fourteen undergraduate programs, including B.Sc. (Hons) in Biochemistry, Biomedical Science, Chemistry, Computer Science, Electronics, Food Technology, Instrumentation, Mathematics, Microbiology, Physics, Statistics, Bachelor of Management Studies, Bachelor of Business Administration (Financial Investment Analysis), and B.A. (Hons) Psychology, our college empowers students to explore their interests and talents while cultivating a well-rounded personality to pave their way to a rewarding career. The college is committed to excellence is evident through our state-of-the-art laboratories, positioning us as a premier scientific institution in India. The college creates a highly competitive and intellectually stimulating environment that equips students with comprehensive skills in various fields, fostering their creativity and critical thinking. The college aims to provide students with the knowledge and skills to think logically, cultivate a spirit of inquiry, nurture scientific temper, and apply their learning to real-life situations where sound judgment is crucial for decision-making.



To support the educational mission, the college has invested in modern teaching techniques, internet facilities, and cutting-edge resources, sprawling over 9.5-acre campus, enveloped in lush greenery, boasts Wi-Fi connectivity, smart classrooms with projection facilities, and interactive monitors to accommodate students with varying learning styles. Additionally, the campus features an open-air amphitheatre, indoor auditorium, a three-floored RFID-enabled library, a conference room, and hostel accommodations for approximately 120 students.

Over the years, the college has proudly produced a distinguished alumni network, with many alumni achieving high-ranking positions in various industries in India and abroad. Shaheed Rajguru College of Applied Sciences for Women is dedicated to providing a nurturing and intellectually stimulating environment that empowers students to excel academically and develop into responsible, creative, and successful individuals.

### **Major Activities and Achievements**

The college has achieved remarkable recognition and accolades, including an impressive A+ grade in its second cycle assessment by NAAC, boasting a commendable CGPA of 3.29. In the highly competitive NIRF Ranking of 2022, the college proudly secured the 32nd position. Dedicated to fostering a culture of research, innovation, and entrepreneurship among its students, faculty, and staff, the college has established the Centre for Multidisciplinary Research, Innovation & Entrepreneurship. This centre serves as a hub to consolidate and streamline these vital activities, ensuring effective execution, adequate funding, and tangible outcomes. Centre specially promotes social entrepreneurship. College acknowledges the funding of Rs 2.70 lakhs received at CMRIE for the year 2022-23 by ICSSR. This has been utilized to create basic infrastructure of the Centre & in functioning of activities. The website of CMRIE was launched on 10 October 2022. In line with its commitment to knowledge dissemination, the college initiated the publication of the 'International Journal of Innovation and Multidisciplinary Research' and launched the website of IJIAMR on 10 October 2022. Launch of International Journal of Innovation & Multidisciplinary Research” (IJIAMR), Vol 2, Issue 1, 2 and 3. Our college has also been recognized with several prestigious awards, including Social Entrepreneurship, Swachhta & Rural Engagement Cell Institution after screening at national level.

### **Honours/Distinctions**

Prof. (Dr.) Payal Mago appointed as Director, Women's Studies & Development Centre (WSDC), University of Delhi., Published books - “Stritva: Stories of Indian Womanhood” as an editor in 2022-23, ISBN: 978-9394176089, My Books Publication (18 October 2022) and a book on exotic Mushroom recipes “Mush Tales- The All Natural Mushroom Cookbook” (Divine Communication and Marketing Agency ISBN 978-93-95538-04-6).

Ms.Himani Dua Sehgal received best paper award in the 6th International Conference on Devices, Circuits, and Systems (ICDCS), organized by Karunya Institute of Technology and Sciences, Coimbatore, India from 21-22 April 2022.

Dr.Neha Garg Received second prize in the “Research Conclave” organized by the Department of Electronic Science, University of Delhi in collaboration with IEEE Electron Device Society-Delhi Chapter in theme Electronics Devices & IOT on 15 October 2022.

### Students with Distinctions

Ms. Shivani Baruah of B.Sc. (Hons) Biochemistry III year was a topper and secured 1st position in the College.

Ms. Simran Kaur of B.Sc. (Hons) Microbiology III year was a topper and secured 1st position in the College.

Ms. Isha Srivastava of B.Sc. (Hons) Microbiology III year was a topper and secured 1st position in the College.

Ms. Anshika Singh of B.Sc. (Hons) Chemistry III year was a topper and secured 1st position in the College.

Ms. Bhawna Shakya of B.Sc. (Hons) Electronics III year was a topper and secured 1st position in the College.

### Publications

Arora, Indu. (2023). Magnoflorine-Loaded Chitosan Collagen Nanocapsules Ameliorate Cognitive Deficit in Scopolamine-Induced Alzheimer's Disease-like Conditions in a Rat Model by Downregulating IL-1 $\beta$ , IL-6, TNF- $\alpha$ , and Oxidative Stress and Upregulating Brain-Derived Neurotrophic Factor and DCX Expressions. *ACS Omega*. 8(2): 2227-2236 .

Khatri, Manisha.(2023). Inhibition of extracellular and intracellular survival of Mycobacterial strains by alkaloids extracted from Justicia adhatoda leaves . *European Journal of Integrative Medicine*. 59(NA): 102241.

Kaur, Jasjeet. (2022). Forensic importance of gunshot residue analysis . *International Journal of Medical Toxicology and Legal Medicine*. 25(NA): 14-21.

Jain, Sadhna & Sarin, L. P. (2022). A non-invasive and multifaceted tool in the sphere of diagnostics. *Journal of Pharmaceutical Sciences and Research*. NA(NA): 713–720.

### Journals

Chief Editor: Prof. Payal Mago. (2022). *International Journal of Innovation & Multidisciplinary Research*”.

### Research Projects

DST SERB funded project entitled “Design, virtual fabrication and characterization of floating gate field effect transistor based toxic gas sensor for industrial applications”. Sanctioned amount of Rs. 29.90 lakh.  
PI: Dr. Sneha Kabra

### Seminars Organized

Seminar entitled, ‘Internet of Things’ by Mr. Kartik Gupta, Manager, CETPA organised by Department of Electronics on 7 April 2022.

Seminar entitled, 'Integrated Personality Development and Communication Skills, personality Development' by Professor J. Saldanha, Faculty at IBS Gurgaon organized by Department of Management Studies on 19 September 2022.

Seminar entitled, '7 Steps to IIMs' by Mr. Siddhart Singhal, Chief Educator, IMS, organized on 12 January 2023.

Seminar entitled, 'Demystifying the UPSC Civil Service Examination' by Ms. Alma Hussain, IT sector organized by Department of Management Studies on 23 January 2023.

Seminar entitled, 'Decoding the Union Budget 2023' by Dr. Kumar Bijoy, Associate Director of The Campus of Open Learning, University of Delhi, and a Chartered Financial Analyst (CFA) organized by Department of Management Studies on 7 February 2023.

### **Number and percentage of students placed: 51**

### **Number of Companies visited for campus recruitment**

69 companies visited the campus in the year 2022-23. Companies visiting the campus were Acuity Knowledge Partners, D.E. Shaw, Genpact, HCL Tech, ICICI, Tata Consultancy Services, Willis Towers Watson, Aon, Decathlon, Cvent, Indigo and Wipro, Aon, Capline Services, Country Edu, Fincart Finvest, Fuld and Company, Genpact, HCL Tech, ICICI Prudential, Indigo, Infollion research, Jaro Education, Ken research, Planet Spark, Skillvertex, SSSI, TCS, XCEL Corp, Zell Education.

### **Extension and Outreach Activities**

On 16 September 2022, an offline visit was made to Dharamshila Rahat Medical Centre Care to learn more about cancer its treatment.

On 27 September 2022, in collaboration with Ehsaas a visit was made to Dallupura village to spread awareness regarding mental health.

A debate competition was organized named "War of Words" on 18 January 2023.

On 1 February 2023, a First Aid First Step workshop was organized to spread awareness of the immediate help that needs to be provided at the time of emergency.

On 10 February 2023, the village visits to Dallupura, Kondli, Harola, Chilla and Morna villages were organized with the objective of conducting a survey to assess the situation and development schemes.

On 23 March 2023, both the members of UBA and Menstrual Cafe visited Kondli and Dallupura villages to spread awareness regarding menstrual hygiene and donate menstrual health products.

### **Library Development**

The library of the college has initiated online resource accessibility to the students and faculty member through NLIST and DULS resources. The existing students and faculty members account has been

upgraded. The new students of first year there are around 446 NLIST account created to access more than 10000 e-Journals and more than 165000 e-Books with login id (Remote Accessibility). The library has also conducted 14 (fifteen) library orientation program for the first-year students. Majority students was participated in this program. The orientations program was conducted for the each of the department of the college. The library also procures 535 books in this year, some books were purchased and many text books was received from the donation.

Total No. of Books in library: 20500

Total No. of Magazine and Journals subscribed: 10000 (E-Journals)

**Faculty Strength: 87**

### **Financial Allocation and Utilization**

Grants Allotted: Rs.34.14 Crore

Grants Utilized: Rs. 29.75 Crore

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## **SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES**

### **Brief history of the College**

Shaheed Sukhdev College of Business Studies (SSCBS) is one of the premier institutions of the University of Delhi, imparting path-breaking education in the fields of Management and Computer Science. It was established in August 1987 by the Government of the National Capital Territory of Delhi (GNCTD) on the initiation of University Grants Commission (UGC) and the Ministry of Human Resources and Development, Government of India (MHRD). At present, the college offers three full-time graduate programs under its three departments - Department of Management Studies (DMS), Department of Financial Studies (DFS) and Department of Computer Science (DCS), leading to the award of Bachelor of Management Studies, Bachelor of Business Administration (Financial and Investment Analysis) and B.Sc. (Hons) Computer Science. The college also offers a post graduate diploma course in Cyber Security and Law. The college supports about 45 student societies working in diverse areas including strengthening students' skills in various domains (such as marketing, finance, technology and entrepreneurship), social outreach, mental and emotional health, environment etc. Companies from as many as fifteen sectors, including consulting, insurance, knowledge services, real estate, media, investment banking, PR, IT, shipping, and financial services recruit our students.

### **Major Activities and Achievements**

SSCBS has secured its position as the Best Undergraduate Business School in India for the fourth consecutive time, as recognized by India Today Magazine in 2023. In the National Institutional Ranking Framework (NIRF) for 2023, SSCBS has achieved a position within the top 100 colleges. The Open Magazine BBA Ranking 2023 has also acknowledged SSCBS as the top BBA college for the second consecutive year, considering factors such as academic excellence, placement records, faculty strength, and infrastructure. Additionally, the college's website received the esteemed title of the Best Website (colleges)

for 2023 from the Vice Chancellor of the University of Delhi. In various global competitions, SSCBS has earned impressive ranks, including Global Rank 1 at the EY-Microsoft Better Working World Data Challenge, Global Ranks 1 and 3 at the Indonesia Investment Banking Competition, Global Ranks 2 and 4 at the Global Microfinance Case Competition, Global Rank 2 at the CRMS Risk Challenge, Global Rank 2 at the High Bridge International Case Competition, and Global Rank 3 at the HSBC Case Competition. On the national front, SSCBS achieved victories in prestigious competitions such as BRAINWARS by Bain and Co., EY CAFTA Case Championship, and emerged as National Runners Up in the Kroll One Team Challenge.

### **Honours/Distinctions**

Dr. Madhu Totla, Dr. Ramesh Kumar, Dr. Neeraj Kumar Sehrawat and Dr. Saumya Jain were awarded with Ph. D. degrees.

Dr. Nidhi Kesari and Dr. Sonika Thakral were promoted to Associate Professor grade.

Dr. Kumar Bijoy was deputed for a period of one year as Associate Director in the Campus of Open Learning, Department of Distance and Continuing Education, School of Open Learning, University of Delhi w.e.f. 30 November 2022.

Prof. Ajay Jaiswal was deputed for a period of one year as Joint Director in the Campus of Open Learning, Department of Distance and Continuing Education, School of Open Learning, University of Delhi w.e.f. 30 November 2022.

### **Students with Distinctions**

Following students were the college toppers during the year 2022-23

Ishaan Jain of Bachelors of Business Administration

Srishti Wadhwa of B. Sc. (Hons) in Computer Science

Khushi Katyal of Bachelors in Management Studies

### **Publications**

Gautam, P., Maheshwari, S., Kausar, A., Jaggi, C.K. (2023). Sustainable retail model with preservation technology investment to moderate deterioration with environmental deliberations. . *Journal of Cleaner Production*, 390, 136128.

Maheshwari, S., Kausar, A., Hasan, A. (2023). Sustainable inventory model for a three-layer supply chain using optimal waste management. *International Journal of System Assurance Engineering and Management*, 14, 216-235.

Maheshwari, S., Gautam, P., Kausar, A., Jaggi, C.K. (2023). Optimal inventory replenishment policies for deteriorating items with preservation technology under inventory replenishment policies for deteriorating items with preservation technology under the effect of advertisement and price reliant demand. *International Journal of Systems Science: Operations & Logistics*, 10(1), 2186753.

Lal, M., Kumar, R. (2023). Social entrepreneurship and the capability approach: An empirical study. *Academy of Marketing Studies Journal*, 27 (3), 1-20.

Bentur, S.A., Mishra, A., Kumar, Y., Thakral, S., Garg, R. (2022). Integrative Therapy based on Yoga, Ayurveda and Modern Western Medicine for Treatment of High-risk Cases of COVID-19: A Telemedicine-Based Case Series. *Indian Journal of Traditional Knowledge*, 21(3).

Nigam, N.K., Gupta, C.P. (2023). Negative Related Diversification, Positive Related Diversification and Firm's Performance: Measurement and Application. *Global Business Review*, 24(1), 48-67.

Nigam, N.K., Singh, K. and Arya, P. (2022). Impact of gender diversity in boardroom on risk-return profile of Indian corporates. *Journal of Indian Business Research*, 14(3), 213-230.

Tandon, A., Kaur, G. (2022). Release Planning Problem with testing coverage and fault reduction factor under imperfect debugging. *Advances in Mathematical Sciences & Applications*, 31(1), 73-91.

Mehta, P., Sharma, H., Tandon, A. (2022). Software Reliability Growth Model with Rate of Change in Application Characteristics. *Recent Advances in Computer Science and Communications*, 15(5).

### **Conferences Organized**

6th International Conference on Innovative Computing and Communication (ICICC 2023), University of Valladolid Spain, Korea Institute of Digital Convergence (South Korea), National Institute of Technology Patna and Universal Innovator on 17 February 2023.

### **Seminar/Conference Presentations**

Dr. Saumya Jain presented a paper entitled 'Impact of IFRS on Value Relevance of Accounting Items: Evidence from India' at two-day International Conference on "New Horizons in Commerce, Finance and Economics" organized by Chinmaya Vishwa Vidyapeeth, Kochi in collaboration with Shri Ram College of Commerce on 16-17 February 2023.

Ms. Paridhi Sani presented Paper entitled 'Current Challenges with Sustainability Disclosures' at an International Conference on Sustainable Goals (ICSG)' 2022 organized by IIM Bodh Gaya on 16-17 September 2022.

Ms. Paridhi Sani Presented Paper entitled 'Have only one world to Save" Prerequisite for Corporate Sustainability Governance Across Countries' at the 9<sup>th</sup> International Conference on Sustainability (THEME: Collaboration, Compassion, and Co-Creation) organized by IIM Shillong on 3-5 November 2022.

Dr. Madhu Totla presented a paper entitled 'Do oversubscribed IPOs perform better in the long run? Evidence from India' at the 44<sup>th</sup> All India Accounting Conference and International Seminar on Accounting Education and Research held on 29-30 October 2022.

Dr. Neeraj Kumar presented a paper entitled 'Impact of bank monitoring on borrowers' earnings management behaviour: Evidence from India' at three-day International Conference organized by India Finance Conference 2022.

Amit Kumar presented a paper entitled ‘Impact of bank monitoring on borrowers’ earnings management behaviour: Evidence from India’ at three-day International Conference organized by India Finance Conference 2022.

### **National/International MoUs Signed and other collaborations**

Manya - The Princeton Review for Sponsorship for the event Ascend’23.

Medulance for Live Project - Go-To-Market Strategy – Competitor Analysis, Industry Analysis, STP Analysis, Marketing Funnel & Market Sizing

Tweek Labs for Different Sports Market Sizing, Competitor Analysis, Market entry opportunities and Combined conclusive analysis of the research, Strategizing Kickstarter Campaign

The Commerce Society, Hansraj College for the 60 registrations on Unstop with a proper database of the registered participants for the APICS SSCBS Chapter annual event, Ascend.

The Computers and Mathematics Society, SRCC, University of Delhi for the 90 registrations on Unstop with a proper database of the registered participants for the APICS SSCBS Chapter annual event, Ascend.

Dunews (Dunews. India) for a post and two stories before the event and sharing link on all our social media platforms.

Enactus, Delhi Technological University for Provision of containers for collection of single-use plastic, Stories on your social media platform for our project Srijan, Certificates over completion of a successful collaboration and Delivery of the collected e waste back to SSCBS campus.

Eartha, Dyal Singh for Collection of e-waste in bins or boxes modified with posters of Srijan, Transportation of said e waste half way and A story on social media handles regarding session.

Enactus, Maharaja Surajmal Institute for Srijan collaboration

Engaging in collaborative quality initiatives for skill enhancement, our institution partnered with the University of Valladolid Spain, Korea Institute of Digital Convergence (South Korea), National Institute of Technology Patna, and Universal Innovator for the 6th International Conference on Innovative Computing and Communication (ICICC 2023) held on 17-18 February 2023. Additionally, collaborations with NSE Academy Ltd and BSE Institute Ltd facilitated programs such as NSE Academy Certified Capital Market Professional (NCCMP) and Financial Modeling & Algo Trading, respectively.

In the fiscal year from April 2022 to March 2023, our collaboration with 182 companies resulted in internship opportunities for 335 students, including placements with renowned organizations such as D. E. Shaw Group, Dalberg, BCG, Deloitte India, PwC India, Ernst & Young, Frost and Sullivan, FTI Consulting, Indian Angel Network, McKinsey Client Capabilities Network, Grant Thornton, Boston Analytics, Colliers International, CRED, Cushman and Wakefield India, Grip Investments, Dasra, Medulance, Densat, and Synergy Consulting.

### **Student under Exchange Program (Inbound/Outbound)**

As part of the exchange program, there is an active influx and outflow of students across various academic disciplines. Currently, there are 6 students participating in the inbound and outbound exchange under the B.Sc. (Hons.) Computer Science program. Additionally, the Bachelor of Business Administration (Financial & Investment Analysis) has 5 students engaged in this exchange initiative. Similarly, the Bachelor of Management Studies (BMS) is contributing to the exchange program with 6 students involved. This dynamic exchange fosters a diverse learning environment, allowing students to broaden their perspectives and enrich their educational experience through interactions with peers from different academic backgrounds.

**Number and percentage of students placed:** 253 and 89%

**Number of Companies visited for campus recruitment = 80**

### **Extension and Outreach Activities**

Kartavya and NSS at SSCBS actively engage in a range of impactful activities. They organize cleanliness and plantation drives, along with clothing donation initiatives. Notably, they fulfill wishes of underprivileged children through initiatives like the wishing wall. Additionally, health checkup camps, blood donation drives, and blood stem cell donation camps contribute to community well-being. The societies also conduct awareness programs and webinars addressing vital social issues, particularly emphasizing gender equality. Through these endeavors, Kartavya and NSS at SSCBS make meaningful contributions to societal betterment and holistic community development.

In response to COVID-19, NSS at SSCBS played a vital role by verifying leads and actively spreading awareness about essential precautions within the community.

SSCBS undertakes various impactful project initiatives aimed at societal betterment. These projects include Project Muskaan, dedicated to breaking stereotypes and fostering equality; Project Chetna, addressing mental health through sessions and webinars; Project Furry, promoting animal welfare by caring for stray animals; Project Saksham, raising awareness about education, careers, and government policies; Project Samman, supporting the needs of the elderly and old age homes; and Project Kilkari, collaborating with Scope for Change to provide education to children in NGOs. These initiatives reflect SSCBS's commitment to diverse social causes.

Enactus SSCBS is dedicated to implementing impactful projects that positively affect over 8.6 lakh people, aligning with UN Sustainable Development Goals. The initiatives include addressing indoor air pollution through Project Pravaah, fostering women's self-sufficiency with Project Basera, and conducting health camps, counseling sessions, and restructuring NGOs under Project Kshitij. Through these endeavors, Enactus SSCBS actively contributes to social and environmental well-being.

Rotaract SSCBS is engaged in impactful projects such as Project Kamakhya, promoting eco-friendly menstrual products through sensitization sessions, and Project Srijan, which bridges the gap between informal and formal e-waste recycling sectors. The society also organizes various short-term activities, including blood donation drives, food donation drives, and awareness events, contributing to community well-being.



CDF SSCBS actively engages in social entrepreneurship through Project Hunar, a student-led initiative focused on upskilling women and children. Additionally, Project Utsav connects potters directly with restaurants, eliminating middlemen and ensuring all revenue and profit generated directly benefits the potters.

### **Library Development**

The college library spans two floors with an area of approximately 1161 sq.m., accommodating reading rooms for 218 students and a research section for faculty members. The collection boasts 24,347 books, with 686 new titles added recently. The library subscribes to 56 magazines and journals of national and international repute, along with 13 newspapers. The budget allocates Rs. 5,17,119/- for books, Rs. 2,78,535/- for magazines/journals, and Rs. 27,829/- for newspapers, totaling Rs. 8,74,314/-. The library is an institutional member of NLIST and DELNET, encouraging students to access e-books and e-journals. Library activities, including circulation and system administration, are automated using the cloud-based open-source solution KOHA. The library verifies its stock annually using bar-code technology and provides online renewal services. The library's portal integrates various resources and offers easy access to the catalogue, e-resources, rare books, syllabus, question papers, and more. With 159 physical footfalls and 192 online logins daily, the library ensures a seamless learning experience for students and faculty, complemented by internships and regular updates on online resources and databases.

**Faculty Strength:** Total Faculty = 89, Permanent Faculty = 32, Adhoc Faculty = 09, Guest Faculty = 48

### **Financial Allocation and Utilization**

Grants Utilized: Rs. 17.92 crore

Grants Allocated: Rs. 17.92 crore

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## **SHIVAJI COLLEGE**

### **Brief history of the College**

Shivaji College was founded in 1961 by Dr. Panjab Rao Deshmukh in Matiala village with the vision of spreading higher education amongst all segments of the society. From being an institution housed in a primary school building with only 20 teachers, 400 students and offering only three courses (B.A., B.Com. Pass and Pre-Medical Studies), Shivaji College has completed a long journey. It was shifted to its present building located at Raja Garden in 1976. Today, the College has a sprawling campus of more than ten acres, state-of-the-art laboratories, classrooms with multimedia projectors and auditorium. Its library is enriched with rich collection of books and journals with RFID technology. The College has successfully constructed Jijabai Academic Block which offers a glimpse of the latest technological innovation required to boost classroom teaching. The College's motto is "Amritam tu Vidya" which is reflected in the way congenial environment is nurtured through classrooms and various extra-curricular activities in the campus. The College has 18 departments which offer 26 undergraduate and 3 postgraduate courses. The College was ranked 35th among the Science Colleges and 28th in Commerce and 42nd in Humanities by India Today 2022. The College has been ranked 70 by NIRF 2022 and 31 by Outlook India.

Shivaji College was also awarded the financial grant under the prestigious DBT Star College Scheme, an initiative of the Department of Biotechnology, Government of India. 13 out of 18 departments of the College were awarded research funds by ICSSR, DST, DBT, SERB, UGC, and the University of Delhi.

### **Major Activities and Achievements**

Under the aegis of DBT Star College Scheme, Science Departments namely Biochemistry, Botany, Zoology, and Chemistry carried out a total of 100 Additional Experiments, 17 In-house Minor Projects, 21 Workshops, 130 Invited Talks, 19 Summer Training Programmes, 57 Educational Lab Visits/Field Trips and 6 Lab-skill Training Programs. Six colleges in remote areas across the country were also mentored by the departments under SCS, Shivaji College including one of college from Aspirational District of Kupwara, Jammu & Kashmir in the year 2022-23. Shivaji College has been recommended for the award of the Star Status to all four participating departments with financial grant of rupees 1.26 crores in October 2022.

NCC cadets also attended various camps which include Inter Directorate State Shooting Championship, Special National Integration Camp, Independence Day Camp, Ek Bharat Shreshth Bharat, Advance Leadership Camp, Prime Minister Rally and several others.

The NSS unit had an inspiring journey this year with events like “Gyanodaya”- Education for All Campaign, International Yoga Day, World Environment Day Celebrations, Yathartha (play team of NSS Shivaji) and Mental Wellness Session, Clean India 2.0 Campaign, Book Donation Drive, Legal Awareness Seminar on Acid Attack Vicitms.

Students have bagged BCCI Trophy, Ranji Trophy, Cooch Behar Trophy. They have secured 2nd position in Delhi University Inter-college Cricket Tournament. The College held its Annual Cultural Festival Vibrations in February 2023 which was inaugurated by Sh. Faggan Singh Kulaste, Hon’ble Minister of State for Consumer Affairs, Food and Public Distribution and Rural Development, Govt. of India. More than 100+ Companies visited the college including Deloitte, Tresvista, DE Shaw, and others and have provided Placement and internships to more than 150 students across all the courses and semesters. The highest package for placement went up to 22 Lac p.a. and 60k stipend for internships.

### **Honours/Distinctions**

Dr. Neetu Rani received the “Global Eminent Academician Award” for Outstanding Service in Teaching conferred on May 15 2022, awarded and acknowledged by VIJ Trust, Reg. No. 959/2010/ BK4, Thiruvengadanagar, Thiruninravur, Tamil Nadu-602024, India.; received the “Outstanding Academician National Award 2022” conferred on April 10, 2022, awarded and acknowledged by Kamarajar Institute of Education and Research (KIER), Regd. with Govt. of India, Madurai Road, Theni-625531

Dr. Jyoti Sharma, Assoociate Professor received an award of Excellence 21 on July 2022, by the reputed Indian-Croatian Society, Zagreb, Croatia for my tenure and work there as ICCR Indology chair.

Dr. Richa Arora“Dr. Sarvepalli Radhakrishnan Best Faculty and Researcher Award 2022 in Chemistry by IMRF Executive Council & Excellence Awards Committee of International Multidisciplinary Research Foundation on 05 September 05 2022.

### **Students with Distinctions**

Following students secured first position in the college in the below mentioned courses

Meenakshi, B.A. Hons. Hindi 1 Year

Supriya Kumari, B.A. Prog. 1 Year

Suraj Chandra Joshi, B.Sc. Hons. Physics 2 Year

Vanshika Garg, B.Com. Prog. 2 Year

Garima, B.Com. Hons. 2 Year

## **Publications**

Pan S, Upadhyay R, Singh S, Singh M . (2022). Synthesis, characterization, and functionalization of super adhesive melamine formaldehyde polyvinylpyrrolidone resins doped with metallic and graphene oxide nanoparticles for better industrial applications . *Journal of Applied Polymer Sciences*, 139 (38), 1-32.

Dhembla C, Yadav U, Kundu S and Sundd M.. (2022). Lipoate protein ligase B primarily recognizes the C8-phosphopantetheine arm of its donor substrate and weakly binds the acyl carrier protein. . *Journal of Biological Chemistry*, 8(298), 1-16.

Pragya, P., Sharma, K. K., Kumar, S., Manisha, M., Singh, D., Kumar, V., & Singh, B.. (2022). Enhanced production and immobilization of phytase from *Aspergillus oryzae*: a safe and ideal food supplement for improving nutrition . *Letters in Applied Microbiology*, 76(2), -.

Aggarwal, A., Arora, S., Khuman, A., Singh, K., Kumar, V., & Chaudhary, B.. (2022). Comparative evolutionary dynamics of the 5'cis-regulatory elements (CREs) of miR167 genes in diploid and allopolyploid cotton species. . *Plant Gene*, 32(-), 100-380.

Ramlal A, Nautiyal A, Baweja P, Kumar Mahto R, Mehta S, Pujari Mallikarunja B, Vijayan R, Saluja, S Kumar V, Kumar Dhiman S, Lal SK, Raju D and Rajendran A . (2022). Harnessing heterosis and male sterility in soybean [*Glycine max* (L.) Merrill]: A critical revisit. . *Harnessing heterosis and male sterility in soybean [Glycine max (L.) Merrill]: A critical revisit.*, 13(-), 1-9.

Talwar S, Mondal N, K Gaurav, Mathur P and Bhardwaj S. (2022). Antifungal Activity of Clove, Neem and Peppermint Oils against *Fusarium graminearum* . *Research Journal of Agricultural Science*, 13(4), 962-965.

Gayacharan, Swarup Parida, Nupur Mondal, Rashmi Yadav, H. Vishwakarma and JC Rana. (2023). Mining legume germplasm for genetic gains: An Indian perspective . *Frontiers in Genetics*, 14(-), 1-30.

Gayacharan, Swarup Parida, Nupur Mondal, Rashmi Yadav, H. Vishwakarma and JC Rana. (2022). Exploring the immunomodulatory aspect of mesenchymal stem cells for treatment of severe coronavirus disease 19 . *Cells*, 11(14), 1-20.

Kant, N., Samanta, S., Panchal, I., Pandey, A., Ghatak, L., Rout, A., & Chaudhary, J. K.. (2022). Genome-wide mutation/SNP analysis, biological characteristics, and Pan-India prevalence of SARS-CoV-2 Variants of Concern . *Chemical Biology Letters*, 9(2), 1-12.

Priyanka, K. (2022). Hybrid Estimators of Population Mean in presence of Non-response and Correlated Measurement Errors. Communications in Statistics (Published online December 15, 2022)

### **Research Projects**

Central Council for Research in Unani Medicine Ministry of AYUSH, Government of India, 2 Years, Development of DNA Barcodes for Medicinal Plants used in Unani System of India, Rs. 19,89,624/-

Science and Engineering Research Board (SERB), New Delhi, 3 Years, Development of Tuned Estimation Methodologies for Modelling Non-Sampling Errors in Survey Sampling, Rs. 6,60,000/-

Intramural Project granted by College Research Cell, Shivaji College, 1 Year, Synthesis of rhodamine based chemosensors and their application in detection of toxic metal ions, Rs. 30,000/-

Intramural Project granted by College Research Cell, Shivaji College, 1 Year, Mathematical Modelling for Volume Estimation of Guava (*PsidiumGuajava* L.), Rs. 30,000/-

Intramural Project granted by College Research Cell, Shivaji College, 1 Year, Impact of Elevated Temperature on the Seed Germination of Medicinal plants (*Catharanthus roseus* and *Trigonella foenum-graecum*), Rs. 30,000/-

### **Patents Filed/Granted**

International patent (01), Dr. Abhijeet Mishra, Assistant Professor, Department of Biochemistry and Trans-Differentiation of a subpopulation of Wharton Jelly derived Mesenchymal Stem Cells (WJ-MSCS) in Human Astrocytes for possible treatment of Neurodegenerative Disorders

National Patent, Dr. Rakesh Yadav, Mr. K.K.S Gautam, Department of Computer Science and “A System for Detecting Threats in IOT Networks And Method Thereof”, Application Number: 202141061667. Publication Date (4/02/2022)

### **Seminars Organized**

Dr. M. R. Ramesh Kumar, Chief Scientist (Retired) & Head, POD, NIO, Goa, National Institute of Oceanography, -, "Antartica and its Scientific Importance", on 13 February 2023

Prof. Ritu Sapra, Professor, Department of Commerce, Delhi School of Economics, University of Delhi., -, “Environmental Reporting – A Tool for Sustainable Development” on 09 November 2022

Prof. Maria Ivanova, Director School of Public Policy and Urban Affairs Northeastern University Boston, USA, -, International Seminar on Environment and Public Health 26-29 September 022

Prof. Vinod Sharma, Professor Department of Computer Science and Information Technology, University of Jammu., -, International Conference on Data Analytics in Business and Marketing on 22 April 2022

Mr. Raghvendra Sharma, Alumnus, Department of Economics Batch 2019, IPS Batch 2021, -, UPSC Examination: Insights on Its Preparation on 10 February 2023

## Conferences Organized

International conference on Analysis and its Applications on 27 February 2023

International Conference on “Data Analytics in Business and Marketing on 21 April 2023

## Seminar/Conference Presentations

Dr. Ashwani Sharma received Best Paper Presenter Award on a research paper titled “Green Purchasing Behaviour of Millennials in India: A Behaviour Analysis presented at the International Conference on theme “Role of Higher Education Institutions in Advancing Sustainable Development Goals” organized by Faculty of Social Sciences, Bhagat Phool Singh Mahila Vishwavidyalaya, Sonapat, Haryana.

Dr. Tarun Gupta, Assistant Professor presented a paper on ‘Scheduled Caste: A Historical Perspective’ in the Conclave on ‘Reservation and Conversion’ jointly organized by Vishva Samvad Kendra, Delhi and Gautam Buddha University, Greater Noida, UP on March 4-5 2023.

Dr. Sonal presented a paper, ‘Colonial Epistemology and Writing of Indian History’ for Archaeology, History and Culture Research Committee of XLVI Indian Social Science Congress, January 27-31, 2023 at Bharathidasan University, Trichy.

Dr. Babita Gupta presented a paper entitled “Certain Inequalities Involving Integral Operators” in the International conference entitled “Analysis and its Applications” held on 27-28 February, 2023 organized by the Department of Mathematics, Shivaji College.

Dr. Aparna Jain presented a paper entitled “Fuzzy Ideal Generated by a Fuzzy Set in a Lattice” in the International conference entitled “Analysis and its Applications” held on February 27-28, 2023 organized by the Department of Mathematics, Shivaji College.

Dr. Uttam Kumar Sinha, Associate Professor presented a paper entitled “Matrix-Valued Gabor Bessel Sequences, Dual Frames and Symmetric Frames Over Locally Compact Abelian Groups” in the 6th International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA-2022) (December 08-10, 2022) Organized by Department of Mathematics, Jaypee Institute of Information Technology A-10, Sector-62, Noida, U.P., India-201309.

Dr. Vandan presented a paper entitled “Ideals In a Ternary Ring of Operator” in the International conference entitled “Analysis and its Applications” held on February 27-28, 2023 organized by the Department of Mathematics, Shivaji College.

Dr. K.K.S. Gautam presented research paper titled “Machine Learning Algorithms for 5G and Internet- of- Thing (IoT) Networks” in IEEE Sponsored Second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022), held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India April 21-22 2022.

Dr. Virat Jolly presented a paper titled “Bridging People and Nature Using Citizen Science To Promote Environmental Awareness in Himalayas” at the Karadeniz 9th International Conference on Applied Sciences, Artvin, Turkey, June 25-26 2022.

Dr. Surbhi Madan, Professor presented a paper on 'Recent Developments in Coding Theory' in international conference on Analysis and its applications, organised by Department of Mathematics, Shivaji College, during February 27-28 2023.

### **National/International MoUs Signed**

MoU signed with Sikkim Government College, Burtuk, Gangtok, East Sikkim, Sikkim under Vidya Vistar Scheme

MoU signed with Himalayan Degree College (University of Jammu), Rajouri, Jammu and Kashmir under Vidya Vistar Scheme

MOU signed with the Ministry of Social Justice and Empowerment, Government of India for the establishment of Dr. Ambedkar Centre for Excellence.

**Number and percentage of students placed: 42**

**Number of Companies visited for campus recruitment: 78**

### **Extension and Outreach Activities**

The College ensures that students remain engaged in constructive community welfare projects through various committees and cells such as NCC, NSS, and WDC. Programmes like Blood Donation Camps were organized by the NCC cadets of Shivaji College. The cadets also planted trees and plants and encouraged others about global warming and deforestation so as to foster an environment friendly approach amongst people. The cadets also attended various camps which include Inter Directorate State Shooting Championship, Special National Integration Camp, Independence Day Camp, Ek Bharat Shreshth Bharat, Advance Leadership Camp, Prime Minister Rally and several others. The NSS Unit of Shivaji College is dedicated to the cause of social empowerment and education, and encourages initiatives related to rural development, healthcare, and environment. NSS had an inspiring journey this year with events like "Gyanodaya"- Education for All Campaign, International Yoga Day, World Environment Day Celebrations, Yathartha (play team of NSS Shivaji) and Mental Wellness Session, Clean India 2.0 Campaign, Book Donation Drive, Legal Awareness Seminar on Acid Attack Vicitms. These aimed at sensitizing students towards causes aimed at community welfare and advancement. The Women Development Cell of the College organised a seminars on sensitive topics such as "Society, Abuse, and Gender", and " Legal Awareness". The Women Development Cell collaborated with the Crime Against Women (CAW) Cell of Delhi Police and organized a 10-day "Self Defence Workshop" for all female students of the College from February 6 to 15, 2023.

### **Library Development**

Shivaji College Library is fully automated with KOHA Software and is RFID enabled. Users can self-issue and return the Books and search the Book through Campus OPAC. It has a rich collection of print and electronic resources which includes Books, Journals, Magazines, and Newspapers. During the year 2022-23, the College Library has added 1930 Books and 05 CDs to its Collection and now Library has total 84110 Books and 744 CDs of various subjects. The Library also subscribed 09 journals, 22 Magazines and 15 newspapers with multiple copies to meet the academic needs of the users and keep them abreast with latest

development. The Library also offers free access to a large number of electronic resources within the College Campus and remotely through Delhi University Library System, NLIST and DELNET. Moreover, to cater to the information needs of the differently abled users the Library has 304 Braille Books and 33 CDs. In addition to this Library also have 09 iPods and 33 Angels audio players.

### **Faculty Strength: 163**

### **Financial Allocation and Utilization**

Grant Sanctioned: ₹ 69.83 Crore

Grant Utilized: ₹ 81.07 Crore

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## **SHRI RAM COLLEGE OF COMMERCE**

### **Brief history of the College**

Shri Ram College of Commerce (SRCC) was established as Commercial College in 1926 by eminent industrialist and philanthropist Sir Shri Ram. In 1932, it was upgraded to a Degree College. The B. A. (Honours) (Commerce Group) Degree and M. A. (Economics) was introduced in 1943, followed by M.Com. in 1948. In 1949, the College started offering B.Com. (Honours). In 1951, on its Silver Jubilee, the Commercial College decided to specialize in commerce and economics and rechristened itself as Shri Ram College of Commerce (SRCC) in recognition of its founder. In 1954, SRCC shifted to its present day campus. The B. A. (Honours) Economics course was introduced in 1958. In 1976, during the celebration of its Golden Jubilee, “Crossroads” was organized for the first time. In 1999, SRCC introduced PGDGB, a unique self-financed programme. In 2007, the main College building was declared a “Heritage Building”. In the 2010s, SRCC redefined its vision from being “A College of national eminence” to “To become a College of Global Choice”.

SRCC is India’s premier HEI in Commerce, Economics and Management being consistently ranked as the Number One College of Commerce in India. SRCC was accredited ‘A++’ in the second cycle in 2023 by NAAC.

### **Major Activities and Achievements**

Second Cycle of Accreditation by NAAC awarded A++.

Organized the Inaugural Arun Jaitley Memorial Debate.

Renovation of the College Auditorium and Naming it as Shridhar Shriram Auditorium was completed.

Launched the Centre of Indian Economic History.

Received recognition and award for three projects on “Development and Dissemination of Knowledge, Research and Competencies on Economic History, Wisdom and Economic Thought of Ancient India” by Ministry of Culture and one project by Ministry of Consumer Affairs.

Recruited 73 permanent faculty as Assistant Professor in 6 Departments.

Promoted teaching and non-teaching faculty members.

## Honours/Distinctions

Prof. A.J.C. Bose, Professor, Department of Economics, awarded Excellence Award for Teachers in Service in Colleges—Age Above 45 Years by the University of Delhi on 22 March 2023.

## Students with Distinctions

Devanshi Satija of B.Com. (Hons.) India's youngest and first female Asian Para Games medallist in swimming 2xAsian youth para games. She represented India in Women Swimming the Asian Para Games 2023 held on October 22-28 in Hangzhou, China.

## Publications

Jha, A. (2023). Relevance of CSR for building affective commitment of employees L A multilevel approach. *Journal of Global Responsibility*. 14(1): 135-154.

Jha, A., et.al. (2023). Demystifying the influence of CSR perception on the purchase intention of generation Z in the fast-food industry. *LBS Journal of Management and Research*. 20(1/2): 1-20.

Bose, A.J.C., et al. (2022). Some reflections on social security: From Tokenism to substantive fairness. *Journal of Indian Research*. 10(NA): 1-2.

Kaushik, R. (2023). Using Advertisements in an English Classroom: An Exploratory Study. *Journal of Arts*. 11(3): 219-233.

Mallik, S., et al. (2022). An empirical analysis on household financial vulnerability in India: Exploring the role of financial knowledge, impulsivity and money-management skills. *Managerial Finance*. 48(9/10): 1391-1412.

Sharma, S. (2022). A stochastic innovation-incorporating Dynamic Potential market. *Nonlinear studies*. 29(4): 1183-1197.

## Journals

Mittal, N. (2022 and 2023). Business Analyst Journal (BAJ). *Bi-annual*, 43 and 44 (1 and 2).

## Research Projects

Competition Commission of India (2019-2023) funded project entitled, “Competition and Regulatory Issues related to Taxi and Cab Aggregator Industry with special reference to Surge Pricing and Algorithmic Collusion in the Indian Context”. Sanctioned amount of Rs. 24.5 lakh. PI: Prof. Simrit Kaur (Principal, SRCC)

## Seminars Organized

Seminar entitled, ‘The 1947 Partition of British India: Forced Migration and its Reverberations’ by Ms. Jennifer Leaning, Senior Research Fellow at Harvard University, OIP - HARVARD SEMINAR, organized on 10 October 2022.



Seminar entitled, 'Recounting Crucial HR Issues: Theoretical & Practical Insights' by Mr. Dhananjay Singh, Director General at National HRD Network, Indian Growth Story: Saga of Human Capital Development organized on 21 October 2022.

Seminar entitled, 'Women as Changemakers' by Ms. Annettee Ammeraal, Senior Lecturer, Avans University of Applied Sciences, Netherland, OIP Seminar on Women as Changemakers organized on 8 March 2023.

Seminar entitled, 'Cooperative Business and Opportunities for Youth entrepreneurship in Asia and Pacific' by Ms. Savitri Singh, Deputy Chief Executive, NCUI, Cooperative Business organized on December 2022.

### **Conferences Organized**

Organized a one-day International Conference on 'New Horizons in Commerce, Finance & Economics' on 16 February 2023.

### **Seminar/Conference Presentations**

62nd Know India Programme in Collaboration with Ministry of External Affairs and Indian Council for International Cooperation was organised by the Office of International Programmes, SRCC in November 2022.

### **National/International MoUs Signed**

**MoU signed with Chinmaya Vishwa Vidyapeeth (National):** The MoU were done towards academic collaborations, building research competencies and mutual development of faculty and students.

**MoU signed with EADA Business School, Spain (International):** The MoU were done towards academic collaborations, building research competencies and mutual development of faculty and students.

**MoU signed with Kalam Research Centre (National):** The MoU were done towards academic collaborations, building research competencies and mutual development of faculty and students.

### **Other Inter-Institutional Collaboration**

Inter-Institutional Collaboration was made with Think 20, an official Engagement Group of the G20.

**Number and percentage of students placed: 508**

**Number of Companies visited for campus recruitment: 90**

### **Extension and Outreach Activities**

Organized ENACTUS SRCC Chapter-Project Virasat  
Organized ENACTUS SRCC Chapter-Project Amal  
Organized ENACTUS SRCC Chapter-Project Leher  
Organized NSS SRCC Project Sanskar  
Organized CDF SRCC Chapter Project Aarogya

## **Library Development**

Over 1000 books added in the library. Created a dedicated section on the Constitution of India. Upgraded College Library IT Database and software.

Total No. of Books in library: 85000

Total No. of Magazine and Journals subscribed: 80

**Faculty Strength:** 130

## **Financial Allocation and Utilization**

Grants allocated: Rs. 42.98 Crore

Grants utilized: Rs. 42.98 Crore

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## **SHYAM LAL COLLEGE**

### **Brief history of the College**

Shyam Lal College (SLC) is a premier educational institution offering vibrant inclusive environment for the development of excellence in academics, culture, sports and other student empowered activities. Founded in 1964 by the great visionary and entrepreneur Padmashree (Late) Shri Shyam Lal Gupta, the then Chairman of Shyam Lal Charitable Trust. Over a period of 59 years, the College has distinguished itself by providing a plethora of courses and PG course with a rich contribution from distinguished faculty in different departments. SLC is fully equipped with state-of-the-art Computer labs, Conference Centres, Science labs, Knowledge Resource Centre and Library. The college campus has sprawling sports infrastructure and is full of lush green lawns and blooming gardens that create natural ambience of holistic teaching learning process. The College has been, for five years consecutively, been among the top 100 colleges of India in the NIRF Rankings for Colleges (61<sup>st</sup> in 2018; 41<sup>st</sup> in 2019; 69<sup>th</sup> in 2020; 77<sup>th</sup> in 2022; and 68<sup>th</sup> in 2023). SLC has been accredited A++ by National Assessment and Accreditation Council (NAAC) in the second cycle (2023). The college has also been selected for DBT Star College Programme under the Ministry of Science & Technology in 2020. The Innovation Council has been recognized with 3 stars from MoE during the IIC Calendar Year 2020-21. SLC is also accredited with several National (SAP, ISO-9001) and International Agencies (WURI in 2022). SLC has been recognized in the band “Performer” under the General (Non-Technical) category by Atal Ranking of Institutions on Innovation Achievement (ARIIA). The college has actively adopted several innovative, socially relevant and value-based approaches that have immensely contributed towards the holistic learning of the students.

### **Major Activities and Achievements**

SLC has been accredited A++ by National Assessment and Accreditation Council (NAAC) in the second cycle (2023) and also secured the 68<sup>th</sup> rank in the latest National Institutional Ranking Framework (NIRF) and received the honorable recognition under World's Universities with Real Impact (WURI).

SLC was selected as a participant in the esteemed DBT STAR College Programme in 2023, reinforcing college's commitment to cutting-edge research and academic excellence.

College has been an active participant in the Delhi University Centenary year celebrations, the Azadi ka Amrit Mahotsav and Bharat's G-20 Presidency. Under these grand commemorations, SLC has taken a plethora of initiatives conducting events, talks, and conferences under the themes of "Global South" and "Vasudhaiva Kutumbakam", enlightening on Bharat's role in an interconnected world.

College has received numerous research grants and have published more than 100 research papers in prestigious journals.

SLC's Saraswati IKS Centre, founded in the year under report, to preserve and propagate the invaluable knowledge of Bharatiya Gyan Parampara. In its inaugural year, the Saraswati IKS Centre achieved significant milestones. It completed "भारतीयज्ञानसंवाहनकार्यक्रम" a student internship project in collaboration with AICTE, delving deep into various domains of Bharatiya wisdom.

Under the DBT Sponsored Star College Scheme, SLC has significantly improved its academic and laboratory infrastructure with 07 well-equipped undergraduate labs in the college, renovated fine air-conditioned staff room, library, office and canteen and CCTV surveillance campus.

SLC's commitment to rural development, skill enhancement, and promoting creativity among its students is evident through participation in initiatives like the Unnat Bharat Abhiyan, Skill India. SLC Entrepreneurship Cell, Centre for Skill Development, and Innovation Council have organized the "Yuva Spandana" National Skill Development and Startup Fair, providing a platform for students to showcase their skills and innovative ideas. This initiative aligns with the national "Skill India" program.

SLC has established partnerships and collaborations with esteemed institutions and organizations like CIBER, GT, Atlanta, USA, AICTE, ICSSR, DBT, ICHR, TUAS (Finland), APU (Japan) encouraging students and faculty to engage in exchange programs, research projects, and global learning experiences.

### **Honours/Distinctions**

The Sports Committee of SLC remained active throughout the academic session 2022-23 in its involvement with the students participation in various games at International, National, University, Inter-College as well as State levels. Some of the achievements for 2022-23 are highlighted as under:

Shyam Lal College Kabaddi Team became Champion of Amity Youth.

Shyam Lal College Secured 2<sup>nd</sup> Position in Pre Inter-College Kabaddi Championship organized by Delhi University Sports Council.

Shyam Lal College Baseball Team Secured 3<sup>rd</sup> Position in Inter-College Baseball Tournament 2022-23.

### **Students with Distinctions**

Out of 3008 students who appeared in the semester examination conducted during 2021-22, 3003 passed giving a pass percentage of 99.83%.

SLC students have participated at International, National, University, Inter-College as well as State levels in different categories, also secured position in Inter-College Tournaments and won prizes and brought Laurels to the College. Some of the achievements for 2022-23 are highlighted as under:

Ms. Sudipti Khanna, BA (H) Political Science III Year, Selected for India Aerobic Gymnastics Team to participate in 7<sup>th</sup> Aerobic Gymnastic Asian Championship held at Thailand from 3rd to 5th September 2022.  
Ms. Sudipti Khanna, BA (H) Political Science III Year, Selected for Jammu Aerobic Gymnastics Team and Won one Silver Medal and one Bronze Medal in 17th Aerobic Gymnastic National Championship 2022-23 held at Bangalore, Karnataka from 29th to 31st march 2023.

Mr. Mohit Rana, BA (P) III Year, Selected for Delhi University Hockey Team to participate in North Zone Inter-University Hockey Tournament 2022-23 held at Lovely Professional University, Jalandhar.

Mr. Tanmay Kaushik, B. Com. III Year, Selected for Delhi University Hockey Team to participate in North Zone Inter University Hockey Tournament 2022-23 held at Lovely Professional University, Jalandhar.

Mr. Anil Tyagi, B.A (Prog) III Year, Selected for Delhi University Kabaddi Team to participate in North Zone Inter University Tournament 2022-23 held at MDU, Rohtak.

Mr. Sandeep Yadav, B.A (Hons) Economics III Year, Selected for Delhi University Baseball Team to participate in All India Inter- University Tournament 2022-23 held at Royal Global University, Guwahati.

Mr. Vishal, B.A (Prog) I Year, selected for Delhi Baseball Team and participated in Junior Baseball National Championship and won Gold medal.

Mr Karender Of B Com ( Hons) 2nd year and Mr Deepanshu Sirohi of BA (program) 2nd year Selected for Delhi University Kabaddi Team to participate in Inter- University Kabaddi Championship for the year 2023-24 at Guru Kashi University Bhatinda from 19th to 22nd October 2023.

Our College Hockey Players were Selected for Delhi University Hockey Team to participate in Inter-University Hockey Championship for the year 2023-24 at Maharaja Bhupinder Singh University, Punjab from 30th Nov to 6th Dec 2023

## **Publications**

Kar, R.N. (2022). Proactive Governance and Financing: the New Indian Model. *Chartered Secretary, ICSI*, Vol. 52, p. 29.

Kumar, S., Sharma, M., Muttoo, S. K., & Singh, V. B. (2022). Inter project defect classification based on word embedding. *International Journal of System Assurance Engineering and Management*, Springer, 1-14.

Ito, S., Ahmad, M., Kumar, V., & Alkhayyat, A. (2023), RKMIS: Robust Key Management Protocol for Industrial Sensor Network System. *The Journal of Supercomputing*, Springer, 1-30.

Bhandari, V., and Sahai, M. (2023). The Impact of Covid'19 Widespread on the Performance of Socially Responsible Companies and Blue Chip Companies – A Comparative Analysis. *International Journal of Financial Management*, 13(1), 16-28.

Khan, A.A., Kumar, V., Srinivas, J., Kumari, S., & Gupta, M.K. (2022). RAKS: Robust Authentication and Key Agreement Scheme for Satellite Infrastructure. *Telecommunications Systems*, Springer,

Khan, A.A., Kumar, V., Ahmad, M., & Jangirala, S. (2022). A Secure and Energy Efficient Key Agreement Framework for Vehicle-Grid System. *Journal of Information Security and Applications*, Elsevier, 68, 103231.

Kaur, K., Bhardwaj, H.K., Rajoria, Y.K., Yadav, A., Maurya, D., & Boadh, R. (2022). Fuzzy Expert System (FES) Integration for Oral Cancer Risk (OCR) Diagnosis. *Journal of Pharmaceutical Negative Results*, Vol. 13(08), pp. 3433-3437.

Agrawal, N., Kapoor, A., & Gupta, M. (2023). Comparative Annual Energy Yield of Total Cross Tied-in-Series and Conventional PV Array Configuration under Unshaded and Partial Shading Conditions in Urban Areas. *International Journal of Renewable Energy Research*, Vol. 13(1), pp. 465-473.

Sharma, S., Monga, Y., Gupta, A., & Singh, S. (2023). In silico screening and molecular docking study of quinoline based compounds with Human kallikrein 7 in complex with 1,4-diazepane-7-one 1-acetamide derivative receptor target for potential antibacterials. *Journal of Molecular Chemistry*, 3(1), 585.

## **Research Projects**

### **International**

Atomic Data for Vapour Shielding in Fusion Devices (F43024) with International Atomic Energy Agency (IAEA), Vienna, Austria.

### **National**

“Exploring and Connecting Great Indian Knowledge Networks of Ashrams and Gurukuls for the benefit of HEIs: A Working Model as per Mandate of NEP 2020” by ICSSR.

Star College Scheme under DBT.

Sea-born Disaster Risk Reduction, Governance and Management in Odisha: A Comparative Study of Policy and Innovation, Impress – ICSSR.

Study of effect of lon beam irradiation on thermoelectric properties viz thermo power and thermal conductivity of Bismuth telluride (Bi<sub>2</sub>Te<sub>3</sub>), lead telluride (PbTe) and MgAgSb based alloy, Government of Nagaland.

An action-based study to Explore & Connect Select IKS in Contemporary Disclosures & Practices, IKS Division of MoE@AICTE.

### **Patents Filed/Granted**

K. Maheswari, N. Kamaraj, Dr. Rahul Boadh, et al. 2022, Hybrid Fuzzy Association Rule Algorithms to Detect the Anomalies in Health Care Data. Indian Patent Published: ID No: 202241025524.

Satish Kumar, Mukesh Kumar, Dr. Rahul Boadh et al. 2022, Machine Learning Based Automatic Waste Management for E-Environment. Indian Patent Published: ID No: 202211047396.

Dr. Deo Datta Aarya, Dr. Rahul Boadh et al. 2022, Artificial Intelligence Integrated Human Paradigm through Organizational Agility and Sustainable Performance. Indian Patent Published: ID No: 202211051481.

Dr. Yogendra Kumar Rajoria, Dr. Rahul Boadh et al. 2022, Artificial Intelligence Based Smart System to Monitor and Predict the Performance of Employees for Human Resources Management with Tremendous Growth of Industry. Indian Patent Published: ID No: 202211051656.

Dr. Rahul Boadh, Dr. Kuljinder Kour et al. 2022, A System for Monitoring Realtime Health Condition of a Patient and a Method thereof. South African Patent Granted: ID No. 2022/09665.

Dr. Rahul Boadh et al. 2022, Developing Sustainable Green Electronics for an Environmentally-Friendly Future. Indian Patent Published: ID No: 202211054425.

Dr. Rahul Boadh et al. 2022, Integrated Machine Vision System for Human Micro- Expression Classification by AI Image Processing. Indian Patent Published: ID No: Authors 202211054424.

Dr. Rahul Boadh et al. 2022, A System for Distinguishing the Dispersion Patterns of Air Pollutants by Using Hybrid Technique. German Patent Granted: ID No. 202022105576.9

Dr. Rahul Boadh et al. 2022, Micro-Scale Dispersion of Air Pollutants across a Coastal Urban Environment. German Patent Granted: ID NO. 20 2022 105 965.9

Dr. Rahul Boadh et al. 2022, A Coupling Technique Based System for Studying the pollutants emitted from vehicles. South African Patent Granted: ID No. 2022/11443

Dr. Rahul Boadh et al. 2022, A Method for identifying the most durable plastic material using radial basis function bipolar fuzzy neural network. South African Patent Granted. ID No. 2022/11999

Dr. Rahul Boadh et al. 2022, A System for Detection of Foodborne Pathogen Salmonella. German Patent Granted: ID No. 20 2022 106 098.3

Dr. Leena Singh, got one Patent on “A Novel Solar PC Module Design”. Application No. 355623-001.

Dr. Saubhagyalaxmi Singh, “Iot based electric vehicle control systems in smart cities”- Patent Number- 202241073743, Publication Date- 30.12.2022.

Dr. Nidhi Jain, published a patent titled "A Supply Chain Management and Control System".

### **Seminars Organised**

International Seminar entitled ‘Managing Personal Finance’ jointly with E-Cell of the college was organized on 28th March 2023.

Seminar entitled ‘Navigate the UK Postgraduate Education System’ organized by Internal Quality Assessment Cell (IQAC) from 10-13 May 2023.

Seminar entitled ‘Widening access to the higher education in India’ was jointly organised by the college and the University of Warwick and CPRHE – NIEPA on 10 November 2022

Seminar entitled ‘Stepping Towards Excellence’ was organised was jointly organised by the college with NIELIT and BSE Institute Ltd. on November 10, 2022 for students enrolled in CSD’s add-on courses

of Shyam Lal College organised Seminar entitled on ‘Starting a Company’ organized by the Entrepreneurship Cell on November 22 2022.

Seminar on भारतीय गणित की शैली’ organised in collaboration with Department of Mathematics Saraswati IKS Centre on 16 February 2023.

Seminar on ‘How to create an effective first impression’ organised by Training and Placement Cell of the college on 20 September 2022.

National webinar entitled 'Employment Opportunities after B.Sc' was organized by CSD & IQAC in collaboration with Unacademy on 17 June 2022

International Conference entitled 'Bhartiya Business Practices: A Roadmap to Sustainability' was jointly organized by the Department of Commerce, Centre for Skill Development & IQAC in collaboration with ICSSR on 17-18 April 2023 at Shyam Lal College.

International Conference entitled 'Indian Knowledge System: Integration and Internationalization' jointly organised by IQAC and Saraswati IKS Centre, Shyam Lal College in collaboration with ICSSR and AICTE commemorating 75 years of Independence on 14-15 July 2022

### **Seminar/Conference Presentations**

Prof. Rabi Narayan Kar, Principal, SLC served as the Keynote Speaker/Resource person in following:

5<sup>th</sup> International Scientific Conference SHTIP organised by Republic of N. Macedonia by GOCE DELCHEV University of SHTIP, Business Logistic & Business Administration on April 13, 2022.

Two Days National Symposium on Integrating Indian Knowledge System in Education organized by The National Institute of Open Schooling & IKS Division, AICTE in collaboration with VBUSS at NIOS, Noida on May 5-6, 2022.

Talk on IKS in Commerce and Business organised by VBUSS jointly with Panjab University, ICAI & ICSI in Chandigarh on 5-6 July, 2022.

Participated in the Research Committee meetings of College Readiness and Student Success in Higher Education, organized by NIEPA in September-October, 2023.

Prof. Kusha Tiwari, Resource Person in Two days International Conference on "Fulfilling the Vision of NEP 2020 in English Language Textbooks" organized by English & Foreign Languages University, Lucknow on 27-28 May, 2022.

Prof. Kavita Arora, Presented a research paper titled "Green Finance: Growth and Development in India" in International Conference on International Conference "Bharatiya Business Practices: A Roadmap to Future Sustainability" organized by the Department of Commerce, Centre for Skill Development & IQAC, SLC in collaboration with ICSSR on April 17-18, 2023.

Ms. Manila Kohli, Presented a paper titled "Re-reading the Conservationist in the Post-apartheid Context" in a two day International Conference, The Literary Legacy of Booker Prize Winners, organised by ELT@1 Rajasthan, on 7-8 October, 2022.

Mr. Mukesh Kumar, Presented a paper entitled "Analysis of Resonant Curve and Phase Portrait Due to Earth's Equatorial Ellipticity In the Earth-Moon System Using Perturbation Technique" in the International conference entitled "Analysis and its Applications" held on 27-28 February, 2023 organized by the Department of Mathematics, Shivaji College.

Dr. Neelam Dabas, presented a paper titled "Reminiscence of Zero in Indian Mathematics" in the International Conference "Indian Knowledge System: Integration & Internationalization" from 14-15 July organized by IQAC, Saraswati IKS Center, SLC in collaboration with ICSSR.

Dr. Subodh Kumar, presented a paper entitled “Restricted Key Errors and Their Detection, Location and Correction” in Fifth International Scientific 'Innovative Stem Education' (STEMedu2023), during 3-6 April 2023, organised by Veliko Tarnovo, a branch of the Varna Medical University. Bulgaria.

Dr. Sitaram Kumbhar, presented a paper titled “Regionalisation of Politics and Rise and Fall of Regional Political Parties in Indian Democracy”, in a Two Day International Seminar on “Changing Trends in Political Parties and Party System in India”, organised by Satyawati College, University of Delhi, Delhi; Dr. Ambedkar Chair in Social Justice, IIPA, New Delhi and Indian Council of Social Science Research, New Delhi on 14-15 March, 2023..

Dr. Gayatri Chaturvedi, presented a paper titled “Symbolic Representations in the Indian Culture and its Relevance in the Present Day Context” in the International Conference on Indian Knowledge System: Integration and Internationalization on 14-15 July, 2022.

### **National/International MoUs Signed**

Vayam App with Superpro ai on 5 February 2022 for 2 years

Energy management with A3 Charge Private Limited on 14 June 2022 for 3 years

Administration of student id cards with Hallparty on 23 September 2022 for 5 years

### **Other Inter-Institutional Collaboration**

SLC has collaborated with:

Ministry of Education (MOE);

Indian Council for Social Science Research (ICSSR);

All India Council for Technical Education (AICTE);

National Institute of Electronics and Information Technology (NIELIT);

National Institute of Educational Planning and Administration (NIEPA) and many more.

**Number and percentage of students placed : 752 and 41.85%**

**Number of Companies visited for campus recruitment: 40 Companies**

### **Extension and Outreach Activities**

The following are the community outreach steps that the college facilitates:

The College has NCC, NSS, Women Development Cell, Centre for Holistic Development, Centre for Industry Interaction and Skill Development, Ambedkar Study Circle, Gandhi Study Circle etc. which organize events dedicated towards community service like blood donation camp, tree plantation drive, Save Yamuna Campaign, gender sensitization, identity discourses, moral education etc. to enhance the sense of community feeling and citizenship among the students

SLC has also adopted Shahdara mandi and regularly conducts cleanliness drives, cleanliness drives, switch over to cashless trading and plastic free campaigns



The College promotes sports and games in the trans-Yamuna region of Delhi by providing opportunities and best coaching facilities to the young and talented players from low-income groups or underprivileged sections of society

The College has conducted various surveys in the past, including the survey as part of the project ‘Old Age Homes in Delhi – Understanding the Challenges Faced by Them and Their Contribution to the Society’. The primary objective of this project is to have a closer view at the old age homes functioning in Delhi in order to assess the problems and challenges that these institutions are facing

NSS volunteers of the College visit slum areas and spread awareness about cleanliness in collaboration with NGOs. The tree plantation activities organized by the College are aimed at improving the air quality in and around the College, as well as for creating awareness about protection of environment

WDC regularly organises activities to sensitize the students and staff to gender related issues and to promote respect for human beings irrespective of race, religion, colour or gender

Most of the activities of the Equal Opportunities Cell such as remedial classes and Spoken English classes for students from under-privileged communities and facilities for differently abled also largely benefitting the students from surrounding areas

The College participates in all national initiatives aimed at promoting good citizenship such as cleanliness drive, skill and entrepreneurship development initiatives, “Make in India” campaign, etc

SLC has adopted 5 villages under UBA project under MoE, GOI.

The NSS of the College also regularly organizes “Nirbheek” – One week Women self-defence camp for girl students. The UBA team and NSS team of the College has already conducted cleanliness drives in Yamuna Bazaar Ghat no 21. The Development and Maintenance of Ghat No.-21 has been done along with repairing, beautification, restructuring, painting and colouring work

The NSS wing of the College lives up to its motto “Love All and Serve All”. The students engaged with NSS volunteer with a number of NGOs. They also organize clothes donation drives to support NGOs like Amar Jyoti. The NSS, every year, organizes a blood donation camp in the College. NCC girls of SLC have participated and organized Self defense Camp, Yoga Camp, Tree Plantation drive and save Yamuna Campaign'

Various centres of SLC viz. Innovation, E-cell, CSD of the college collaborated with several research institutes and departments to explore the student's latent skills and also conducted field trips, industrial and educational visits. Women Development Centre (WDC) in collaboration with National Service Scheme (NSS) and Swachhta Action Plan (SAP) of SLC organised awareness program on “Menstrual Hygiene Awareness Campaign”.

## **Library Development**

Our college Library has a rich collection of over 56,000 books covering the gamut of different disciplines. E-Resources facility is provided through DULS, N-LIST and DELNET to its users to access the world's best Databases, e-Journals, e-Books etc. In the year 2022-23, 457 books were added to our collection in various subjects. The college Library provides following services to its users –

Circulation services

In Knowledge Resource Centre, users can access E- resources (through DULS) & N-LIST

Internet access facility is also provided to its users in Knowledge Resource Centre

Web OPAC

DELNET

Newspapers clipping service

Inter Library Loan

Through N-LIST, DULS (for Faculty members) and DELNET remote access facility is provided to its users for accessing E-resources

Reference services

Reading Room facilities

Services to visually impaired students by providing Angle Pro device

**Faculty Strength: 160**

### **Financial Allocation and Utilisation**

Grant Received: Rs.29.95 Crore

Grant Utilised: Rs.29.95 Crore

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## **SHYAM LAL COLLEGE (EVENING)**

### **Major activities and achievements**

IQAC of the College, in collaboration with DSPSR, organized (online) XXIV Annual International Conference on “Nationalism, Globalization, and Development” from 7-9 January 2023.

### **Students with distinctions**

Following students were the college toppers:

Navin Chand Bhatt of B.A. Programme III year scored a percentage of 81.76.

Mudit Bhardwaj of B.A. (Hons) Political Science III year scored a percentage of 78.70.

Anjali Kanaujia of B.A. (Hons) Hindi III year scored a percentage of 79.08.

Pallavi Singh B.Com. (Hons) III year scored a percentage of 84.99.

### **Research Publications**

Kumar, A. Supply chain management and use of technology: A Critical Appraisal. *KAAP International Journal of Law* ISSN: 2349-2589

Kumar, A. Relationship between e-banking and customer satisfaction. *International Journal of Commerce and Management Research*. ISSN: 2455-1627.

### **Conferences Organized**

IQAC of the college in collaboration with DSPSR, organized (online) XXIV Annual International Conference on “Nationalism, Globalization, and Development” on 7-9 January 2023.

### **Seminars / Conferences Presentation**

Dr. Suresh Kumar, Assistant Professor, Department of Commerce presented a paper in the International Conference on 'Development Issues and Interdisciplinary Research Method ' organized by Mahila College Khagaria, Munger University on 4-5 September 2022.

Dr. Suresh Kumar, Assistant Professor, Department of Commerce also presented a paper in the National Seminar on "Emerging Trends Towards Cashless Economy in India" organized by Shree Jain Post Graduate College, Bikaner on 12 February 2023.

He presented a paper in the International Conference on "Sustainable Development in Commerce, Management and Technology" jointly organized by Research affairs committee, Rajdhani College, University of Delhi on 26-27 February 2023.

He also presented a paper in the National Seminar on "Contemporary Trends in Humanities and Social Science" organized by S.D.(P.G.) College, Panipat, Haryana on 18-19 March 2023.

### **Number and percentage of students placed**

Number of students placed = 57

### **Number of Companies visited for campus recruitment**

5 (Agile Capital Services, Inglu, Pehchan, Planet Spark, Tata Strive)

### **Library Development**

Our Library has a rich collection of over 53,365 books covering an array of different disciplines. It subscribes 16 Hindi & English Newspapers, 18 magazines and journals. E-resource facility is also available through which students and teachers can access the world's best databases, DULS, E-Journals, E-books and Reports. Our library is automated and ensures the availability of current titles by consulting publishers', catalogue, book reviews and publisher websites. Open access facilities to students and staff are available on ground floor and upper library building.

The library is computerized with bar coded books and membership cards. Xerox facility is also available for the staff members. The existing ceiling of the number of copies of a title to be purchased has been increased from five to twenty in view of new syllabi. The new arrivals are duly notified and prominently displayed.

### **Faculty Strength**

Total number of Permanent Faculty = 41

Total number of Ad-Hoc faculty = 22

## **Financial allocation and Utilization**

Grant Allocated = Rs. 30,68,72,000/-

Grants Utilized = Rs. 27,48,12,737/-

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## **SHYAMA PRASAD MUKHERJI COLLEGE FOR WOMEN**

### **Brief history of the College**

The glorious journey of 53 years of Shyama Prasad Mukherji College started with a humble beginning in the year 1969, in a small government building at Tagore Garden with only six programs, 500 students, and a handful of teaching and administrative staff. The college is named after the illustrious statesman and academician, Dr. Shyama Prasad Mukherji. The college was shifted in its present location, Punjabi Bagh, West Delhi in October, 1985. At present, the college offers 21 programs including three professional courses and three certificate courses

Today, the college takes great pride of its big campus spreading over 10 acres of land with two academic blocks, more than 100 rooms, 9 labs, 4 seminar rooms, an audio-visual room, a state-of-the-art auditorium with a seating capacity of 1150 people. The College also has excellent sports infrastructure, that includes indoor and outdoor gyms; a basketball and volleyball court; Kho-kho, Kabbaddi and hockey grounds. The college has a large, well-stocked, fully digitalised library with a collection of 85,000 books, 22 journals, 11 newspapers and air-conditioned reading -halls. It also possesses Staff quarters, a branch of the Indian Overseas Bank, an ATM, a Bookshop, and a Photo Copy shop in its campus.

### **Major Activities and Achievements**

The college, under the supervision of IQAC, carried out various activities throughout the year. Few of the activities are Faculty Development Programme, 2 UGC sponsored National Seminars, number of seminars and special lectures, ICPR Sponsor Seminar, Awareness campaign on Unsung Heroes, Literary Festivals and various intercollege competitions. Our faculty members published numerous research articles, books, and book chapters. Many of our faculty members presented papers, chaired sessions and invited to deliver special lectures in various seminars, workshops and conferences.

### **Honours/Distinctions**

Certificate of appreciation from Department of Higher Education, Ministry of Education, Government of India for the contribution on World Environment Day 2022, Certificate of Appreciation from The Energy Research Institute, Darbari Seth Block, Delhi for the contribution in the field of environment and energy conservation (2021-22 and 2022-23), Certificate of Appreciation from Petroleum Conservation Research Association (PCRA), New Delhi for the contribution in Energy and environment-related activities

The students of Department of Physical Education and Sports has brought laurels including our Kho-Kho team secured 2nd Position in “Khelo-India 10 Ka Dum” organized by Ministry of Youth Affairs and Sports & SAI in collaboration with Kho-Kho Association of Delhi at Jawaharlal Nehru Stadium, SPMC Aerobic Team Secured 2nd Position in EROBERN Invitational Inter-College held at Miranda House College and Aerobic Team Secured 1st position in Aerobics Invitational Inter-College held at Kalindi College on 12 April 2022

During the Annual NCC festivals in various colleges of the University of Delhi, NCC, SPMC participated at various events and won many medals and achievements for example SPMC won 1st in Quarter Guard Competition and 2nd in Tug of War at Sangharsh'23 - the Annual NCC fest of Atma Ram Sanatan Dharma College, NCC, SPMC Won 1st in Squad Drill Competition at Dyal Singh College and also won 1st in Quarter Guard Competition held in Bhim Rao Ambedkar College NCC, SPMC won 1st in Squad Drill Competition held at Rajdhani College and at Mata Sundri College respectively. NCC, SPMC won 1st in Tug Of War held at Shri Guru Tegh Bahadur Khalsa College on 29th March 2023. NCC cadets participated in various camps and rally.

### Students with Distinctions

S.No.	Name of Students	Class
1	SHIVATMIKA SHUKUL	III Year, Applied Psychology
2	DISHITA PRASAD	III Year, Geography
3	Nandini Jindal	II Year, Economics
4	Garima Khurana	II Year, Applied Psychology
5	Shruti Sharma	I Year, Applied Psychology

### Publications

Akansha Bansal Chopra & V.S. Dixit. (2022). Detecting biased ratings in Collaborative Recommender Systems using Opinion Mining . *Journal of Intelligent Systems*, 32(1), online .

Pratibha Yadav, Sweeta Tyagi and Other. (2022). Evolutionary Extreme Learning Machine Based Collaborative Filtering . *International Journal of Advanced Technology and Engineering Exploration*, 10(104), online.

M. Sood, Jaya Gera and Other. (2022). Creation, Evaluation, and Optimization of a Domain-Based Dictionary. . *Journal of Intelligent and Fuzzy System*, 43(5), 6123-6136.

Toolika Wadhwa. (2022). Communication in Metamorphosizing Classrooms: Reflections on Teaching During the Covid-19 Pandemic . *Fortell, Not Available*(45), 56-66.

Rachna Dua. (2022). Geo-Political Implications of Belt and Road Initiative with Special Reference to India . *National Geographical Journal of India*, 68(2), Online.

S. Bhatia, S. Houshou. (2022). Internet Addiction and Anxiety amid COVID-19 in India: Role of socioeconomic status and locus of control . *International Journal of Research in Social Science*, 12(4), Online.

Arif Hussain and Others. (2022). Snow Cover and Snowline Variation in Relation to Land Surface Temperature in Spiti Valley, Himachal Pradesh, India . *Journal of Ecol Internationalogy and Environmental Sciences*, 49(2), 187-189.

A. K. Bansal & V.S.Dixit. (2022). An adaptive RNN algorithm to detect shilling attacks for online products in hybrid recommender system . *Journal of Intelligent Systems*, 31(1), online.

A.K. Bansal & V.S. Dixit. (2023). Push and nuke attacks detection using DNN-HHO algorithm . *International Journal of Information and Computer Security*, 20(2-3), 248-268.

## **Research Projects**

ICSSR, 2019-21 (ongoing), Status of Impact of Constitutional Status of J&K on marginalized communities since Independence., 18.06 lakhs

ICHR, 2020-22 (ongoing), History, Science, Religion among Modern India Political thinker: A Thematic and Methodological Exploration. 3.5 Lakhs

ICHR, 2022-23, Accessibility and Sustainability of PM Krishi Sinchai Yojana: A Comparative Study of Uttar Pradesh, Jharkhand, Himachal Pradesh and Uttarakhand. 14 Lakhs

IOE, Delhi University, 2021-22, Psycho-social and Economic Impact of Internet Users in India. 1.5 Lakhs

IOE, Delhi University, 2021-22, Svaatantryottara Sanskrit Kaavyon men abhinav Prayog. 1.5 Lakhs

## **Seminars Organized**

Prof. Seema Bawa, Prof/University of Delhi, on 'Reading Gender Through Visual Source, Gender Awareness' on 29 March 2023

Prof. Ujjwal Kumar Singh, Professor/University of Delhi, on 'Gandhi and Indian Constitution', Celebrating Indian Constitution, 23 November 2022

Dr. Dipa Sinha, Assistant Professor/ Ambedkar University, on 'UNPACKING SECTORAL TRENDS IN FEMALE EMPLOYMENT IN INDIA, Indian Economy' on 14 September 2022

NGO-Mann Rahi, NGO, on 'Mental Health and Wellbeing for All: A Global Priority, Social Awareness', on 21 September 2022

Prof. Renu Deswal and Dr. Suruchi Kapuria, Professor, Dept. of Botany, Delhi University, Implementation of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal Act, 2013, on 'Awareness Campaign on sexual harassment', on 07 December 2022

## **Conferences Organized**

Marginalization and Inclusion: Role of Marginalised Communities in India's Struggle for Freedom, 09 August 2022, ICSSR

Indian Knowledge System: Dialogue With Time, 23 February 2023, UGC

Dialogue with Time, 04 January 2023, SPMC

Literary Festival, 31 March 2023, IGNCA

Parwaaz-23: Hindi, the language of the future, 31 March 2023, with Oil India Limited and Dristi Vision

## **Seminar/Conference Presentations**

Dr. Anamika Rai delivered a talk on "Models of Good Practices on Well Being Taken in Campuses" in a Tree Day Conference at Maitry College, DU in 2022.

Dr. Rishiraj Pathak delivered a talk on ‘Exploring the Connection on Music and Emotions’ at Lady Shriram College, Delhi University on 16 February 2023.

Dr. Chayanika Uniyal presented a paper ‘Evolving Contours of Women Empowerment: A Study of Women Participation in Political Institutions and Education in India’ in VI International European Conference of Interdisciplinary Scientific Research held on 26-27 August 2022 at Bucharest, Romania.

Dr. Ritu Bhagat presented a paper ‘Evolution of Food Practices in India: Growth of Farm Tourism in Haryana’ in Two days National Annual Conference of Haryana Congress held at Kurukshetra University, Haryana from 20-21 November 2022.

Ms. Mamta Marwa shared her expertise on ‘Celebrating World of Flavour’ in Janki Devi Memorial College, Delhi University on 9 September 2022.

Dr. Meenu Gere presented a paper on ‘Bharat ke Lok Evam Sanskar Geet’ at Two Days National Seminar on Indian Knowledge System: A Dialogue With Time held in Shyama Prasad Mukherji College, University of Delhi from 23-24 February 2023.

Himanshi Verma presented a paper on Bussiness Practices in the Era of Sustainable Development’ in 10th International Conference on Advance in Bussiness and Management held at Saheed Bhagat Singh, University of Delhi from 10-11, November 2022.

Dr. Mukul Khana Presented a paper on ‘The Study of Expected Future of Electric Vehicle in India’ in Two Days Annual Commerce Conference on Bharat@2047 held at Department of Commerce, Delhi School of Economics, University of Delhi from 11-12 January 2023.

Dr. Supriya Sinha presented a paper on ‘Heritage Management in Indian Knowledge System’ in Two Days National Seminar on Indian Knowledge System: A Dialogue With Time held in Shyama Prasad Mukherji College, University of Delhi from 23-24 February 2023.

Dr. Suruchi Bhatia presented a paper on “Initiatives/ models of good practices on well being taken in campuses” in the National Conference on Integrated Approach to Mental Health and Wellbeing in the Universities: Perspectives, Methodologies and Practices, organized by Dialog, Department of Sociology, Maitreyi College in collaboration with Manodarpan, The MoE for Psychological Support and Mental Well-being of students from April 21-23, 2022.

### **National/International MoUs Signed**

MOU with All India Radio, Delhi a constituent of Prasar Bharati on 14 November 2022 to be radio partners for activities related to events of social importance organized by the college.

MOU with SAKSHAM, Inderprastha, Delhi to collaborate and work for the betterment of differently able persons on 19 July 2022.

MOU with Social Studies Foundation (SSF) 1196, Pune to organize seminar on “Marginalization and Inclusion’ on 20 June 2022.

### **Other Inter-Institutional Collaboration**

SPMC has been associating with the Eco-club Delhi Government more than 5 years. Every year a small grant of Rs.20,000 is given to the eco club of SPMC from Delhi Government for organizing various activities related to the environment.

Eco Club, NSS and Medical Committee, SPMC in collaboration with DEEP-C and Lung Care and Foundation organized a workshop on Health and Air Pollution widespread awareness (H.A.W.A) on 14 December 2022.

SPM college in collaboration with IGNCIA organized Two Days National Seminar on 'India Knowledge System: Dialogue with Time' from 23-24 February 2024

Hindi Department, SPMC organized a one day seminar on "Varjanaan: Samaaj, Saahitya Aur Cinema" on 8 February 2023.

Department of Philosophy, SPMC organized an ICPR funded one day seminar on "Foundations of Philosophy" 29 March 2023. DR. Aditya Gupta, Associate Professor, Dr. Mausumi Bose, Associate Professor and Dr. Sagarika Datta, Associate Professor deliberated on the theme.

SPM College in collaboration with GIIP organized 'IPR: Fundamentals and Challenges in Global World' on 9 December 2022.

Philosophy Department, SPMC received financial assistance of Rs. 20,000/- from Indian Council of Philosophical Research. for organizing various activities.

**Number and percentage of students placed:** 0.002 percent

**Number of Companies visited for campus recruitment:** 05

### **Extension and Outreach Activities**

Ruchika, Vocational Centre is running two courses 'Cutting-Tailoring and 'Secretariat Training' specially for women living in neighbouring localities in the premises of the college. Many women were giving hand on training.

NSS, SPMC in collaboration with Bharatiya Shikshan Mandal launched an awareness campaign on the Contribution of "Subhash Chandra Bose" and his Vision of "SELF RELIANT BHARAT" on 25 August 2022.

NSS, SPMC under the Aegis of DU centenary celebration organized 'A dialogue With Time' with an objective to spread awareness about Indian knowledge system among the students on 4 January 2023 in college Rajiv Gandhi Auditorium.

NSS, SPMC in collaboration with Deep-C & Lung Care Foundation organized a Workshop on Health and Air Pollution Widespread Awareness

The Department of Applied Psychology and Family and Counselling Centre, SPMC organised various awareness campaigns and activities to spread the importance of positive mental health in the neighborhood of the college throughout the year. Also the college is also providing counselling facilities to all the stakeholders and community at large



FCC, SPMC organized workshops and seminars for all the stakeholders on the issues of suicide prevention, let's celebrate life, social transformation among women, perspective taking, etc throughout the year

DURVA- the Eco Club, SPMC in collaboration with Sorditcon Private Limited, New Delhi organised a workshop on 27 January 2023. The objective was to aware the students about e waste and how it is affecting the environment and hence causing hazardous diseases

### **Library Development**

The library added 1500 books. The library subscribed to 22 journals, 42 magazines, and 10 newspapers. An amount of Rs. 1408875/- was spent towards purchasing of books, Magazines, Journals etc. during the year 2022-23. The library had a membership of 5126.

The college has provided N-LIST: The project entitled "National Library and Information Services Infrastructure for Scholarly Content" to fulfill the information requirements of faculty and students through online access to e-books, e-journals, e-databases etc. to make more accessible to visually impaired students, the library had purchased Kibo device. Kibo device reads and translates printed/ handwritten/ digital text in various Indian languages can store them in PDF and audio files.

**Faculty Strength: 180**

### **Financial Allocation and Utilization**

Grant Sanctioned: 78.5 Crore

Grant Utilized: 78,5 Crore

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## **SRI AUROBINDO COLLEGE**

### **■ Brief history of the College**

Sri Aurobindo College was established in 1972, the birth centenary of the philosopher, patriot-poet Sri Aurobindo. The foundation of our college was laid with the objective of providing quality education to young aspiring minds. The college celebrated the Golden Jubilee in the year 2022. At the time of its inception in 1972, the college offered only two courses: B.A. and B.Com Pass. The institution had 172 students then. Thirteen teaching and fourteen non-teaching members were a part of the institution at that time. Presently, the college teaching faculty consists of 50 permanent and 78 adhoc members, whereas the non-teaching staff has 36 permanent and 28 contractual employees, offering a total of ten courses under CBCS as well the New Education Policy, namely B.A. (Prog), B.A. English (Hons), B.A Hindi (Hons), B.A Political Sc (Hons), B.Com (Hons), B.com (Prog), B.SC Life Science, B.SC Physical Science, B.SC Electronics (Hons) and M.A Hindi to more than 4000 students. With time, our college has established a name for itself as one of the leading colleges of the university of Delhi. It is counted as one of the most coveted places of learning and attracts students even from far-flung areas of the country.

### **Major Activities and Achievements**

The highlight of the Academic year 2022-23 was also the fact that Sri Aurobindo College organized a two-day International Seminar entitled “Technology for Environmental Sustainability, Socio-Economic Responsibility and Associated Entrepreneurial Opportunities in Society and Rural Environment” on 16-17 March 2023 sponsored by ICSSR under the convenorship of Dr. Rashmi Mathur. The event witnessed a number of dignitaries, and distinguished speakers and was attended by number of participants from across the entire country. Apart from that, the students have been actively involved in a host of cultural and sports activities, along with extension and outreach activities that have helped in creating awareness and welfare of one and all, in and around the campus. Additionally, this year saw a list of accolades in many fields with excellent performances exhibited by the students across the University and various Institutes of the country.

### **Honours/Distinctions**

Prof. Namita Rajput has 9 scopus publications. She has 4 Ph. D. awarded under her supervision. Besides this, 9 books have been edited by her. She has authored one book for CUET entrance business studies. In her academic kitty stands 20 invited lectures on NEP and gender sensitization. One Australian patent has been granted to her. She has received a copyright from Gender wheel by Government of India, copyright office.

Dr. Neetu Dwivedi Best oral paper presentation award received in the National conference on Natural Resources conservation & Environmental challenges to Human Health & society organized by Departmental of Environmental Science, Bareilly College, Bareilly.

Dr. Anita Kumari Authored a book chapter entitled "Synthesis and Application of carbon-based nanocomposite" by Rashi Nathawat, Satyapal S. Rathore, Poonam R. Kharangarh, Reena Devi and Anita Kumari of "Carbon Nanomaterials and their Nanocomposite-based Chemiresistive Gas Sensors" edited by Shivani Dhall, Materials Science, Elsevier 2023, ISBN: 9780128228371.

Dr. Poonam Jain “First Prize in Oral Presentation 2023” on paper entitled “Study of a level scheme in Actinide Region” held from 28-29 January 2023 jointly organized by Department of Physics, Aryabhat Institute of Academics and Research and Amiruddaula Islamia Degree College, Lucknow.

Dr. Poonam Jain “First Prize in Regional Competition on Innovative Experiments in Physics RCIEP 2022” held from 24-25 September 2022 organized by Indian Association of Physics Teachers RC-01.

Dr. Poonam Jain Invited Speaker in 2<sup>nd</sup> International Conference on “Multidisciplinary Academic Research and Innovation” on 28-29 January 2023 jointly organized by Department of Physics, Aryabhat Institute of Academics and Research and Amiruddaula Islamia Degree College, Lucknow.

Dr. Poonam Jain Appointed as an Executive Council Member of Indian Association of Physics Teachers (IAPT RC-1) 2022-2023, Delhi and Haryana Region.

Dr. Poonam Jain Organized National Science Day Celebrations on 28 February 2023 in association with Indian Association of Physics Teachers RC- 1 and Department of Physics and Astrophysics, University of Delhi.

Prof. Aprajita Chauhan Lecture of the month "Earth Day-2022". In CEC Published in CEC News, Vol.22. No.7 July 2022 Consortium for Educational Communication, CEC-UGC edusat, Govt. of India. She delivered 14 lectures on Molecules of Life and Environment on the UGC cec-edusat TV and cec -gurukul live lectures channel with Vyas TV.

## Students with Distinctions

Jia of B.A. (Prog.) II year was awarded rank I in Sri Aurobindo College.

Priyanshi Garg of B. Com (H) II year was awarded rank I in Sri Aurobindo College.

Sanyam Garg of B. Com (H) II year was awarded rank II in Sri Aurobindo College.

Shalini Priya of B. Sc. (H) Electronics I year was awarded rank I in Sri Aurobindo College.

Shant Sharma of B. Sc. Physical Sciences I year was awarded rank I in Sri Aurobindo College.

## Publications

Chauhan. A. (2023). Total Leaf Protein Content: A Measure to Study the Phytotoxic Effects of Sulfur Dioxide on Crop Plants. *IJRASET*. 11(III): 911-915.

Shrivastava, A., Rajput, N., Rajesh, P., Swarnalatha. (2023). IoT-Based Label Learning Distribution Mechanism for Autism Spectrum Disorder for Healthcare Application. *Internet of Medical Things: Emerging Trends, Issues, and Challenges*. NA(NA): 305–321.

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## Seminars Organized

Seminar entitled, 'International Daughter's Day and World's Contraception Day' by Dr. Ankita Chakraborty, Deputy Commissioner, South Municipal Corporation organized on 26 September 2022.

Seminar entitled, 'Developing Business Resilience: The Way Forward, Developing Business Resilience: The Way Forward in collaboration with PHD Chamber of Commerce and Industry' by Prof. Sudhir K. Jain, Prof. AK Singh, Mr. Anil Khaitan, CA S. Ravi, CA Amarjit Chopra, Mr. Arun Kumar Jha, Dr. Rishika Nayyar, Prof. Kavita Sharma, Mr. Rajendra Prasad Singh and Dr. Jatinder Singh., Professor and Industrialists organized on 17 June 2022.

Seminar entitled, 'Challenges to achieve global environmental sustainability, Environmental sustainability only one earth' by Dr. Ashwini Ray, Professor, University of Delhi organized on 20 June 2022.

Seminar entitled, 'Sustainable development goals in Indian context- vision 2030' by Prof. Pawan K Joshi from Jawaharlal Nehru University and Prof. Radhey Shyam Sharma from University of Delhi organized on 18 July 2022.

Seminar entitled, 'Protecting the wildlife in unprotected areas, Protecting the wildlife in unprotected areas,' by Mr. Wasim Akram, Deputy Director - Special projects of the famous NPO Wildlife SOS established in 1995 organized on 11 October 2022.

### **Conferences Organized**

Organised two-day conference on 'Technology for Environmental Sustainability, Socio-Economic Responsibility and Associated Entrepreneurial Opportunities in Society and Rural Environment' on 16 March 2023 under the aegis of ICSSR.

### **Seminar/Conference Presentations**

Dr. Neetu Dwivedi presented a paper titled, "Contribution of renewable energy resources in sustainable agriculture: A review" in the international seminar on Technology for Environmental sustainability, socio economic responsibility", organized by Sri Aurobindo College, University of Delhi on 16-17 March, 2023.

Ms. Sukriti Sobti presented a paper titled, "Science and Scientific Temper: National Educational Policy 2020' in ICSSR sponsored by Seminar on 'Technology for Environmental Sustainability, Socio-Economic Responsibility and Associated Entrepreneurial Opportunities in Society and Rural Environment" on 17 March 2023 at Sri Aurobindo College.

Ms. Kalpita Sonwal presented a paper titled, "Circularity in Indian Food Sector: Its Alliance with Sustainable Development Goals and Paris Agreement- A review' in the International Paris Conference on Social Sciences-VII" from 6-7 July 2022 held in Paris, France.

Ms. Kalpita Sonwal presented a paper titled "Sustainable Eco-Restoration through Mushroom Cultivation' in the national conference on Natural Resources Conservation and Environmental Challenges to Human Health and Society" organized by Department of Environmental Science, Bareilly College, UP on 4 June 2022.

### **National/International MoUs Signed**

Solar Panels and LPG Pipeline for the Labs in the premises. Moreover, Audits conducted by Indohan Technologies for Gender Audit, Energy Audit and Green Audit

### **Other Inter-Institutional Collaboration**

Collaborations with IGNOU, SOL and NCWEB for Education empowerment initiative.

**Number and percentage of students placed: 200**

**Number of Companies visited for campus recruitment: 25**

### **Extension and Outreach Activities**

The college has become an arena of activities that provide students a platform to hone and exhibit their skills, using the skills and facilities provided to them. Listed below, as an example, are a few activities that has had a positive influence on the students of the college as well as neighboring areas of the premise, in some cases.

The National Service Scheme (NSS) is a community service-oriented unit of Sri Aurobindo College, working under the guidance of Principal Prof. Vipin Kumar Aggarwal. The NSS SAC unit is led by the Program Officer, Prof. Subhanjali Chopra while Ms. Aakriti Saini, Dr. Neetu Dwivedi, Ms. Kalpita Sonowal, Dr. Seema Kumari, Ms. Sonia Lohia, Ms. Sonia Rexwal, and Mr. Avanish Yadav is the teacher coordinator of the unit.

The unit is engaged in six projects, which include Action on Addiction, Sahyog ek Pehal, Vasundara, Project Saviour, We Heal, and Project Kilkari to bring about social change.

In the academic year 2022-23, under the presidency of Mr. Anurag Verma, the NSS unit of Sri Aurobindo College has successfully completed 102 events including the major events Swacchta Pakhwada, Clean India 2.0, Blood Donation Camp, Fit India Freedom Run 3.0, Mega Collection and Donation Drive, Saguti : A Happy Destination (Visit to Orphanage), we for She (sanitary pads distribution drive), Plantation drive at Qutub Minar and UNNATI'23- NSS Annual Fest.

Mimansa: The Moral Education Society: MIMANSA, the Moral education society of Sri Aurobindo College under the convenership of Prof. Sangeeta Kaul, envisions to educate all the college students with the knowledge of philosophical, moral and cultural values. Dr. Hema Nagpal and Dr. Shikha Narang is the faculty coordinator of Mimansa Society. The Mimansa Society celebrated its annual day of 'The Gandhi Utsav' and organized a Seminar on "The roles of Morals in Nation Building and Peace". The SDM of South Delhi, HQ, Ms. Anupama Chakrovorty was the chief guest and keynote speaker of this seminars. The Mimansa society on the occasion of Mahatma Gandhi Jayanti, conducted competition among students: In the month of November 2022, the Mimansa society conducted a survey "DARPAN" among our college students to ensure the level of awareness of Morals, ethics & philosophical and cultural awareness among them. In the month of December, the volunteers of Mimansa visited a number of times in a slum area near the college - ' Begumpur ' to aware the children about Moral education. The Mimansa Society, under the aegis of MEHAK'23, successfully conducted: An Inter college Meme Making Competition, in which more than 40 students competed.

Prithvi- Society For Environment: Special talk- on “ENVIRONMENTAL SUSTAINABILITY ONLY ONE EARTH” in pursuance of World Environment Day and Golden Jubilee celebration on 20 June 2022. On this occasion the invited speaker was Dr. Ashwini Ray from University of Delhi, delivered a talk on “Challenges to achieve global environmental sustainability”.

Sustainable Development Goals In Indian Context- Vision 2030: On 18 July 2022, Prithvi society organized a seminar for the students. In this event two special guest Prof. Pawan K Joshi from Jawaharlal Nehru University and Prof. Radhey Shyam Sharma from University of Delhi, presented his opinions on SDGs and answered the relevant queries of students.

"Wildlife Week Series" Prithvi: Society for Environment, observes "Wildlife Week" from 2nd October to 8 October 2022, and on the occasion of wildlife week, we conducted a series of events. "Photography

Competition" The first event of this series is "Photography Competition" on the theme "Exploring the Wild flora and fauna of Delhi".

Seminar on Protecting the Wildlife: On 11 October 2022, the much-awaited event began with a special seminar on 'Protecting the wildlife in unprotected areas' with one of the most renowned personalities Mr. Wasim Akram. He is the Deputy Director - Special projects of the famous NPO Wildlife SOS established in 1995.

Project Aves: Project Aves has been launched to be a gathering place where everyone can come together for the love of nature and all of its creations.

Visit to WWF India: On 14 November 2022, we visited the "Wings of Wonder" WWF Office, Lodhi Estate, for the exhibition. Nearly 50 members actively participated in the visit.

Recruitment & Orientation: On 23 November 2022, the Prithvi society organized an orientation program for the fresher batch. Nature Visit to Biodiversity Park and Sanjay Van on 24 February 2023, Prithvi under project Aves visited Neela Hauz Biodiversity Park.

Poster making competition - On the occasion of World Water Day an Inter-college Poster making competition was conducted. Act for Environment- A Nukkad Natak was performed on the occasion of World Water Day.

## **PLACEMENT CELL**

The Training and Placement Cell of Sri Aurobindo College is continuously working towards inculcating the principles of Sri Aurobindo. The cell has the following goals: To develop different skills in our students at the undergraduate level, to bring mass recruiters as well as product-based companies, to provide placement & internship opportunities for each & every student of our college. The cell regularly organizes workshops, seminars and job fairs to achieve the above goals, to provide placement & internship opportunities for each & every student of our college.

## **NEEV 2.0**

This year, the cell conducted NEEV 2.0 on 24 March, 2023 in which teachers, members, and volunteers worked together to make the mission successful. The fair started from 9 am and ended at 4 pm. At the terminus, HRs and the team members got certificates from the college's Principal, Prof. Vipin Kumar Aggarwal, and the Convener of the Training and Placement Cell Prof. Subhanjali Chopra. This year, more than 35 companies exalted the event with their presence both in online and offline mode. More than 1200 registrations came despite heavy rain, and more than 500 students were present.

## **CV Vetting Workshop by DR. Harshada Mulay**

The Training and Placement Cell, Sri Aurobindo College organized a speaker session with Dr. Harshada Mulay on 6 October 2022, to guide students to overcome the mistakes and difficulties faced while preparing a CV by having a wonderful CV Vetting Workshop.

Career Orientation Workshop by Mr. Varun Bhutani. The Training and Placement Cell of Sri Aurobindo College organized a career orientation program on 12 October 2022 and experienced an enormously great seminar in the presence of Mr. Varun Bhutani.

The Training and Placement Cell of Sri Aurobindo College recently organized a webinar on "Personal Branding and Cracking Your Placements" with renowned speaker Dr. Shubhra Chakraborty.

## **PAAKHI**

The Women Empowerment cell demonstrates the vibrancy and heterogeneity in the events along with the consistent and deterministic efforts of the members to create awareness throughout with its principles of cohesion, learning and devoted engagement among the individuals.

Following events took place throughout the session 2022-2023- Awareness Drive SAMVEDNA-The Gender Sensitization Forum and PAAKHI-The Women Empowerment Cell of Sri Aurobindo College (M), University of Delhi organized an awareness drive on 11 April 2022 to spread the awareness among the students regarding the amenities college administration provides.

Paakhi & Samvedna - International Daughter's Day & World Contraceptive Day. Paakhi in collaboration with Samvedna organized an event on 26 September, 2022 on the occasion of International Daughter's Day and World Contraception Day. Open mic competition on the theme "Girl Child Day". Paakhi organized an open mic competition on 13 October 2022 to celebrate International Girl Child Day under the convenership of Dr. Vandna Bhalla.

Breast Cancer Awareness Month: PAAKHI marked the importance of breast cancer awareness month on 28 October 2022 through the social media handle of Paakhi @wec\_sac.

International Day for the Elimination of Violence against Women & National Law Day Respected Advocate Property Lawyer Navaneeth Pavithram told students about several laws and cases that concern the safety of women, along with the problems women's are facing inspite of the sufficient laws made in favor of them as well as suggested the solutions to such issues.

National Youth Day: PAAKHI, the Women Empowerment Cell organized an exciting and interactive session wherein the college youth were invited over to share their thoughts on what one can be done for the cause of women's empowerment on 12 January 2023.

Veerangana'23 – Paakhi's Annual Fest: Paakhi, Women Empowerment Cell of Sri Aurobindo College organized its annual fest Veerangana on 3 April 2023. Under the theme Naari - The Epitome of Power. The guests were Falit Sijariya, Representative of Y-20 India, Founder-President Studomatrix and Diplomatron along with Valentina Brahma, Secretary for Media Y-20 India.

## **GENDER SENSITIZATION FORUM**

Samvedna, the Gender Sensitization Forum of Sri Aurobindo College is the society which aims to sensitize everyone towards the others in the society. Under the able guidance of the Principal sir, Prof. Vipin Kumar Aggarwal, the society convenor, Dr. Rashmi Mathur and faculty coordinators- Dr. Vandna Bhalla, Mrs.

Shobhna Chandra and Dr. Anita Kumari, during this academic year the society undertook various activities as listed:

On 26 September 2022 Samvedna in collaboration with Paakhi - the Women Empowerment Cell of the College, observed the International Daughter's Day and World's Contraception Day by organizing speaker sessions with Dr. Dhvani Mago and the Deputy Commissioner, South Municipal Corporation, Dr. Ankita Chakraborty.

On 24 January 2023 Samvedna collaborated with PAAKHI- The Women Empowerment Cell of the college, to celebrate the National Girl Child Day and International Education Day.

On 28 March 2023, the Annual Fest- SPRING was organized. The fest witnessed a motivating talk by a dynamic speaker, Mrs. Meenu Choudhary (IPS), Joint CP Southern Range, Delhi Police.

A panoply of events such as street play competition, debate competition, poetry competition, quiz, image description competition, games and face painting were successfully conducted during the Annual Fest- SPRING. A period pain modulator camp was organized, through an NGO- Satykhand.

## **G20 CONCLAVE**

A one-day national seminar titled ' The G20 Conclave 2023 Under India's Leadership ' was organized on 8 February 2023 under the aegis of the Internal Quality Assurance Cell of Sri Aurobindo College and sponsored by the Indian Council of Social Science Research. Lectures and research papers focused on current global challenges such as "Sustainable Development", "Lifestyle and Happiness", "Digitalization", "Ecology" and "Global Situation Conflict and Resolution" etc. were presented during the symposium.

## **SPORTS**

### **Archery**

Name - Ayush Rao (B.A.)

Achievements – (Category – Compound)

Participated in All India Inter University Archery Championship held at Guru Kashi University, Talwandi Sabo, Punjab from 23rd December to 28 December 2022.

Selected for Khelo India University games 2022-23.

Secured 2nd position in Khelo Haryana Youth Games held at Gurugram, Haryana from 16th to 18 December 2022.

Secured 1st position in Team event in Under 17 Compound Category in 37th. Haryana State Boys Archery Championship held at Umra, Haryana from 6th to 10 December 2022.

Secured 1st position in Compound Category (Individual Event) in 10th Gurugram District Archery competition. (Sub Junior)

Secured 1st position in Compound Category (Team Event) in 10th Gurugram District Archery competition. (Sub Junior)

Secured 2nd position in Compound Category (Team Event) in 10th Gurugram District Archery competition. (Senior)



Name - Ayushi Lingwal (B.Sc. Phy. Sci.) Achievements- (Category – Indian)

Participated in All India Inter University Archery Championship held at Guru Kashi University, Talwandi Sabo, Punjab from 23 December to 28 December 2022.

Secured 1st position in Delhi State Archery Championship held at JLN Stadium, New Delhi from 27 January to 1 February 2023. (Junior)

### **Badminton**

Name – Piyush Singla (B. Com Hons.) Achievement

Secured 2nd position in Punjab State Games U-21 held at SAS Nagar, Punjab from 15-22 October 2022.

Name – Mahira Nagpal (Eng. Hons.) Achievements

Secured 3rd position in Women Doubles in Stadium, New Delhi from 7-14 August 2022.

Secured 1st in Women Doubles in Delhi State Badminton Ranking Championship.

### **Kabaddi (women)**

Team Members: Himani, Kunika, Rabia, Garima, Khushi, Thaneswari, Anjali, Dimple, Muskan & Preeti.  
Achievements

Secured 1st position in Invitational Inter-college Women's Kabaddi Tournament held at Kalindi College, University of Delhi from 1-2 February 2023.

Secured 1st position in Nangla Purohit Kabaddi League held at Jaipur, Rajasthan from 18-20 October 2022.

Secured 2nd position in Pre-Inter-college Kabaddi Tournament.

Secured 1st position in Invitational match held at Sri Aurobindo College, University of Delhi.

Team Members: Rabia, Garima and Thaneswari participated in North Zone Inter University Championship held at Sonapat from 7-11 December 2022.

Team Member: Thaneswari (B.A.) Participated in National Kabaddi Women Championship held at Mahendergarh, Haryana from 23-26 March 2023.

Team Member: Khushi Tanwar (B.A.) Participated in Junior National Kabaddi Women Championship held at Delhi from 1-4 September 2022.

### **Kabaddi (men)**

Name – Ayush Chaprana (B.A.) Achievement \_

1. Participated in North Zone Inter-University Kabaddi Men's Championship held at MDU, Rohtak, Haryana from 6-11 December 2022.

Name – Saurabh (B.A.) Achievement

1. Participated in North Zone Inter-University Kabaddi Men's Championship held at MDU, Rohtak, Haryana from 6-11 December 2022.

### **Taekwondo**

Name - Chander Dev Kirad (Hindi Hons.) Achievements

Secured 2nd position in Delhi state Taekwondo Championships held at Delhi on 11 December 2022.

Selected for National Taekwondo Championship 2022-23 going to be held at IG Stadium, New Delhi from 14-16 April 2023.

Name – Devendra Singh Chauhan (B. Com) Achievements

1. Participated in All India Inter University Taekwondo Championship held at GNDU, Amritsar from 2-6

January 2023.

Name – Pinky Yadav (B.Sc. Life Science) Achievements

Participated in 38th National Senior Kyorugi Taekwondo Championships held at Puducherry on 11-12 February 2023.

### **Shooting**

Name – Sahil Chaudhary (B.A.) Achievements

Participated in 65th National Shooting Championship Competitions in Pistol Events held at Bhopal, Madhya Pradesh from 20 November to 12 December 2022.

Team Member: Sahil Chaudhary participated in All India Inter University Championship 2022-23.

### **Gymnastics**

Name – Paras Singh Karki (B.Sc. Phy. Sci.) Achievements

Secured 2nd position in All India Inter University Artistic Gymnastics Championship held at Panjab university, Chandigarh from 10-14 March 2023.

Qualified for khelo India university games 2022-23

Secured 7th rank in Khelo India Youth games 2022-23 held at Gwalior, Madhya Pradesh from 2-6 February 2023.

Participated in Junior National Gymnastics Championship held at Trivandrum, Kerala from 28 December 2022 to 4 January 2023.

Secured 1st position in delhi state gymnastic championship in two category (Pommel and horizontal bar) and 3rd position in individual all rounding championship.

### **Netball**

Name – Romy Dabas (B.A. Prog.) Achievements

Secured 3rd position in 36th National Games held at Bhavnagar, Gujarat from 26-30 September 2022. (Also honored with the title of best player of the tournament)

Secured 2nd position in 40th Senior National Netball Championship held at Nagpur, Maharashtra from 1st to 4 March 2023.

Secured 3rd position in 6th All India Inter Zonal National Netball Championship held at Nagpur, Maharashtra from 1-4 March 2023.

Secured second position in 39th Senior National Netball Championship held at Bhiwani, Haryana from 30 March to 3 April 2022.

Secured 1st position in Senior Delhi State Netball Championship from 24-26 February 2023.

Name – Bharti Tomar (B.Sc.) Achievement

1. Secured 1st position in Senior Delhi State Netball Championship held at Heeralal School, New Delhi from 24-26 February 2023.

### **Hand ball**

Name – Rahul (B. Com Hons.) Achievement

1. Selected for Delhi University team for North Zone Inter University Handball Championship held at Kurukshetra University from 10-14 March 2023.

### **Karate**

Name – Deepshikha (B.A.) Achievement

1. Deepshikha has received a scholarship of Rs. 20,000 per year (2021- 2024) from Delhi Government.

Name – Kashish Sharma B.Com.(H) Achievement \_

1. Kashish Sharma has received a scholarship of Rs. 3 lakhs from Delhi government.

### **Yoga**

Name – Anjali Kashyap (B.A.)

Achievement

1. Anjali Kashyap secured 2nd Position in second National yogasan Championship held at Dhruv Global school sangamer Maharashtra from 27-30 December 2022.

International Yoga Day

The Department of Physical Education, Sri Aurobindo College has organized a series of events to celebrated the 8th International Yoga Day from 16-21 June 2022.

Annual Sports Meet 2022-23

The Department of Physical Education, Sri Aurobindo College (Day), University of Delhi organized the Annual Sports Meet on 25 March 2023 at Jawaharlal Nehru University Stadium, New Delhi.

### **Library Development**

Keeping in view the significance of library in an institution, the college has a dedicated space allotted for it. The record/catalogue of books is completely computerized and it utilizes NET LIB software to streamline the data. This software stores difficult-to-obtain, low circulation reports and papers. The record is kept digitally to streamline the book bank; It also serves the purpose of avoiding hassle in figuring out the number of books issued as well as books which haven't been issued. To ensure that students can access the books in a hassle-free manner, they can check the availability of books using library search engine. The library houses more than sixty thousand books which are distributed and divided into various sections depending upon the subject they belong to. There are wide variety of books covering various disciplines such as Environmental Science, Electronic Science, Mathematics, Physics, Chemistry, Hindi, English etc. Each year several new books are added to the existing book bank. The library has separate funds to replenish with new books each year, the fund is allocated to each department depending upon the number of students. We have spacious reading room of the library which can accommodate more than 100 students at a time. For faculty members there is a separate reading room with seating capacity of 15 people at a time. Our students make the maximum use of the facility and access e-books also which are provided to us through the Delhi University central arts and science library. Our college library is fully automated. The records of borrowed and deposited books are maintained. The college library is also equipped with more than a thousand laptops for students and faculty. The laptops can be borrowed by the students and they have to return them before the commencement of the semester examination. The initiative of giving the laptop to the students was taken in the academic year 2013-14, when Four Year Undergraduate Programme (FYUP) was introduced in the University of Delhi, though it was called back in the next year. The college has a library committee comprising of officials from the library. The college bursar, all the respective teacher in charge of the various students. The library is well equipped with internet facility and it is student friendly. The library has a separate section of journals and reference books specially for the teachers. The text book section is mainly used by the students. Normally the students have to return the books in a stipulated time, but many times the teachers go out of their way to get books for economically weaker and needy students. The faculty members may recommend the books from the authorized dealers and the library committee approves the recommendations. The number of books also increases every year, to facilitate the growing

demand of students. We have a designated library staff, dedicated completely for the library maintenance. The library has separate funds to replenish with the books each year. The fund is allocated to each department according to the number of students. The library has complete power backup and the reading room provides a quiet environment for the students. It is fully air cooled and the students make optimum use of the facility.

Total No. of Books in library: 62000

Total No. of Magazine and Journals subscribed: All the journals subscribed by the Delhi University Library System

**Faculty Strength:** 128

#### **Financial Allocation and Utilization**

Grants Allotted: Rs. 20.6 Crore

Grants Utilized: Rs. 20.5 Crore

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### **SRI AUROBINDO COLLEGE (EVENING)**

#### **Brief History**

Sri Aurobindo College (Evening), named after the legendary philosopher, nationalist and reformer Sri Aurobindo Ghose, was established in 1984, as a constituent College of the University of Delhi. In the year 1988 this Evening College made history by opening its doors to women students. The College had begun by offering instructions in B.A. (Prog.) and B.Com. (Prog.) Courses. Over the years courses in B.Com. (Honours), B.A. (Honours) Hindi and B.A. (Honours) Applied Psychology were introduced. The College presently offers the following courses in 1st. year: B.Com. (Hons.), B.Com., B.A. (Hons.) Applied Psychology, B.A. (Hons.) Hindi, B.A. (Prog.), B.A (hons.) English and B.A (Hons) Economics. The college is committed to fulfilling the vision of Sri Aurobindo Ghose by imparting holistic education and knowledge to students for development of the body, mind and soul based on traditional Indian values. We strive to imbue the teaching/learning process with a unique blend of intellectual rigor and aesthetic and ethical engagement. The pedagogical aim is to develop a community of learners driven by excellence and self-actualization, ready and willing to contribute to the community and society.

#### **Major Activities and Achievements**

Handball men – The College team secured 2nd place in Delhi University Inter-College tournament. Alka Singh of semester VI won Gold medal in National Shooting Women Championship. Various departments and societies conducted numerous activities. Major among them: Department of Applied Psychology conducted an Interactive session on “Stress and Management Techniques, an international workshop on “Relationship between time perspective and stress”, Workshop on “Indian Psychology”, Seminar on “Hypnosis and Past Life Regression”, “Mental Health Examination”- An invited lecture, “Conflict Resolution”-An Interactive Session, and a workshop on “Mindfulness-A practice of self- analyzing”. Department of Commerce organized a seminar on "Professional Ethics and Coherent Communication". Department of Economics conducted a debate competition on “Privatization is the Path to Economic Development”, organized a quiz competition and conducted a live seminar on the Growth & Employment

scenario in India. Department of English organized an Interactive Book Reading Session wherein the novelist Jalaja Shrivastava was invited to deliver a talk. Department of Environmental Studies organized Shatabdi Vriksharopan program. Department of Hindustani Music organized a Lecture Demonstration on "Musical Forms of Semi-Classical Music" by Sh. Arul Seth (A graded AIR artist). Department of History organized quiz competition. Department of Sanskrit organized "Patra Vachan Pratiyogeeta" and special lectures.

### **Honours/Distinctions**

Prof. Susanta Kumar Bag awarded with 'Dr. Sarvepalli Radhakrishnan Best Teacher and Researcher Award in History-2022' by IMRF, Vijayawada, AP. He was also awarded 'A.P.J. Abdul Kalam Award for Best Teacher in Modern Indian History-2022' by CPACE, Vijaywada, AP. Recently, Prof. Kumar was felicitated with International Excellence Award-2023 as Young Professor of the Year, Kitekrafts, Ludhiana, Punjab.

Dr. Amandeep Nahar awarded with 'Dr. Sarvepalli Radhakrishnan International Award of Best teacher' by HRD Mission and Genius Brain on September 11, 2022. He was also awarded 'Dr. APJ Abdul Kalam Best Teacher and Researcher Award 2022' in the field of Human Resource Management by centre of professional advancement continues education (CPACE) on 15 October 2022.

Vikas Kumar Joshiya awarded with 'Education Excellence Award 2022 in the Field of Human Resource Management' during the World Environment Summit 2022 on 15-16 October 2022 at Auditorium, V.P. Chest Institute University of Delhi, North Campus, Delhi by Environment and Social Development Association (ESDA), Delhi.

### **Students with Distinctions**

Aastha Singh of B. Com. (Hons.) has secured 1st position in the college-cumulative result of Semester VI with a CGPA of 9.054.

Sanjana of B. A. (Hons.) Applied Psychology has secured 1st position in the college-cumulative result of Semester IV with a CGPA of 8.89.

Harshita Kour Johar of B. A. (Hons.) Applied Psychology has secured 1st position in the college-cumulative result of Semester VI with a CGPA of 8.84.

Devraj Mandal of B. Com. (Hons.) has secured 2nd position in the college-cumulative result of Semester VI with a CGPA of 8.82.

Manish Keshari of B. A. (Programme) has secured 1st position in the college-cumulative result of Semester VI with a CGPA of 8.76.

### **Seminars Organized**

Seminar entitled, 'Hypnosis and Past Life Regression, Psychoanalytical theories and structure of human mind' by Dr. Navneeth Vallabh, President of the Rotary Club Delhi and Director at NVFP Pvt Ltd - media company organized on 16 January 2023.

Seminar entitled, 'Growth & Employment scenario in India' by Prof. Jayan Jose Thomas, Economics department of IIT Delhi organized on 3 March 2022.

Seminar entitled, 'Climate change and the Global Crisis in the seventeenth century' by Dr Vipul Singh, Department of History, University of Delhi organized on 25 January 2023.

Seminar entitled, 'Vaishvik Samaj aur Srimad Bhagwad Gita' by Prof. Daya Shankar Tiwari, Chairman Governing Body, Satyawati College, University of Delhi organized on 27 January 2023.

Seminar entitled, 'Mental Health Examination' by Prof. Dinesh Tyagi, Head, Dept. of Psychiatry, Dr. Baba Saheb Ambedkar College, Delhi organized on 30 January 2023.

**Conferences Organized:** 28-09-2023,

### **Seminar/Conference Presentations**

Prof. Munish Sharma presented a paper titled, "प्राचीन शिक्षा बनाम आधुनिक शिक्षा", धर्मानंद उनियाल राजकीय महाविद्यालय, नरेंद्र नगर टिहरी गढ़वाल, उत्तराखंड, 25 और 26 नवंबर 2022.

Vikas Kumar Joshiya presented a paper titled, "Protective legislation for underwater" Global Water Congress 2022 at RKGIT, Ghaziabad from 20-21 March 22.

Vikas Kumar Joshiya presented a paper titled, "The new executive- an Image" in International Conference on Sustainable development in commerce, management & technology at Rajdhani College, University of Delhi from 26-27 February 2023.

Dr. Kalpana Rohit presented a paper titled, "Role of Competency Based Education in the Skill Enhancement of the Tribal Population of Madhya Pradesh", in one day National Conference (Blended Mode) on 'Possibilities & Dimensions of Skill Development in Tribal Areas' organised by Indira Gandhi National Tribal University, Amarkantak, M.P., held on 12 November 2022.

Dr. Deepa Sharma presented a paper titled, "Challenges to opportunities-A qualitative study of tribal women of H.P." in National Seminar on Women Empowerment at department of Psychology, P.P.N. (PG) College, Kanpur from 5-6 November 2022.

Dr. Shyam Narayan Pandey presented a paper titled, "प्राचीन भारतीय राजनीतिक चिंतन-प्रणाली में उत्तरदायित्व पूर्ण शासन" in a National Seminar on Indian Knowledge Tradition, organised by Bhartiya Samaj Vigyan Parishad and Hansraj College, University of Delhi from 15-17 October 2022.

Dr. Shyam Narayan Pandey presented a paper titled, "समान नागरिक संहिता :अंबेडकर के पश्चात् अंबेडकरवादी", in a two days National Seminar on The partition of India and Dr B.R. Ambedkar, organised by Dr. Ambedkar International Centre, MoSJE from 22-23 February 2023.

### **Other Inter-Institutional Collaboration**

Project X- Culture –University of North Carolina, USA - An international experiential learning project across 80 universities from 40 countries with 2500 students working on various dimensions of international

business. Professor Sumati Varma, Department of Commerce, Sri Aurobindo College - Evening is a Member of the Executive Board of Project X Culture, University of North Carolina, USA.

### **Number and percentage of students placed:**

**Number of Companies visited for campus recruitment: 85**

### **Extension and Outreach Activities**

Team SAMARPAN (NSS-SACE) began many new and unique activities this academic year. NSS organised the Feed the Stray campaign, which was one of NSS's and most of SACE's successful monthly campaigns. In collaboration with IPCA (Indian Pollution Control Association), a plastic recycling drive was also held. To commemorate Gandhi Jayanti, a cleanliness drive was organised around the college and PVR Saket area. A winter clothing distribution drive was organised to assist those in need in surviving the bone-chilling winters. To help stray animals, a donation drive was organised in association with Friendicoes Animal Shelter. The money collected was used to provide food, medical supplies and bedding for animals in need.

The Enactus chapter of Sri Aurobindo College (Eve.) was formed in 2016 and is one of the most active student organizations on the south campus, University of Delhi. The chapter works on the principles of social entrepreneurship in running two projects PROJECT ISHTA and PROJECT ANNAPOORNA, which has been our flagship project since inception. The projects help to give real life experience and exposure of all facets of social entrepreneurship and management to its members, including increasing financial and entrepreneurial literacy.

The basic aim of PROJECT ANNAPOORNA is Women Empowerment through Social Entrepreneurship, and it has enabled homemakers, to establish a tiffin service business. The student team act as management consultants and have provided the necessary ecosystem for enabling a domestic activity to take the form of a flourishing business. The Society has honed the business skills of these homemakers and has thus not only helped to make them self-reliant and financially empowered, but is also instrumental in improving the financial condition of their families.

PROJECT ISHTA - 'Initiative for Sanitation and Hygiene Towards All' – a project on woman entrepreneurship for hygienic sanitation. Project ISHTA is aimed at enabling complete, inexpensive public hygiene for women. We have created a convenient, hygienic and waterproof toilet seat cover which fits all seats and gives complete coverage and protection. The project complements the government's vision of "SWACHH BHARAT" as the proceeds from our toilet seat covers are used for the construction of public toilets in underserved regions. Clean is also green. ISHTA is minimalistic and follows 3 R's- 'Reduce' the use of paper, 'Redeploy' proceeds for sanitation, and use 'Recyclable' material for safe disposal.

Project Katran aims to reduce waste in the fashion industry by utilizing scrap cloth materials that are discarded by factories and tailoring shops. It is based on principles of recycling and upcycling and helps to reduce and recycle waste and create employment opportunities for women.

Enactus students have participated enthusiastically in different events throughout the year.

Project Annapoorna won the second prize at Projectus 22, a B-Plan Competition organised by Swami Shraddhanand College.

Students also participated in the shark tank event at GNOSIS organised by Akhilesh Das Gupta Institute of Technology & Management. Students have regularly participated in events at the Global Challenges Forum (GCF) in collaboration with Maadhyam, aimed at building resilience and awareness among youth.

Team Katran also showcased their events at various college festivals and received a positive response and much appreciation.

### **Library Development**

More than 1500 volumes of books were added during the financial year 2022-2023 in all relevant subjects and all ICT facilities.

Total No. of Books in library: 46500

Total No. of Magazine and Journals subscribed: 14

**Faculty Strength: 60**

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 31.01 Crore

Grants Utilized: Rs. 27.41 Crore

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## **SRI GURU GOBIND SINGH COLLEGE OF COMMERCE**

### **Brief history of the College**

Sri Guru Gobind Singh College of Commerce, founded in 1984, stands as a prestigious institution within the University of Delhi, being the second commerce college established by the university. This esteemed college offers specialized courses in commerce, economics, business economics, management and computer science. The College is supported by the Delhi Sikh Gurudwara Management Committee, a statutory body, constituted under an Act of Parliament. The College is proudly named after Sri Guru Gobind Singh Ji, the tenth Sikh Guru. Drawing inspiration from the teachings of Sikh Gurus, the college encourages its scholars to imbibe universally accepted moral and spiritual principles. Initially, the College was housed in 'barracks' with inadequate resources, a total enrolment of 129 students, and just six teachers. The joint efforts of individuals involved with the institution have propelled SGGSCC to new heights of glory and success, with a strength of around 2200 students and a teaching faculty of around 75 academicians and a NAAC grade of A++ in the year 2022. Rooted in the teachings of Sikh Gurus, the college instils universally accepted moral and spiritual principles in its scholars.



## Major Activities and Achievements

In the academic year 2022-2023, the college achieved significant milestones, including obtaining an esteemed 'A++' grade from the National Assessment and Accreditation Council (NAAC) and securing a prominent position in the National Institutional Ranking Framework (NIRF). Additionally, the college successfully implemented the new UGC curriculum framework, indexed our journal- 'Journal of Business Thought' in the Australian Business Deans Council (ABDC) Journal Quality List, and introduced interdisciplinary Value-Addition Courses and Skill-Enhancement Courses. The college upgraded its infrastructure with air-conditioned classrooms, faculty cubicles equipped with personal computers, and advanced computer laboratories. Furthermore, a Radio Frequency Identification (RFID) system in the library for book issuance was implemented and the Kibo device to assist visually impaired individuals has also been introduced. With a strong focus on student achievement and creating an optimal learning environment, the college congratulates its students and faculty for their outstanding efforts and looks forward to reaching even greater heights in the future.

## Students with Distinctions

Khyati Kalra of BMS was awarded the prestigious 'university medal in BMS' at the 99 Annual Convocation of University of Delhi for securing the highest CGPA in BMS for 2022.

Ritika Kaur of B.A. (Hons.) in Punjabi was awarded the prestigious 'Sardar Mohan Singh Memorial Gold Medal' at the 99 Annual Convocation of University of Delhi for securing the highest CGPA in B.A. (Hons.) Punjabi for 2022.

## Publications

Kalra V., Kashyap I., Kaur H. (2022). Classification based topic extraction using domain-specific vocabulary: A supervised approach. *Indonesian Journal of Electrical Engineering and Computer Science*, 26(1): 442-449.

Sethi R., Mehrotra M., Sethi D. and Mehrotra G. (2022). Medical Image Augmentation Framework for Resolving Chest X-Ray Data Imbalance . *International Journal of Computing and Digital Systems*, 12(1): 1161-1171.

Kaur G. (2022). Nexus between Inflation and Fiscal Deficit: A Comparative Study of India and China. *Journal of Chinese Economic and Foreign Trade Studies*, 15(2): 193-216.

Puri V., Joshi S., Devkota N. (2022). Infrastructure and Climate Change Adaptation in Nepal: An Assessment. . *Southeast Asian Journal of Economics*, 10(3): 1-26.

Malhotra R., Khanna M.. (2023). On the Applicability of Search-based Algorithms for Software Change Prediction. *International Journal of System Assurance Engineering & Management*, 16(1): 55-73.

Sahoo B.P., Ashri D., Gulati A. (2022). Drivers of FDI in Emerging Economies: BRICS vs. MINT. *International Journal of Advanced and Applied Sciences*, 9(9): 118-126.

Preet S., Chopra S., Gulati A. (2022). Impact of Sustainable Development on Economic Growth: Evidence from OECD Countries. *JIMS8M-THE JOURNAL, Web of Science*, 27(2): 54-61.

## Research Projects

Centre of Excellence, SGGSCC funded project entitled, “Psychosocial and Economic Impact of Covid-2019 on Healthcare Workers in India”. Sanctioned amount of Rs. 0.90 lakhs. PI: Dr. Paramjeet Kaur (Department of Economics)

Centre of Excellence, SGGSCC funded project entitled, “Campus Sustainability: From Understanding to Assessment and Action”. Sanctioned amount of Rs. 0.90 lakhs. PI: Prof. Kawal Gill (Department of Commerce)

Centre of Excellence, SGGSCC funded project entitled, “Impact of Financial Literacy on Long Term Investment Behaviour of Young Investors in India: An Empirical Study”. Sanctioned amount of Rs. 0.85 lakhs. PI: Dr. D. D. Chaturvedi (Department of Economics)

Centre of Excellence, SGGSCC funded project entitled, “ਕੈਨੇਡੀਅਨ ਸਮਾਜ, ਅਰਥਚਾਰੇ ਤੇ ਰਾਜਨੀਤੀ ਵਿਚ ਸਿੱਖੀ ਭਾਈਚਾਰੇ ਦਾ ਉਭਰਦਾ ਸਰੂਪ : ਗੁਰਮਤਿ ਸਿਧਾਂਤਾਂ ਦੇ ਵਿਸ਼ੇਸ਼ ਸੰਦਰਭ ਵਿਚ”. Sanctioned amount of Rs. 0.50 lakhs. PI: Prof. Taranjeet Kaur (Department of Punjabi)

Centre of Excellence, SGGSCC funded project entitled, “Impact of Taxpayer’s Awareness and Perception about GST Regime on Indirect Tax Revenue in India: A Study of Producer and Consumer State”. Sanctioned amount of Rs. 0.83 lakhs. PI: Prof. Sangeeta Dodrajka (Department of Commerce)

## Seminars Organized

Seminar entitled, ‘Systematic Literature Reviews’ by Prof. Meena Mathur, Professor at Faculty of Management Studies, MLS University, Udaipur, Rajasthan and Dr. Montu Bose, Assistant Professor, Department of Policy and Management Studies, TERI School of Advanced Studies was organised on 22 July 2022.

Seminar entitled, ‘Qualitative Research Methods- NVIVO’ by Prof. Hemandra Dangi, Department of Commerce, University of Delhi was organised on 16 August 2018.

Seminar entitled, ‘Are developing countries gambling on development?’ by Prof. Stefan Dercon, University of Oxford was organised on 9 February 2023.

Seminar entitled, ‘Cancer Awareness’ by Dr. Rajinder Kaur Saggu, Oncoplastic Breast Surgeon, Indraprastha Apollo Hospital, New Delhi was organised on 2 February 2023.

Seminar entitled, ‘Mental Health and Spirituality’ by Prof. A. K. Singh, Head, Department of Commerce, Delhi School of Economics, University of Delhi was organised on 15 November 2023.

## Conferences Organized

Organised a one day conference on ‘India on the Path to Sustainable and Inclusive Development: Myth or Reality’ on 24 March 2023.

## Seminar/Conference Presentations

Dr. Gurminder Kaur Arora presented a paper titled “Exploring the Psychological and Socio-Economic Impact of Covid 2019 on Health Care Workers in India” at the International Conference organised by Jesus and Mary College, University of Delhi on the theme “Social Determinants Health Inequality & Health Inequity: Impact of Covid 2019, strategies for Future” on 24 February 2023.

Ms. Meenu Gupta presented papers titled “Forensic Accounting” in the international conferences organised by Goenka school of Management and IIM Bodh Gaya, in June 2022 and September 2022 respectively.

Prof. Renu Gupta presented a paper titled “Evolution of FinTech in Financial Markets: A Bibliometric Analysis” at the Global Conference on Emerging Technologies, Business, Sustainable Innovative Business Practices and Social Well-Being on 10-11 December 2022.

Prof. Renu Gupta presented a paper titled “Mapping Research on Ageism Personal and Social Well-being in IT Professionals: A literature review and bibliometric analysis” at the Global Conference on Emerging Technologies, Business, Sustainable Innovative Business Practices and Social Well-Being on 10-11 December 2022.

Prof. Renu Gupta presented a paper titled “Spiritual Intelligence, happiness and success of students in select higher education institutions of University of Delhi” at the Global Conference on Emerging Technologies, Business, Sustainable Innovative Business Practices and Social Well-Being on 10-11 December 2022.

Prof. Renu Gupta presented a paper titled “Evolution of EHRM: A Bibliometric Analysis” at the Global Conference on Emerging Technologies, Business, Sustainable Innovative Business Practices and Social Well-Being on 10-11 December 2022.

Prof. Renu Gupta presented a paper titled “Evidence on Herding Bias in the Indian Stock Market” in XXIV Annual International Conference organized by Delhi School of Professional Studies and Research on 7-8 January 2023.

Dr. Vandana Kalra presented a paper titled “Effect of Distance Measures on K-Nearest Neighbour Classifier” in the Second International Conference on Computer Science, Engineering and Applications held at Gunupur, India and “Effect of Ensembling over K-fold Cross-Validation with Weighted K-Nearest Neighbour for Classification in Medical Domain” in the International Conference on Machine Learning, Big Data, Cloud and Parallel Computing.

Dr. Megha Ummat presented a paper titled “Analysis of Search-based Algorithms for Prediction of Aging Related Bugs” at the 7 International Conference on Smart Trends in Computing and Communications.

Dr. Tarvinder Kaur presented a paper titled “Guru Tegh Bahadur ji de Aninn Shardhalu Bhai Jaita Ji: Panjva Sahibzaada Naval de Vishesh Sandarbh Vich” in the National Conference on ‘Sri Guru Tegh Bahadur: Life, Philosophy and Legacy’ organised by Mata Sundri College for Women, University of Delhi in collaboration with Haryana Punjabi Sahitya Academy.

Dr. Tarvinder Kaur presented a paper titled “Guru Tegh Bahadur Ji di Bani Vich Chinta toh Santokh da Safar”, at a National seminar organised by Sikh History & Gurbani Forum (DSGMC) Gurdwara Rakabganj Sahib.

## **National/International MoUs Signed**

**MoU with K.R. Mangalam (National):** Sri Guru Govind Singh College of Commerce and K.R. Mangalam University joined together to complement joint research projects, train students in order to facilitate overall research, training & placement and to make them understand the importance of environmental management issues. The MoU also aims at academic and research collaboration in the areas of mutual interest, faculty development programmes to help faculty get updated with the working, regular students-faculty exchange program, joint publications, joint workshops, seminars, etc.

**MoU with DSPSR (National):** The college joined Delhi School of Professional Studies and Research (DSPSR) for collaborating for the XXIV Annual International Conference organised by the latter party on 7-8 January 2023 on the broad theme, “Nationalism, Globalization, and Development”. It was agreed that the college’s Journal, Journal of Business Thought would publish selected papers of the XXIV Annual International Conference relevant to the overall theme of the Journal, subject to the clearance of standard submission and review process followed for all possible publications in the Journal.

**Number and percentage of students placed: 366**

**Number of Companies visited for campus recruitment: 104**

## **Extension and Outreach Activities**

**International Yoga Day:** NSS unit organized a yoga session to mark International Yoga Day on 21 June 2022, observed Azaadi ka Amrit Mahotsav, the members and volunteers enthusiastically participated in the flag hoisting and also participated in Har Ghar Tiranga Campaign to invoke the feeling of patriotism in the hearts of people.

**Unnat Bharat Abhiyan:** Three drives were conducted in villages namely- Karala, Khedakhurd and Pootkhurd under this initiative. The drive at Karala village was based on waste segregation and career counselling. The drive at Khedakhurd aimed at imparting knowledge on cleanliness and waste segregation. The last drive at Pootkhurd was based on plantation and career counselling themes.

**Menstrual Hygiene:** To spread awareness about menstrual hygiene, a Sanitary Pad Distribution Drive was conducted by Rotaract Club at Sweet Homes Girls Ashram on 10 July. A visit to Earth Saviours Foundation for the mentally and physically challenged and a Self-Defence Workshop at Diksha School (16 July) were initiated by the Club, followed by a visit to Tails of Compassion Trust to promote adoption of Indian breed dogs on 27 August 2022.

**Annual Blood Donation Camp:** The Club organized its Annual Blood Donation Camp where it collected 202 units of blood on 21 September 2022.

**Diwali and Dengue Awareness Workshop:** A drive to Autism Boys Hostel (1 October 2022), visit to Kamla Bakshi Old Age Home to celebrate Diwali and a Dengue Awareness Workshop at Spreading Smiles Gyaan Kendra were organized in the month of October 2022.

**Food Donation Drive:** Children's Day visit to Raen Basera and “Commit to Quit ” - a Cigarette Butt Collection Drive were also taken up in the month of November 2022. One of the major initiatives in this tenure is Project Udaan - a weekly initiative to educate slum children near Gopal Mandir, Pitampura.

Gratitude Day: The NSS unit organized Gratitude Day to celebrate ‘Teacher’s Day’ in the college premises on 5 September 2022. Swachhta Pakhwada and a Plantation Drive were organized to instil the motivation among the people to make the college Campus and the surroundings cleaner.

25th Sahibzada Ajit Singh Cricket tournament: The tournament was organized on founder day of the college in the month of 15 December 2022 to 18 January 2023.

Gender Sensitisation and Prevention: Internal Complaint and Gender Sensitisation Committee organised a seminar on Gender Sensitisation and Prevention, Prohibition, and Redressal of Sexual Harassment in Higher Education Institutions, UGC regulation 2015 on 17 January 2023. The guest speaker for the session was Prof. (Dr.) Namita Rajput, Professor, Sri Aurobindo College, University of Delhi. She is a POSH practitioner, who is empanelled with the Ministry of Women and Child Development, she discussed on topics like Difference between Sex & Gender, Gender Sensitivity and Gender Equality.

Gender Equality: The Women’s Development Cell of the Republic organized a seminar titled “Jashn-e-Azadi: Breaking the Glass Ceiling” on February 15 2023. Eminent women personalities from diverse fields were invited to share their thoughts and experiences on how much women in India have progressed and what all challenges still need to be addressed to have gender equality.

### **Library Development**

It has been a prolific year for the college library. A student team was appointed to facilitate easy and quick address of any issues faced by the student community. The team visited the British Council Library with the Convenor to experience their system and facilities and implement the same in the college library.

A new kiosk has been installed, making it easier for students to access study materials. A website has also been developed by the student team to access materials online which includes a collection of e-books, e-journals, important links, and other electronic resources. The members have also prepared a collection of past year question papers for subjects taught in College and competitive exams.

A new device ‘Kibo’ has also been installed, which can scan the pictures, convert them into word files, and translate them into several languages. It is extremely useful for visually challenged students and in general.

Total No. of Books in library: 55000

Total No. of Magazine and Journals subscribed: 45

### **Faculty Strength: 75**

### **Financial Allocation and Utilization**

Grants Allotted: Rs. 28.18 Crore

Grants Utilized: Rs. 32.08 Crore

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## **SRI GURU NANAK DEV KHALSA COLLEGE**

### **Brief history of the College**

Sri Guru Nanak Dev Khalsa College, with its erudite, passionate and dedicated teachers as well as diligent and steadfast staff members, has been successfully providing students with an enabling environment to learn, prosper and progress in a holistic manner. College being a constituent college of the University of Delhi was established in the year 1973. College, from being known as Sri Guru Tegh Bahadur Khalsa (Evening) College, became a full-fledged Day College in the academic year 2005-06 and acquired the noble name Sri Guru Nanak Dev Khalsa College, after the first Sikh Guru, Sri Guru Nanak Dev ji. Delhi Sikh Gurudwara Management Committee (DSGMC) is the parent body and strives to impart education by blending modern education curriculum with justice-based, equality-oriented, and society-centric moral teachings of Sri Guru Nanak ji. In terms of fostering and catering to the needs and aspirations of the Sikh community, our college was granted minority status by the National Commission for Minority Educational Institutions. The College believes in the philosophy of equality of humanity that gets reflected in noble words, Maanas Ki Jaat Sabhai Ekai Pehchanbo, as well as in our constitutional vision of fraternity and 'one man, one value.

### **Major Activities and Achievements**

Under the guidance of the Internal Quality Assurance Cell (IQAC) of the College, a number of Seminars, talks, competitions, workshops etc, have been conducted by the various Department societies of the College. The IQAC has also been organizing workshops and seminars for training and capacity building of teachers, non-teaching staff and students. One of the focal points of the College is not just to educate students but also to mentor them closely, provide guidance, motivation, and emotional support, and help them explore careers, set goals, and identify resources with a structured and effective MMP - Mentoring the Mentor Programme that covered Profile/biodata building, Prospects of Higher Education within India and Abroad, and growing concerns about Artificial Intelligence along with general sessions on students' well-being. The learning environment in college has gained tremendously from all the above-mentioned activities organized at the departmental and College level in the 2022-23 academic year. All of this became possible with the constant involvement of and support from our faculty members, who are known and valued for their academic credentials, innovative teaching methodologies and never-ending zeal for knowledge dissemination. Our faculty constantly updated themselves with the latest pedagogical methods and tools.

### **Honours/Distinctions**

Dr Herman Kar and Dr Simarpreet Kaur recipient of certificate of merit for the research project on “Indian Diaspora: Analysis in Pacific Region” by Antar Rashtriya Sahayog Parishad, Diaspora Research and Resource Centre, Ministry of External Affairs and IQAC of Sri Guru Nanak Dev Khalsa College, University of Delhi in November 2022

### **Students with Distinctions**

Following students were among the toppers in Maths Hons programme: Ashish Garg, Veeresh Chaudhary, Saksham Gupta, Sajal Sharma and Ritesh Seth

## **Journals Published**

Journal of Research and Innovation . *Annual*, 5 (Issue 1), 124

## **Seminars Organized**

Seminar entitled, 'Time Management- New situation, new challenges' was organized in collaboration with T.I.M.E Institute on 14 November 2022.

Seminar entitled, 'Shifting Contours of Representation of Disability' was delivered by Prof. Anil Aneja and Prof. Someshwar Sati, Professor Department of English, Delhi University on 17 March 2023.

Seminar entitled, 'Rashtriya Shiksha Niti 2020 aur Bhartiya Bhashayen' was delivered by Prof. Manju Mukul, Professor, Department of Hindi, University of Delhi, on 19 January 2023.

Seminar entitled, 'Labour Migration and Identity: Post-Partition Refugees of Karol Bagh' was delivered by Dr Akanksha Kumar, Assistant Professor, JDM College, Delhi University on 15 September 2022.

Seminar entitled, 'Taking a step in the data world' was delivered by Mr. Rushikesh Konapure and Mr. Anmol Bhatnagar on 15 November 2022.

## **National/International MoUs Signed**

An International MoU signed with Antar Rashtriya Sahyog Parishad (ARSP) Diaspora Research.

MoU signed with Youth for Seva (YUVA).

MoU signed with Saksham Disability for creating opportunities for inclusion of students with blindness and low vision in Higher Education.

## **Other Inter-Institutional Collaboration**

Collaboration with Shaheed Rajguru College of Applied Sciences for Women.

Collaboration with Guru Angad Dev Teaching-learning Centre, Khalsa College

## **Number and percentage of students placed**

Number of students placed = 79

## **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment =19

## **Extension and Outreach Activities**

Various extension and outreach activities were organized by the college, some of which are mentioned below:

Annual Fest TAASHI organized on 7 and 8 April 2022; Self-defence program closing ceremony organized on 26th April 2022; दिल्ली विश्वविद्यालय की स्थापना दिवस (st) organized on 1 May 2022; Video screening on Mother's Day (online) organized on 8 May 2022; International conference under DU centenary celebrations (NSS Centre) organized on 19 May 2022; Handmade poster to try to spread awareness on World Bicycle Day organized on 3 June 2022; Van Mahotsav Week (facts updated on the Instagram handle) organized on 1-7 July 2022; National Nutrition week celebration organized on 1-7 September; Clothes Collection Drive organized on 18-21 October 2022; Traffic training workshop organized on 14 January 2023  
College also conducted numerous events under Fit India Movement 3.0 in collaboration with the Physical Education Department of our college.

### **Library Development**

The college library has successfully installed the KDHA software for smooth library functioning, cataloguing, circulation, and OPAC. Now the faculty as well as students can access the college library online. The library has also taken membership of INFLIBNET and DELNET. INFLIBNET (Information and Library Network Centre) is an Inter-University Centre of UGC that provides seamless access to electronic resources. DELNET (Developing Library Network) is a major operational resource-sharing library network in India connecting 1674 libraries in 32 States and UTs in India and seven other countries. Apart from access to e-resources, its services include Inter Library Loan (ILL) and Document Delivery Services (DDS).

### **Faculty Strength**

Total number of faculty = 96

### **Financial Allocation and Utilization**

Financial Allocation = Rs. 28,02,90,000/- and Grant Sanctioned = Rs 6,90,00,000/-

Grants Utilized = Rs 34,15,04,000/-

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## **SRI GURU TEGH BAHADUR KHALSA COLLEGE**

### **Brief history of the College**

Sri Guru Tegh Bahadur Khalsa College, a constituent college of the University of Delhi, was established in 1951 and is maintained by the Delhi Sikh Gurudwara Management Committee (DSGMC), a statutory body established under an act of the Parliament of India. The college started in a school building in Dev Nagar and shifted to its present premises in North Campus in 1973. The focus of the College at the time of inception was to ensure a comprehensive social transformation through access to quality education, in particular to young Punjabi Refugees of Partition in 1947, and to conserve and promote Punjabi language, culture, and heritage. The College is named after the Ninth Guru - Sri Guru Tegh Bahadur, who sacrificed his life to uphold secular values, and is an institution with a cosmopolitan environment and progressive outlook.



## Major Activities and Achievements

In the academic year 2022-2023, our college prioritized academic excellence and cultural enrichment. Commencing on July 20th, 2022, the session embraced the National Education Policy 2020, fostering a transformative educational experience. A highlight was the International Sikh Congress from January 5th to 7th, 2023, dedicated to documenting Sikh history and contributions to India, graced by Lt. Gen. Gurmit Singh and Prof. Yogesh Singh. On September 9th, 2022, a felicitation program was held to honor Padma Shri awardee S. Vikramjit Singh Sahney. The academic discourse continued with an August 8th, 2022 national seminar on the Partition of India and Sikh role in freedom. In sports, the 9th Sahibzada Zorawar Singh and Sahibzada Fateh Singh T20 cricket tournament in 2023 was inaugurated by Dr. Ravi Chaturvedi. Tradition persisted with the Founders Day on November 26th, honoring the martyrdom of the Ninth Sikh Guru, Tegh Bahadur Sahib Ji. The students of our college showed exemplary performance in academics and sports. The GAD-TLC hosted 86 events attracting 12,316 participants nationwide. The promotions and recruitments for teaching faculty were conducted. These collective efforts reflect the college's commitment to holistic education, cultural celebration, and intellectual engagement.

## Honours/Distinctions

Prof. Vimal Rarh was awarded the INSA Best Teacher Award - 2020 on 16 December 2022 by the Indian National Science Academy during an award function at the Anniversary General meeting at Vishakhapatnam

Prof. Vimal Rarh was awarded as “India Coordinator” by “UK Awards, Nottingham, United Kingdom” for coordinating UK-India programs in Teacher Training.

Prof. Vikram Rarh was awarded as “India Coordinator” by “NPTC Colleges, Wales, United Kingdom” for coordinating UK-India programs in Teacher Training.

## Students with Distinctions

Sonali Sharma of M.A. Punjabi was awarded the Bhai Vir Singh Gold Medal by the University of Delhi for the highest CGPA in the M.A. Examination in Punjabi

Lakshay Raj Sharma of B.A. (H) Business Economics was awarded the University Gold Medal in Academics

Divya Sharma of B.A. (H) Political Science was the recipient of the Indian Political Science Conference Prize by the University of Delhi for securing the highest marks in political science

Nitin Locab of B.A. (Prog) II year represented Delhi and secured the second position in the Senior National Handball Championship (2022) held at Sirsa, Haryana

Amish Nehra of B.A. (Prog) III year won the silver medal in the Open Delhi State Athletics Championship 2022 organized by Delhi Athletics Association on 25 – 26 October 2022 and another silver medal in the Delhi University Inter-college Athletics Meet 2022

## Publications

Kaur, S., Bharadvaja A., Baluja, K. L. (2022). Electron interactions with AlF. *The European Physical Journal D*, 76(NA), 176.

Gulati, S., Chitralekha P., Pandit, M. A., Katyal, R., Bhandari, N., Mehta, P., Rawat, C. D., Kaur, S., Kaur, J. (2022). Diversity, Succession and Seasonal Variation of Phylloplane Mycoflora of *Leucaena leucocephala* in Relation to Its Leaf Litter Decomposition. *Journal of Fungi*, 8(6), 608.

Kumar, R., Sinha, N., Yadav, H., Kumar, B. (2022). Hirshfeld surface, etching, mechanical and electrical enhancement analyses of pyramid pattern of Xylenol Orange dye in Triglycine Sulphate single crystals. *Journal of Solid State Chemistry*, 315, 123498.

Batra, K., Sinha, N., Kumar, B. (2022). Effect of Nd-doping on 0.95(K<sub>0.6</sub>Na<sub>0.4</sub>)NbO<sub>3</sub>-0.05(Bi<sub>0.5</sub>Na<sub>0.5</sub>)ZrO<sub>3</sub> ceramics: Enhanced electrical properties and piezoelectric energy harvesting capability. *Journal of Physics and Chemistry of Solids*, 170, 110953.

Kumar, S., Jain, G., Kumar, K., Singh, B. P., Dhakate, S. R. (2022). Review on Polymeric Photoluminescent Nanofibers: Inorganic, Organic and Perovskites Additives for Solid-State Lighting Application. *Polymer Science, Series A*, 64, 367-392.

Kumar, S., Jain, G., Kumar, K., Gupta, A., Tawale, J. S., Singh, B. P., Dhakate, S. R., Sahare, P. D. (2022). Stress-Induced Structural Phase Transition in Polystyrene/NaYF<sub>4</sub>: Eu<sup>3+</sup> Photoluminescent Electrospun Nanofibers. *Journal of Nanomaterials*, 2022, 2173629.

Kumar, P., Kumar, D. (2022). Multi-peak soliton solutions of the generalized breaking soliton equation. *Physica Scripta*, 97(10), 105203.

Kaur, I., Dhama, S., Mukherjee, A., Mathur, P. (2023). Influence of different organic amendments in modulation of soil physico-chemical characteristics and growth of marigold seedlings. *Journal of Plant Nutrition*, 46(13), 3068-3081.

Kaur, I., Koul, M. (2022). Exploring the sister cells of embryo sac: developmental and functional attributes. *The International Journal of Developmental Biology*, 66(4-5-6), 349-358.

Dubey, S. K., Khatkar, S., Trivedi, M., Gulati, M., Kumar, S., Rath, N. P., Kumar, S., Lakhia, R., Ragav, N., Kaur, S. (2022). Syntheses and structural and serum protein protecting activity of ruthenium(ii)-DMSO complexes containing a mercapto ligand. *New Journal of Chemistry*, 46(24), 11669-11675.

## Research Projects

Department of Biotechnology (DBT), Ministry of Science & Technology, Govt. of India [Grant Number No. BT/PR207 46/MED/29/1194/2016], 13 December 2019 to 12 December 2022/ 3years, Designing and evaluation of point of care diagnostic assay for detection of MDR Tuberculosis using Loop mediated isothermal amplification combined with lateral flow dipstick, 25.4 lakhs

DRDO CATS project (Grant No. 1115/TS/SPL/CARS-101/23 dated 24 March 2023), 2023-24, Study on optimization of PMN-PT powder synthesis, 9.9 Lakhs

FRP-IoE Project (Grant No. IoE/2021/12/FRP Date: 31/08/2022), 2022-23, Fabrication of wearable piezoelectric nanogenerator for electrical energy from body movement using PENP:GO hybrids, 5 Lakhs

IoE [Grant No.: IoE/2021/12/FRP Date: 29/10/2021], 2021-22, Synthesis and characterization of nanoparticles for piezoelectric applications, 3 Lakhs

### **Seminars Organized**

Seminar entitled 'Partition Of India And Role of Sikhs In India's Freedom Movement, Partition of India in 1947 and Role of Sikh in India's Freedom Struggle' by Dr. Raghuvendra Tanwar, Chairman, Indian Council of Historical Research, New Delhi organized on 8 August 2022

Seminar entitled 'The significance and future of legal profession in India: Challenges and Prospects, India's Legal Landscape' by Mr. Nar Hari Singh, Ex. Add Advocate General of Jammu and Kashmir, Advocate on record Central Government Counsel Supreme Court of India organized on 15 October 2022

Seminar entitled 'The Crisis of Globalisation and the Indian Economy, Globalisation and the Indian Economy' by Prof Surajit Majumdar, Professor Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University organized on 15 November 2022

Public Seminar on Constitutional Democracy entitled 'Constitutional Democracy: Changes and Challenges' by Professor Sunil K. Choudhary, Director, Centre for Global Studies, University of Delhi organized on 20 January 2023

Seminar entitled 'Breaking free: from Lab Life to Wildlife, Wildlife conservation' by Dr. Bharti Arora, Senior Project Associate, Wildlife Institute of India organized on 29 September 2022

### **Conferences Organized**

The First Sikh History Congress was organized on 5 January 2023 in collaboration with DSGMC, ICHR and IGNCA

An international conference on 'Bhai Vir Singh: Times, Writings & Legacy' was held on 1 December 2022 at Bhai Vir Singh Sahitya Sadan, New Delhi in association with Sahitya Academy, New Delhi

Hindi Ke Naye Kshitij: Avasar Aiwam Chunautiyaan was held on 27 September 2022 at SGTB Khalsa College

### **Seminar/Conference Presentations**

Principal, Prof. Jaswinder Singh was an invited speaker and a resource person for sessions in various faculty development programs/webinars/workshops organized by GAD-TLC.

Prof. Vimal Rarh delivered an invited lecture on “Safer and Greener methodologies in Chemistry Labs” at a One Day Workshop on "Lab Safety and Greener Labs" under the DBT Star Status scheme organized by the Department of Chemistry, Kirori Mal College on 31 January 2023

Prof. Vimal Rarh delivered an invited lecture on “Methodology for developing 4 Quadrant MOOCs” at a One Week Workshop on MOOCs Development & Delivery organised by the UGC-Human Resource Development Centre, Jamia Millia Islamia, New Delhi on 9 March 2023.

Prof. Vimal Rarh delivered an invited lecture on “Technology and Outcome Based Education @ NEP 2020” in the NAAC Sponsored “Online Two Day National Level Conference on Teaching, Learning and Evaluation Methods: Traditional to Blended Approaches” held on 11 July 2022, organized by JSS College, Ooty Road, Mysuru, Karnataka.

Dr. Tarun Kumar was the keynote speaker at "Student workshop on Korean History 2023: Understanding Korean History Through Indian Perspectives" organized by the Department of Foreign Languages, Jamia Millia Islamia, 21st of February, 2023. The title of the paper was "Catering to the State: Archaeology and Nationalistic Politics in India and Korea"

Dr. Tarun Kumar presented a paper titled “Royal Women and Political Power in Ancient India and Early Korea”, in the 16th RASK International seminar titled "India-South Korea Ties: Exploring Linkages through History, Values, and Interest” held on 11 – 12 November 2022 at Jamia Millia Islamia.

Dr. Bipin Thakur presented a paper entitled, “Criteria for Inclusion in the Eighth Schedule: A Work in Progress” at the International Conference on Question of Language & India in the 21st Century, organized by Vishwa Hindi Sahitya Parishad in association with Adhyayan Foundation at India International Centre, Max Mueller Marg from 21 - 22 January 2023

Dr. Bipin Thakur presented a paper entitled “Does India Urgently Need Uniform Civil Code? Revisiting the Constituent Assembly Debates” in the International Seminar on Revisiting the Ideas of India from ‘Swaraj’ to ‘New India’, organized by the Department of Political Science, University of Delhi, at the Conference Centre, University of Delhi, Delhi from 19 - 21 May 2022.

### **National/International MoUs Signed**

MoU signed with Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray Arts, Science and Commerce College to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 5 April 2022

MoU signed with Tilak Education Society's S.K. College of Science & Commerce to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs)/ Workshops / Training / Certificate Programs on 13 June 2022

MoU signed with Jeevan Jyot Education Charitable Trust Reena Mehta College of Arts, Science, Commerce, and Management Studies to enhance the capacity building of faculty members/research

scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 15 July 2022.

MoU signed with Smt. Radhadevi Goenka College for Women to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events such as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 4 August 2022.

MoU signed with ATSPM's Adv. B.D. Hambarde Mahavidyalaya to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 3 September 2022.

MoU signed with Agrawal P.G. College to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 12 November 2022.

MoU signed with Daulat Ram College to enhance the capacity building of faculty members/research scholars and other students by organizing Joint Events as Seminars / Webinars / Conferences / Faculty Development Programs (FDPs) / Workshops / Training / Certificate Programs on 20 Feb 2023.

### **Other Inter-Institutional Collaboration**

College has an ongoing MoU with Guru Kashi University, Talwandi Sabo, Punjab to carry out research projects and other academic collaboration under Vidya Vistar Scheme launched by University of Delhi. These institutes will organize lectures, workshops, training programmes and carry out collaborative research under the project.

College has an ongoing collaboration with University of Carleton for joint research projects including an exchange program for teachers and students.

College has an ongoing collaboration with University of the Fraser Valley, Canada.

**Number and percentage of students placed: 130 and 23%**

**Number of Companies visited for campus recruitment: 24**

### **Extension and Outreach Activities**

A free Health Camp was organized on 12 April 2023, in collaboration with Dharmshila Narayana Super Specialty Hospital, to promote health and wellness.

A webinar was organized on the topic 'Bronchial Asthma and COVID Burden', which was the need of the year at that time.

A session on mental health was organized on 2 July 2022. The topic for the session was 'The Importance of Mental Health' with a focus on issues like anxiety and depression.

Under Youth Chaupal, different sessions like sessions of Final Literacy and a webinar on "You are not a tree" were organized.

Project Khawaish was led forward with various visits, like the visit to Koshish Special School for the mentally disabled children, a visit to an old age home for celebrating Diwali and visits to the slums were also held like in Azadpur or Timarpur Basti, where distribution drives were carried out on a large scale.

## **Library Development**

College Library possesses the finest collection of reading material among the various institutions on the University Campus. It is equipped with 145642 books of all disciplines on record and regular subscription to Indian journals; magazines and daily newspapers. It caters to the needs of the students at the Undergraduate and Postgraduate levels to support research and learning. The library services are automated. The Annual General Budget of the Library for the period of (2022-2023) was the sum of Rupees 11, 80,000 (Rupees Eleven Lakh Eighty Thousand Only). 1251 books were added to the library in the session 2022-2023. The library has a gate security check system with 32 CCTV cameras installed to monitor. The library is connected with Delhi University through a wide area campus networking system and provides access to Electronic Resources to its users from the Delhi University Library System (DULS) and UGC-INFONET Consortium. The library subscribed to 7 journals, 28 Magazines and 27 Newspapers. Two permanent Library Attendants have been appointed on 07 November 2022. The library has a separate section of 8000 classics and other reference books on Sikh studies.

The College Library is a member of the UGC N-LIST consortium and Library members can have access to online journals, e-books etc. within and outside the library premises and even at home.

An orientation program is conducted at the commencement of a new academic session every year. Students were oriented towards the library for its collection, services, facilities etc. in batches.

N-LIST demo classes are held twice a week to train the students with e-resources and also collect feedback.

Library Internship Programme: Two Library Science students have been recruited as interns for one month in the College Library. They have been trained to work in all sections of the Library.

New Arrival List: The list of the new books added to the library is prepared on the computer and is displayed in the reading hall periodically for the Information of the users.

Question Bank and Syllabus: The library provides the previous years' scanned question papers and syllabi of various subjects for consultation and Xerox.

The library is computerized and books are bar-coded and made easily accessible through OPAC (Online Public Access Catalogue). The college provides access to the Internet in the Library Reading Room for the students and the staff during college hours. The library preserves all the editions of the college magazine "THE TEGH" with the first edition published in 1953.

## **Faculty Strength: 147**

### **Financial Allocation and Utilization**

Grants allocated: Rs. 77,39,00,000/-

Grants utilized: Rs. 76,03,00,000/-

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## SRI VENKATESWARA COLLEGE

### Brief history of the College

The desire to share knowledge and the dream to make education accessible to all brought together three visionaries: Smt Durgabai Deshmukh, Shri K. L. Rao, and Shri C. Anna Rao in the early decades of India's independence to create a dynamic space for knowledge sharing. The aim was to blend traditional values, learning with modern outlook and rationale in Delhi. This dream blossomed into reality with the aid and encouragement rendered by Tirumala Tirupati Devasthanams (TTD) and Sri Venkateswara College made its modest beginnings in Andhra Education Society in 1961. The foundation stone of Sri Venkateswara College was laid in the year 1961 by eminent Indian philosopher and statesman Dr. Sarvepalli Radhakrishnan. Within a few years of acquiring its new campus, and led by its principal V Krishnamoorthy, the college introduced honors courses in arts and science. In 1973 the University of Delhi recognized it as one of its constituent colleges, paving the way for future expansion. This year i.e 2023, marks 62 years for this prestigious institution, which has proudly stood tall through the last many decades. Sri Venkateswara College has over the years acquired an indomitable place in the Indian education map.

### Major Activities and Achievements

Sri Venkateswara College, ranked 13th nationally by NIRF in 2023 and awarded an A+ grade by NAAC. It celebrated its Diamond Jubilee Valedictory Function, attended by notable dignitaries including Shri Dharmendra Pradhan, the Minister of Education, and Prof. Yogesh Singh, Vice Chancellor of Delhi University. The college has been recognized for its commitment to sustainability and holistic development, with faculty members receiving prestigious awards, including the 'Periyar Award' and nominations for the Sustainable Tourism Award. The college has made significant infrastructural advancements, promoting the use of alternative energy sources like solar power and inaugurating Rain Water Harvesting Structures. Several MOUs have been signed for scientific and academic collaboration with institutions like INMAS, Delhi, and Shriram Institute for Industrial Research. The college has also organized numerous events to foster national pride and responsible citizenship, including voter registration drives and international forums, such as an India-Australia meeting on internationalizing higher education, featuring prominent figures like Jason Clare and cricketer Adam Gilchrist. These initiatives underscore the college's dedication to academic excellence, environmental responsibility, and civic engagement.

### Honours/Distinctions

Dr. Krishna Kumar is a recipient of the Sapru Paper Grant from the Indian Council of World Affairs and referee for the Foreign trade Review, Sage Publications.

Dr. Nandita Narayansamy featured in WOMEN in STEM Vanguards of India @75.

### Students with Distinctions

S.No.	Name of Students	Class
1	PARIDHI KOTNALA (University Gold Medal)	B. Sc. (Hons) Biological Science III Year

- |   |  |                             |
|---|--|-----------------------------|
| 2 | YASHWARDHAN OBEROI (Selected for Delhi U-19 team for multi-days matches)         | B.Com Program               |
| 3 | ARYAN DALAL (Selected for Delhi men's cricket U-25 team for one day tournament.) | B.A. (H.) Political Science |
| 4 | JAYESH PANDITA ( Selected to represent Rajasthan U-19 team for tournaments.)     | B.Com Program               |

## Publications

Shikha Gulati, Sneha Vijayan, Mansi, Sanjay Kumar, BharathHarikumar, Manoj Trivedi, Rajender S.Varma. (2023). Recent advances in the application of metal-organic frameworks (MOFs)-based nanocatalysts for direct conversion of carbon dioxide (CO<sub>2</sub>) to value-added chemicals . *Coordination Chemistry Reviews*, 474(NA), 214853.

Shikha Gulati, Akangkha Choudhury Gauravya Mohan, Riya Katiyar, Mohammed Abaan Kurikkal M P, Sanjay Kumar and Rajender S. Varma. (2023). Metal–organic frameworks (MOFs) as effectual diagnostic and therapeutic tools for cancer . *Journal of Materials Chemistry B*, 11(29), 6782-6801.

Shefali Shukla, Bulbul Sagar, Anantpreet Kaur Sood, Abhay Gaur, Sanjay Batra, Shikha Gulati. (2023). Supramolecular Chemotherapy with Cucurbit[n]urils as Encapsulating Hosts . *ACS Applied Biomaterials*, 6(6), 2089-2101.

Meena Bisht, Sarath Kumar Thayallath, Pranav Bharadwaj, Gregory Franklin, Dibyendu Mondal. (2023). Biomass-derived functional materials as carriers for enzymes: towards sustainable and robust biocatalysts. *Green Chemistry*, 25(12), 4591-4264.

Meena Bisht, Bhawna, Baljeet Singh, Siddharth Pandey. (2023). Deep eutectic solvent-modified mesoporous silica for CO<sub>2</sub> capture: A new generation of hybrid sorbents . *Journal of Molecular Liquids*, 384(NA), 122203.

Srinivasu Nakka, Anamika Sindhu, Deepak Chahar, Meena Bisht, Nagaraju Devunuri, Pannuru Venkatesu. (2023). A Vibrant Accelerating Strategic Solvent System for Sustainability and Functionality for Proteins: Unvarying Structure of Stem Bromelain in Hybrid Ionic Fluids. *ACS Sustainable Chemistry & Engineering*, 11(16), 6395-6404.

Chikkili Venkateswara Raju, Y Veera Manohara Reddy, Chae Hwan Cho, Hyeon Ho Shin, Tae Jung Park, Jong Pil Park. (2023). Highly sensitive electrochemical peptide-based biosensor for marine biotoxin detection using a bimetallic platinum and ruthenium nanoparticle-tethered metal–organic framework modified electrode. *Food Chemistry*, 428(NA), 136811.

Mrunmoy Jena, Debashish Sen, Mohammad Zulfequar, K. Asokan and Anant Pandey. (2023). Study of the thermoluminescence properties of  $\gamma$  and UV-C irradiated Li<sub>3</sub>PO<sub>4</sub>:Dy synthesized by solid state diffusion method . *Journal of Alloys and Compounds*, 955(NA), 170077.



Garima Sharma, Surbhi Agarwal, Kavita Verma, Rashmi Bhardwaj, Vartika Mathur. (2023). Therapeutic compounds from medicinal plant endophytes: molecular and metabolic adaptations . *Journal of Applied Microbiology*, 134(4), 1-14.

Rekha Kumari, Yasha Yadav, Richa Misra, Utpal Das, Upasana Das Adhikari, Pushkar Malakar, Gyanendra P Dubey. (2022). Emerging frontiers of antibiotics use and their impacts on the human gut microbiome . *Microbiological research*, 263(NA), 127127.

### **Research Projects**

Department of Biotechnology (DBT), Government of India, 3 years (2021-2024), Understanding the role of Ser/Thr protein kinases in the regulation of toxin-antitoxin loci in *Mycobacterium tuberculosis*, 12386270

Ministry of Environment, Forestry and Climate Change (MoEF&CC) (Research & Development for Conservation and Development scheme), 2 years (2021-2023), Microbial communities in changing climatic regime: Analysis of primary and secondary risk factors, 4323800

Department of Science & Technology (DST), Government of India, 3 years (2020-23), Nanodos- Synthesis of nano-phosphors and spin-trapping nano-crystals as energy-independent dosimeters for radiotherapy beams (Indo-Norwegian Joint Research Project), 3255211

Indraprastha Gas Limited (IGL), 3 years (2021-24), Scientific monitoring of reforestation project at Barapullah Drain area, 1925000

Honda Car Pvt Ltd, 1 year (2022-23), Investigation of Insect Behaviour on Machinery Parts, 1096160

### **Patents Filed/Granted**

IP India Patent Number - 433031 (First author- Dr. Hari Singh (Electronics) patent by the Government of India) and "A Textile Material Based Wideband MIMO Antenna"

IP India Patent Number - 430696 (Co-author-Dr. Hari Singh (Electronics) patent by the Government of India) and "Electrically Small Circularly Polarized UWB Intraocular Antenna System for Retinal Prosthesis"

### **Seminars Organized**

Dr. Sudhir Kumar, Research scientist Center of Global Infectious Disease Research Seattle Children's Research Institute, Seattle, USA, Plasmodium Fertilization: A tale of two gamete fusogens, Plasmodium Fertilization: A tale of two gamete fusogens, 17 October 2022

Dr. Nishant Kumar, Project Scientist at Wildlife Institute of India, and a visiting fellow at the University of Oxford, People, Animals and Waste Systems Web. Integrating Disciplines for Urban Ecosystems in the 21st Century, People, Animals and Waste Systems Web. Integrating Disciplines for Urban Ecosystems in the 21st Century, 22 November 2022

Dr. Renu Swarup, Former Secretary, Department of Biotechnology (DBT), Government of India, Science Beyond Borders, Exciting Opportunities, Science Beyond Borders, Exciting Opportunities, 23 March 2023

Dr. Seema Grover, Chief of Physiotherapy and Rehabilitation Indraprastha Apollo Hospitals, Delhi & Dr. Ranjan Modi, Associate Consultant & Interventional Cardiologist Indraprastha Apollo Hospitals, Delhi, Seminar on 'Post-Covid Workplace Ergonomics and Heart Health, To create awareness about how Ergonomics can improve absenteeism by helping prevent workplace injuries that lead to missed work days and creating a more comfortable working environment for employees., 19 October 2022

Mr. Shuaib Khan, Panel Advocate, New Delhi, District Legal Services Authority, Legal Awareness Seminar on Acid Attack, Legal Awareness Seminar on Acid Attack, 15 February 2023

### **Seminar/Conference Presentations**

Dr. Manvi Singh presented one paper on "Intersection of Food, Memory and Gender: A Feminist Study of select Indian Culinary Autobiographical Narratives". International Malatya Gastronomy Culture and Tourism Conference, Malatya, Turkey, 16-18 September 2022)

Dr. Manvi Singh presented one paper on "Bodies of Suffering and Resistance: Voices of Dalit Women in Dalit Autobiographies translated into English", at the 5th Annual South Asia Conference organised by Ireland-India Institute, Dublin City University, Ireland, 28-30 April 2022.

Dr. Anju Kaicker, Department of Biochemistry presented a paper on "The role of Public-private partnership in education & employment" at National seminar on innovations in education through PPP model Organized by Cluster Innovation Centre, Delhi University, 13-15 March 2023

Dr. Nandita Narayansamy presented one paper on Association between Occupational Exposure to Air Pollutants and Pulmonary Health in Construction Workers: Systematic review and Meta-analysis. Lalitha, J. and Narayanasamy, N.; STREE 2020 National Conference and Expo organized by JNU and SHAKTI on 24th and 5 November 2022

Dr. Muthabattula Prajna presented one paper on "Comparative analysis of Whole Genome codon usage bias of two entomopathogenic fungi" at an International conference cum workshop on Plant Molecular Biology and Bioinformatics jointly organized by the Department of Bioinformatics, Pondicherry University, Indian Science Congress Association (ISCA), Pondicherry chapter and Society for Plant Research (SPR), India held from 13-15, February 2023 at Pondicherry University.

Dr. K Prasad presented one paper on "Conservation and Propagation of Pterocarpus santalinus (Fabaceae)" and "Conservation and Multiplication of the giant water lily, Victoria amazonica (Nymphaeaceae)" in an international symposium on "Plant taxonomy, Ethnobotany, and Botanical Garden" organized by Botanical Survey of India, Ministry of Environment, Forest and Climate Change from 13-14 February 2023.

Dr. Vinita Kapoor presented one paper on "Use of Technology in the Classroom: Benefits & Outcomes", in the International Online Conference on "Emerging Trends in Higher Education" jointly organized by NPTC Group of Colleges & UK Awards, United Kingdom and Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMNMTT) of Ministry of Education from 28 March to 29 March 2023.

Dr. S Krishna Kumar Presented a paper on "Bretton Woods II, core-periphery models and growth prospects in the developing world" online presentation International Seminar on Contemporary Issues in International Trade: Challenges and Opportunities at Goenka College in collaboration with Heritage College, Kolkata

Ms. Arushi presented a paper titled "Orders and conjugacy classes of special types of subgroups in the Symmetric Group and the General Linear Group" at an International Conference on Algebra and Discrete Mathematics held at the Department of Mathematics, Savitribai Phule University from May 26-28, 2022.

Ms. Preeti Singh Presented a paper titled " Globalization and Cultural Identities" in a National Conference India and The World: Challenges and Opportunities organized by Aligarh Muslim University on February 27-28, 2023

### **National/International MoUs Signed**

Universidad De Burgos, Burgos, Spain, signed in 2022 for 4 years - Agreement for promotion of educational visits to explore cooperation opportunities in international education and exchange programs.

Babes Bolyai University, Cluj-Napoca, Romania, signed in 2023 for 5 years - Agreement to promote mutual cooperation in the area of education and research.

Faculty of agriculture, Ferdowsi University of Masshad, Iran, signed in 2022 for 4 years - Agreement to promote the development in the field of human resources training, scientific research and technology transfer

Institute of Bi-organic Chemistry of Academy of Sciences, Tashkent, Uzbekistan, signed in 2021 for 5 years - Agreement to establish scientific collaboration through joint research activities, academic exchange, and research internships

Nordic Center-a consortium of 19 Universities in Sweden, Norway, Finland, Denmark and Iceland, signed in 2018 for 5 years - To establish collaborative relations through joint research activities, academic exchange and research internships.

Czech University of Life Sciences Prague, Czech Republic, signed in 2021 for 3 years - To establish scientific collaboration through joint research activities, academic exchange and research internships.

Martin Luther University, Halle-Wittenberg, Germany, signed in 2019 for 5 years - Agreement for Joint Cooperation in Bio-Informatics.

ICT Academy, signed in 2023 for 1 year - Agreement to offer services to faculty members and students of the college in the areas of information and communication technology.

Shriram Institute for Industrial Research, signed in 2022 for 5 years - Agreement to explore joint research opportunities and outreach activities.

Institute of Nuclear Medicine and Allied Sciences, Brig. S. K. Mazumdar Marg, Delhi-110054, signed in 2022 for 10 years - Agreement for sharing existing research facilities and available expertise between the two institutions.

## **Other Inter-Institutional Collaboration**

Scientific Exchange Program with the Department of Physics, University of Oslo in the field of Radiation Dosimetry

### **Student under Exchange Program (Inbound/Outbound)**

Exchange under SVC-Nordic Center of India (NCI)

1. Mr. Adam Ahmed Hansen from January 2022-May 2022
2. Ms. Annemette Lindberg Friis Jonsson from January 2022-May 2022
3. Ms. Victoria Skovshoved from January 2022-May 2022
4. Bastian Gautam Wolter Larsen from July 2022-December 2022
5. Melanie Gunaratnam from July 2022-December 2022
6. Mikkel Sahil Krüger Henriksen from July 2022-December 2022

**Number and percentage of students placed: 242**

**Number of Companies visited for campus recruitment: 60**

### **Extension and Outreach Activities**

GREEN SCHOOL INITIATIVE organized by Department of Botany and Eco Club on 28th and 29th November 2022 to sensitize students to the pressing Environmental challenges and associated health issues.

Seminar cum Workshop on maintenance of Rainwater Harvesting System organized on 19th April 2023 to make students aware about the need to conserve water, about rain water harvesting systems, their installation and maintenance.

Workshop on “Waste Segregation at Source and its Management” organized by Eco Club on 30th April 2023 to understand the importance of waste segregation and management. Isolation of waste in different containers according to its composition like paper waste, Kitchen waste etc. Impart expert training to our staff, faculty members and students in better upkeep of the college campus. Educational Trip to Blind Relief Association organized by NSS on 1st September 2022 to bridge the gap between differentially abled students and the mainstream society and to unfold the horizon of members and volunteers of the EOC to think beyond for the betterment of the Pwd community. Blood stem cell donation organized by NSS on 20 March 2023 to -educate people on blood cancer and the importance of blood donation. -Promoting people on benefits of donating blood for a healthy and crucial cause. -Help people in need by organizing a blood donation camp. Health Check up Camp (Pahal) organized by NSS on 12th February 2023 to get the adults of Sanjay Camp updated on their health, provide healthcare and dental care. Celebrating children's day through orphanage visit organized by NSS on 9 November 2022 to interact and engage orphans of Bal Seva, educating the children on the subject of good touch and bad touch and other awareness topic.

Inaugural ceremony of Honeywell ICT Academy Data Analytics and Training Programme organized by ICT on 13 February 2023.

Menstrual Awareness and Pad Distribution Drive organized by Commerce Department on 20 February 2023 to sensitize girl students aware about menstrual hygiene and the use of sanitary pads as well as to distribute sanitary pads to the underprivileged women in the area.

Enactus of SVC runs Project Crimson, Project Gulzaar and Project Fankaari to inculcate the spirit of entrepreneurship among the students and make them sensitive towards the society. Enactus believes in finding opportunities and transforming them into real, sustainable projects to empower the underprivileged sections of society.

CDF SVC runs Project Roshni, Project Perna and Project Angrezi Vartalap, contributes to multiple United Nations Sustainable Development Goals (SDGs) such as no poverty, good health and well-being, quality education, gender equality, decent work and economic growth, reduced inequalities, and partnerships for the goal.

### **Library Development**

Sri Venkateswara College Library is a vibrant hub of learning, dedicated to facilitating academic excellence, fostering a culture of inquiry, and promoting lifelong learning among our students and faculty. In the past academic year, it has continued to evolve and adapt to meet the diverse needs of our students and faculty.

Its collection has expanded significantly, now boasting over 105950 books, subscribed 23 journals, 31 magazines, 14 newspapers and access to a vast digital repository. This growth has been driven by strategic acquisitions in various disciplines, ensuring that learners across all departments have access to up-to-date resources.

In addition to its extensive collection, the library has prioritized technology integration. The ILM software to LIBSYS was upgraded in September 2022

### **Faculty Strength: 205**

### **Financial Allocation and Utilization**

Grant Sanctioned: ₹ 78.37 Crore

Grant Utilized: ₹ 88.23 Crore

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## **ST. STEPHEN'S COLLEGE**

### **Brief History of the College**

St. Stephen's College was founded on 1 February 1881 by the Cambridge Mission to Delhi in conjunction with the Society for the Propagation of the Gospel. The Cambridge Mission comprised a number of Dons from various colleges at Cambridge University, and one of them, the later Canon Samuel Scott Allnut was the founder and the first Principal of the College. In the early years, college occupied rented premises in two mansions built in the old Mughal style in the bylanes of Chandni Chowk, opposite the present Central Bank Building. The college was housed in Shish Mahal in Katra Khushhal Rai in Kinnari Bazar from 1881

to 1890. On 8 December 1891 it moved to its own building designed by Col (later Sir) Swinton Jacob, Chief Engineer of Jaipur State. These buildings stand both sides of the road in Kashmere Gate, close to the historic St. James Church. On 1 October 1941, the college occupied its present home in the Delhi University Enclave. Both teachers and students moving out of the college into the larger world outside have made significant contributions to various walks of our natural life: education, art, science, law, commerce, administration, sports, journalism and politics.

### **Major Activities and Achievements**

College has been accredited by NAAC with the top rank of A++ and also participated in the NIRF Ranking process. The four-year old NCC contingent continued to win top accolades at the national level. Admissions were conducted following CUET procedures. Admissions to College, which is a Christian Minority Institution, were conducted online. Offline classes began and exams were conducted as per the DU Calendar. College participated in the centenary celebrations of the University of Delhi, putting up a much-visited stall at the University Rugby Stadium. Two students, Syed Muhammed Khalid and Vedanta Thapar, were selected for the Rhodes scholarships this past year. In the sporting arena our students have fared well and while there are many who've worked hard, participated and won medals here are the names of just a few who've done the country, the University, the College and themselves proud by their achievements.

### **Honours / Distinctions**

St. Stephen's Young Leaders, Neighbourhood-First Fellowship programme which is supported by the Ministry of External Affairs, Government of India. Two students, Syed Muhammed Khalid and Vedanta Thapar, were selected for the Rhodes scholarships this past year.

### **Students with Distinction**

Deeksha Dewan of B.Sc. (Hons) Chemistry was recipient of Rai Bahadur Brijmohan Lall Sahib Memorial Gold Medal and the Professor Seshadri prize.

Srinwanti Debgupta of B.Sc. (Hons) Mathematics was recipient of two Gold Medals - the Rai Bahadur Brijmohanlal Sahib Memorial Gold Medal and Shri Suresh Bhatia Memorial Gold Medal. She was also a recipient of Mitra Memorial prize.

Akansha of B.Sc. Physical Sciences was recipient of University Medal for her studies.

Devaki Misra of M.A. Sanskrit was recipient of Dr. CD Deshmukh Memorial Gold Medal, Smt. Sivakaamma Radliakrishnan Medal and also Pt Raghubar Dayal Memorial Medal.

Chahat Mehra of M.Sc. Chemistry was recipient of Prof. R P Mitra Gold Medal and also Prof. KN Johry Memorial Gold Medal.

Payal Khatri of B. A. (Hons) English III year was an International Level Shooter and recipient of Multiple Medals (World Cup and Championship - Gold Medal).

## **Publications**

Ahmed, K., Pal, S., Mohan, R. (2022). Some new semiring structures. Asian-European Journal of Mathematics. doi: 10.1142/S179355712250173X.

Ahmed, K., Pal, S., Mohan, R. (2022). Key exchange protocol based upon a modified tropical structure. Communications in Algebra. 1–10. doi: 10.1080/00927872.2022.2095566.

Aggarwal, M., Gupta, L. (2022). Uniform Split Continuity. Journal of Mathematical Analysis and Applications, 511:126099.

Gupta, L., Aggarwal, M. (2022). Split Continuity: A different perspective. Topology and its Applications, 317: 108189.

Bansal, P., Kumar, A., Bansal, A. (2022). Continuous Modulated Shearlet Transform. Advances in Pure and Applied Mathematics. 13(4), 29-57

Malik, P., Thareja, R., Singh, J., Kakkar, R. (2022). II-VI core/shell quantum dots and doping with transition metal ions as a means of tuning the magnetoelectronic properties of CdS/ZnS core/shell QDs: A DFT study. Journal of Molecular Graphics and Modelling. 111: 108099.

Goswami, A., Prasad, A. K., Maity, J., Khaneja, N. (2022). Synthesis and applications of bicyclic sugar modified locked nucleic acids: A review. Nucleosides, Nucleotides and Nucleic Acids, 41, 5-6, 503-529.

Holanda, R. F. L., Lima, F. S., Rana, A., Jain, D. (2022). Strong lensing systems and galaxy cluster observations as probe to the cosmic distance duality relation. The European Physical Journal C, 82 : 115.

## **Number of college teachers serving as Editor(s)/Member(s) of Editorial Board**

One - Prof John Varghese serves on the Editorial Board of The Bede Athaneum

## **Research Projects**

Project entitled, ‘Compendium of 75 Indian Stratagems’ sponsored by Centre for land warfare studies (Government Agency) and Principal Investigators Dr. Abhishek Mishra, Dr. A. D. Mathur and Col V Vidyashankar. Sanctioned amount: Rs 40,000/- and duration of 3 months.

Project entitled, ‘A Study of accredited Massive Open Online Courses in Social Science and their Implementation in Higher Educational Institutions’ sponsored by Indian Council of Social Science Research (Government Agency) and Principal Investigators Dr. Raj Kumar Bhardwaj (Librarian). Sanctioned amount: Rs 4,00,000/- for a period of 2 years.

Project entitled, ‘Building pandemic resilience in rural communities’ sponsored by Indian Council of Medical Research and Principal Investigators Mr. Benston John (Department of Economics) and Sanctioned amount: Rs 28,89,330/- for a period of 3 years.

Project entitled, ‘Development of reusable macrocyclic probes for detection and separation of radioactive metal ions’ sponsored by Ministry of Defence & Development Organisation, Life Science Research Board

and Principal Investigators Dr Satish Kumar (Department of Chemistry) and Sanctioned amount: Rs 10,07,408/- for a period of 3 years.

### **Seminars Organized**

Seminar entitled, 'Understanding Epistemic Injustice through a Cultural Lens' was delivered by Dr. Sooraj Saksena.

Seminar entitled, 'Bengal 1946-47: The Moment of Independence and Partition' was delivered by Dr. Suchetana Chattopadhyay, Jadavpur University.

Seminar entitled, 'REIGNING PERSPECTIVES- Session of "India's Realist Foreign Policy' was delivered by Ms. Palki Sharma Upadhyay.

Seminar entitled, 'The Child Sati in Early 19th Century Bengal : Tales from the Archives' was delivered by Dr. Tanika Sarkar (JNU and Ashoka University).

Seminar entitled, 'Quantum Conundrums: Measurement and the Uncertainty Principle' was delivered by Dr. Bikram Phookun.

### **National/International MoUs Signed**

MoU signed with the American Institute of Indian Studies, New Delhi (AIIS).

### **Number and percentage of students placed**

Number of students placed = 54 (through campus placement)

Percentage of students who got placed = 13.4%

### **Number of Companies visited for campus recruitment**

Number of Companies visited for campus recruitment = 45

### **Extension and Outreach Activities**

Young Leaders Neighbourhood ; First Fellowship programme was launched which was also supported by the Ministry of External Affairs launched in March 2022.

### **Library Development**

College Library is as old as the college itself. Established in the year 1881 and moved to the current location in the year 1941, it has a rich history of its own. Library stands today with a total covered area of 993 sq. mtrs. The Library is automated using Troodon 5.5 software. The OPAC helps the users to search through vast collection of documents. College has a rich collection of textbooks, rare books and E resources. The Library is a member of NLIST, which is jointly executed by E-Shodh Sindhu Consortium, Inflibnet and INDEST-AICTE Consortium, IIT Delhi. College Library provided support to students throughout COVID period.

### **Faculty Strength**

Total number of permanent faculty = 55



Total number of Ad-Hoc faculty = 37

### **Financial Allocation and Utilization**

As per rules

### **Other Significant Information**

Faculty continue to perform their academic responsibilities and in addition to their regular duties the following members have contributed in ways indicated below.

Dr. Vibha Sharma served as Chairperson for the NAAC Steering Committee. She served as Member, Faculty of Science, University of Delhi (2022 - present) and published one paper.

Dr. Ekta Kundra Arora was Deputy-Superintendent of Examination, Odd Semester 2022-23 and served as Member of The Committee for formulating Courses under UGCF 2022 for B.Sc Programme Physical Science and Life Science, University of Delhi. She published one paper and delivered one keynote address.

Dr. Jyotirmoy Maity published five papers and was a Resource person at the NRS Government College's Certificate Course on Everyday Chemistry

Sanjeev Kumar Grewal served as a member on the Committee of Courses for the Economics Department and is a Member of the Faculty of Social Sciences

Divya Singh served as Member of the NAAC Steering Committee and is a Member of the Solar Project Committee of the College. She was selected as a participant for the Advanced Graduate Workshop on Globalisation, Poverty and Development organised jointly by the Azim Premji University and the Institute for New Economic Thinking at Azim Premji University, Bangalore

Dr Karen Gabriel served as member of the Anti-Ragging Committee. Dr Gabriel serves as Executive Member of RINGS; she is a Member of the ATINER (Athens Institute for Education and Research – a World Association of Academics and Researchers) and is a Life Member, Indian Association of Women's Studies (India). She has published two papers and delivered eight Keynote addresses in the year under reckoning.

Dr Soofia Siddique has the special responsibility of being the Chairperson of the Library Committee and the Convener, Translation Studies Centre

Dr. N. P. Ashley published one paper and delivered a keynote address at Queen's University Belfast.

Ann Susan Aleyas is the Faculty Coordinator, Alumni Association of St.Stephen's College and published two papers.

Naveen John Panicker is the Associate Dean (Residence), St. Stephen's College, was a member of the NAAC Steering Committee and is a member of the Anti-Ragging Committee.

Dr. Aditya Pratap Deo is the Coordinator, IQAC. He is a Member of Editorial Board, Indian Institute of Advanced Study, Shimla and has published one paper and one book this last year.

Dias Mario Antony has published two papers this year. He is also the Coordinator, College Building Conservation Project and a member Anti-Ragging Committee.

Dr. Sudipto Basu was a member of the NAAC Steering Committee for the assessment cycle of 2016- 21 and has one paper to his credit this past year.

Dr. Sabina Kazmi serves as a Member of Indian History Congress

Dr. Abhishek Mishra undertook a special translation project: Compendiums of 75 Indian stratagems' under Centre for Land Warfare Studies (CLAWS).

Dr. Ashutosh Shukla delivered a keynote address at D.S.N. PG College, Unnao (U.P.) on 20<sup>th</sup> March

Dr. Jaspreet Kaur served as Governing Body member till Nov 2022 and is a Member of Syllabus Committee of Faculty of Mathematical Sciences from March 2022-till date.

Dr. Chinkhanlun Guite served as Bursar of the College and is the Public Information Officer of the College.

Dr. Annu Malhotra is the Staff Secretary and she also serves as Nodal Officer, NIRF and the AISHE Survey.

Dr. Harish Kumar Yadav is Member of the syllabus formation committee of the B.Sc. (Hons) Physics and B.Sc. (Prog) under Undergraduate Curriculum Framework (UGCF)-2022 based on National Education Policy (NEP) and also a member of committee for the moderation of Physics papers for University final exams.

Dr. Sangeeta Sachdeva was Tutor for Admissions (TFA) 2022-2023. She served as member of Committee of Courses in Physics for B.Sc. (Physics) Hons/Program, University of Delhi. She was also member of the Syllabus designing team for Undergraduate Curriculum Framework (UGCF) under the National Education Policy (NEP), University of Delhi. Dr Sachdeva served as member of Moderation Committee in Physics for B.Sc.(H)/Prog examination May/June 2023, University of Delhi.

Dr. Abhinav Gupta Is a Member, Committee of Courses for devising syllabus for NEP

Dr. Akshay Rana was a member of the NAAC steering committee. He has published two research papers in International journals

Dr. Rohit Mathew served as Faculty Editor for The Philosophical Society Journal, KOSMOS 2023. He has published one paper.

Dr A.D. Mathur is the Registrar of Societies and is a Member of the Grievance Redressal cell. He is the Convenor, DSC Courses Committee, Department of Sanskrit, University of Delhi, has Two special lectures at National Law University, Himachal Pradesh – July 2022 and is currently supervising two Ph D students.

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## SWAMI SHRADDHANAND COLLEGE

### Major activities and achievements

Yash Dhull represented India in Under - 19 World Cup Cricket Championship as winning captain and also represent ASIA CUP, Ranji Trophy and IPL (Delhi Captain), century on Ranji Trophy debut in both innings (only the third player in India to do this after Nari contractor and Viraj Awathe and followed it up with a double hundred.

Himanshu Rana represented India in Under - 19 World Cup Cricket Championship (World Cup winner). He also represented India in ASIA CUP and Ranji Trophy as Captain. Back-to-back hundreds in this year's Ranji trophy season.

**Base Ball:** Our team won the Silver Medal in inter college baseball Tournament. Four of our players Pawan Kumar, Pushpender, Rohit & Amar Nath were represented Delhi University in all India Inter University Base Ball Championship held at Royal Global University Assam & Guwahati.

**Kabaddi:** Three of our Kabaddi Palyers Yash Malik, Parvesh, Mayank represented Delhi University in North Zone Inter University Kabaddi Championship held at MD University Rohtak.

**Wrestling:** Jatin represented Delhi University in all India Inter University Wrestling Championship held at Shivaji University Kolhapur.

**Athletic:** In Inter University Athletic Championship Vijay Kumar was selected in Ten Thousand Mtr. Race & (21 km.) half Marathon race. In Delhi state 10,000 mtr. Obtained 9th rank. In Vedanta half Marathon race all India rank 19th & World-Wide rank 97th

### Publications

Mehta, B. (2022). Synthesis of Novel Spiro [imidazolidine- pyrazoline]-2, 4-dione Derivatives. *Indian Journal of Advances in Chemical Science*. 10(4). 172-176.

Singh, P. P. (2022). Supported Ionic Liquids and their Applications in Organic Transformation. *Current Organic Synthesis*. 2022. 19(8), 905-922.

Sethi, A. (2022) Cuprous Delafossites, Cu<sub>3</sub>(MFeSb)O<sub>6</sub> (M = Na, Li) with Honeycomb Arrays, Realized by Topochemical Ion-Exchange Reactions. *Ceramics International*. 2022. 48(10) 13833-13841.

Srivastava, R. N. (2022). Analysis of Students' Perception of the Internal Assessment System. *International General of Research and Analytical Review*. 9(1), 43602.

Paliwal, L. R. (2022) Women Empowerment and Gender Inclusion Fund: Equitable and Inclusive Vision in the National Education Policy: 2020. *International Journal of Innovations & Research Analysis (IJIRA)*. 02(03).

Chanana, K. S. (2023). Queer Articulation of Self: Indian Hijra Autobiographies” in Studies in Humanities and Social Sciences. *Indian Institute of Advanced Study*, (ISSN: 0972-1401, Forthcoming).

Sachar, P. (2022). Different Applications of Artificial Intelligence to Combat Climate Change Issues. *International Journal of Advanced Trends in Computer Science and Engineering*. II(2), 58-61.

Kumari, V. (2022). Poorvottar Rajyon Mein Prantiya Bhashaon Ke Vikas Mein Hindi Ki Bhumika. *Bhasha*. 301(61) 18-22.

Mahajan, L. (2022). Lung CT scans for the management of COVID-19 pneumonitis and the diagnosis of COVID-19, Artificial Intelligence Strategies for Analyzing COVID-19 Pneumonia Lung Imaging. *Characterization Approaches*. Ayman El-Baz and Jasjit S Suri: Bristol, U.K. IOP Publishing Ltd. Chapter 10.

Prasad, V. (2022). Multipole Polarizabilities and Dipole Oscillator Strengths of H-Atom in Nonideal Classical Plasmas. *The European Physical Journal Plus*. 137,p. 78.

### **Research Projects**

Project entitled, ‘Cultural Impeccability of Himachal Pradesh since Vedic Period with Reference to their Floras’ sponsored by ICSSR, Delhi and Principal Investigator Dr. Jiban Singh, Assistant Professor.

### **Seminar Organized**

Prof. Jagbir Singh, Professor in Geography - Two Days International Seminar on “Green Technologies for a Sustainable World: A G-20 Vision” held on 3 and 4 February 2023.

### **Seminar/Conference Presentations**

Dr. L.R.Paliwal, Assistant Professor in Commerce: “New Paradigm and Digitisation of Accounting with Growth in Online Apps: A Study of Top 10 Accounting Softwares in India” in 44<sup>th</sup> All India Conference of Indian Accounting Association held at Gwalior on 29 October 2022.

Ms. Akanksha Gupta, Assistant Professor in Computer Science: “Implications of Technology in the Agricultural Sector in India” at the International Conference(online) on Recent Research in Management and Technology, organised by Research Foundation of India along with SKC LNCT Group of colleges, India, 5 August 2022.

Prof. Saroj Bala, Professor in English: 8<sup>th</sup> JGU International Literary Conference on “India in the Literary Imaginary”, organised by Jindal Global University, Sonapat, Haryana, 18 -20 July 2022.

Dr. Preeti Sachar, Assistant Professor in Commerce: “Role of Green Technology Use for Agriculture and Food Security: An overview” in two days International seminar on Green technologies for Sustainable World: A G20 Vision organised by Department of Geography SSNC in Association with Institute Mines- Telecom Business School University of Paris, France held on 3-4 February 2023.

Dr. Preeti Sachar, Assistant Professor in Commerce: “Green Technology and Environmental Management-Trends and Scope” in Two days International Seminar on Green Technologies for Sustainable World: A G-20 vision organised by Department of Geography SSNC in association with Institute Mines- Telecom Business School, University of Paris, France held on 3-4 February 2023.

### **Library Development**

Library is a responsive, learning and continuously evolving organization. It encourages students to have a sense of commitment, to contribute to national development, and respect for diversities in religion, language, culture, ethnicity, lifestyle and habitat. The library is open to all regular students of the colleges during office timing. The primary mission of the library is to support the educational and research programs of the College by providing physical and intellectual access to information. Following the objectives of the university, the library aims to develop a comprehensive collection of documents, useful for the readers.

**Library Collection:** Library has a rich collection with more than 112300 books, more than 24 newspapers, and 52 national and international periodicals which provide the latest information and knowledge of various disciplines. Library regularly updates its collection and added more than 2500 books every year. More than 450 users visit the library per day for different needs.

**Technological Support:** Library is a fully automated library with library management software SOUL 3.0 with its various modules. The library is providing its automated services since September 2022. A web-based OPAC is installed through which users can search the required collection and their location in the library with various search options. Technological support is involved to deal with various jobs such as acquisition, accession, serial control and searching the books also.

**Support System for VH Students:** The library facilitates the VH students by providing assistive tools, Braille language books and other technological support making ease of their study.

**Services Provided:** Assistance in searching the book(s)/document(s) Users' guidance to retrieve the e-resources Software-based circulation services Bibliographic and Indexes references Reference / Referral services for specific needs OPAC-based search Plagiarism check service

**Provision of E-resources:** The library is connected with well-established library resources centres such as NLIST, DELNET and DULS through an electronic management package. The consortium NLIST provides more than 6000 journals and about 2 lakhs e-books and also DELNET provides e-databases in large numbers. The DULS provides around 4500 e-journals and more than 100 e-databases through its electronic management package.

## **Faculty Strength**

Total number of faculty = 173

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## **VIVEKANANDA COLLEGE**

### **Brief history of the College**

Vivekananda College is an institution dedicated to providing quality education and a sense of empowerment to young women. The college was set up in 1970 in Gandhi Nagar by the Delhi Administration (now the Government of NCT of Delhi) out of grants from UGC and Delhi Administration, with a specific objective of providing opportunities for higher education to women in the Trans-Yamuna area. The foundation stone of the new College building was laid on 26 October 1976 by Prof. S. Nurul Hassan and the building was dedicated by Swami Ranganathananda of the Ramakrishna Mission in 1979.

Starting its journey in a school building with approximately 300 students admitted to B.A. (Pass), the college has, since then, witnessed a meteoric rise in the number of students seeking admission in the

different courses offered by it. Today, the college has around 2265 students and offers many discipline and honors courses at the undergraduate level, two postgraduate courses, namely, Hindi and Sanskrit, three add-on courses (Hindi Patrakarita, Translation, and English Proficiency), one certificate course, and one diploma course in German Language. The College community works in synergy to promote an environment of effective teaching and learning.

### **Major Activities and Achievements**

The Hockey Turf inauguration was held on 3 November 2022 in the college with Mr. Manish Sisodia being the Chief Guest for the event. New Home Science and Computer laboratories were set up for students. Installation of RFID technology was introduced in the college library for smooth functioning of library activities.

### **Honours/Distinctions**

Dr. Sukhneet Suri received “Food Safety Mentor” award at the World Food Safety Day celebrations held on 07 June 2022. The programme was jointly organized by the Centre for Quality and Food Safety, Guru Gobind Singh Indraprastha University, Manav Rachna International Institute of Research and Studies, IEST, CPRTTF, NITCON and EAT RIGHT (FSSAI).

Ms. Isha Gupta received excellent paper award by the Korea Multimedia Society during a special session held at the Spring Conference on 13 May 2022.

Dr. Neeta Mathur received an appreciation letter on 04 October 2022 for her Book Launch named “Shastriya Sangeet ke Surya” from Ms. Meenakshi Lekhi, Honorable Minister of State for External Affairs and Culture, GOI and Padma Vibhushan Dr. Sonal Mansingh, Member of Parliament.

### **Students with Distinctions**

Ms. Umaira of B.Sc. Honours Mathematics III year received best student of the college award for the year 2022-23.

Ms. Manisha Sharma of B.A. Programme III year received best Sports Person (in Kabbadi & Athletics) of the college award for the year 2022-23.

Ms. Ekta Sharma of B.A. Honours Political Science III year received Outstanding contribution to the college, in Extra Curricular Activities, award for the year 2022-23.

### **Publications**

Dr. Hina Nandrajog & Prem Kumari Srivastava. (2023). *Amrita Pritam: The Writer Provocateur*. Routledge, NA(NA), NA.

Seth, S., Chadha, N.K., and Bhatia, H.. (2022). *Qualitative methods: A practical journey into research*. Friends Publication, NA(NA), NA.

Sorokowski, P., Kowal, M, Sternberg, R.J. et al.. (2023). Modernization, collectivism, and gender equality predict love experiences in 45 countries. *Scientific Reports*, 13(NA), NA.

Bhanot, D., Verma, S.K. (2022). The development and initial validation of the multidimensional socio-political empowerment (SPE) scale for Indian stigmatized group . *Current Psychology*, 0(NA), 1-18.

Verma S.K.;Sharad, S. Singh, T & Bharti P.. (2023). Living with alternatives: Percived Crisis and meaninglessness and effort to maintain meaningful life in Indian Hijra . *Culture and psychology*, 0(NA), 1-24.

Kapoor, B. & Sondhi, V.. (2023). Exploring the Understanding of Globalization: A Qualitative Study of the Urban, Educated, Middle-Class, Young Indians . *Culture & Psychology*, NA(NA), NA.

Hameed, S & Sondhi, V. . (2023). Experiences and difficulties for primary caretakers of children with celiac disease — A qualitative study . *Indian Journal of Gastroenterology*, NA(NA), NA.

Mishra, R. & Sondhi, V. . (2022). Conceptualizing Resilience among Adolescents Who are Orphaned and Living in Institutional Care in India . *Residential Treatment for Children & Youth*, NA(NA), NA.

I. Gupta, I. Chatterjee and N. Gupta. (2023). “A two staged NLP based framework for assessing the sentiments on Indian supreme court judgments” . *International Journal of Information Technology*, 15(NA), NA.

Singh, T., Mittal, S. Sharad, S. et. al.. (2022). The silver lining behind the dark cloud: Exploring the psycho-social factors impacting successful adaptation during the COVID-19 pandemic. . *Journal of Pacific Rim Psychology*, 16(NA), 1-18.

## **Research Projects**

Dr. Shivantika Sharad and Dr. Sunil Kumar Verma received SPARK Grant from International Association of Cross-Cultural Psychology for their project titled “Broadening Horizons: A certificate course on Cross Cultural Psychology”. Sanctioned Amount: \$ 1000= Rs. 83000 approx.

## **Patents Filed/Granted**

One Patent has been filed with the Indian Patent Office on 14 January 2022 by Ms. Vishakha Jain, Dept. of Economics, for her project, “Smart Mesh Filter for Open Drains.” Request for First examination was done on 09 February 2023. The response for the same was filled on 15 July 2023.

## **Seminars Organized**

Seminar entitled, “United Colours of Languages and NEP 2020”, under the theme Promotion of Indian Languages and NEP 2020 was held on 27 April 2022. The speakers included Dr. Kumud Khanna, Director, Retd. Institute of Home Economics, Prof. Vimal Rarh, Joint Director GAD-TLC, Prof. Rajeev, RR from International Centre for Free and Open Source Software and Dr. Saguna Diwan, Scientist, Innovation Protection Unit, CSIR.

Seminar entitled, “Information Literacy Skills, Promotion of IT Skills” by Dr. Rajesh Singh, University Librarian, University of Delhi, on 17 August 2022.

Seminar entitled, “Decolonizing the Self: Issues and Perspectives, Rethinking Indian Modern Thought” by Dr. Mukesh Bairva, Associate Professor, Department of English, P.G.D.A.V. College, University of Delhi on 04 November 2022.

Seminar entitled, “Rights of the Acid Attack Victims and Services, Promoting Awareness and Legal Rights about Acid Attack Survivors” by Ms. Shisba Chawla, Advocate, DLSA 0 on 01 February 2023.

Seminar entitled, “Women and Emotions, Understanding Mental Health Issues” by Dr. Deepika Dahima, Founder-Yellow Turquoise, Counselling Psychologist, Educator on 21 February 2023.

### **Conferences Organized**

Organized International Conference on “Revolution in the new millennium-innovation, Ethics and Sustainability: A Multidisciplinary Approach” on 2 February 2023.

Internal Quality Assurance Cell organized International Workshop on “Qualitative Research, NVIVO and Publishing in High indexed Journals” in collaboration with College of Business, University of Buraimi, Oman on 24 November 2022.

### **Seminar/Conference Presentations**

Dr. Hina Nandrajog presented paper titled “Divided by Script, United by Translation: Punjabi Stories on the Partition of Punjab in 1947” at Punjab: Past, Present, Future, Punjab Research Group Conference, (Oxford, UK) 29 October 2022

Dr. Hina Nandrajog presented paper titled “Cultural Texts and Contexts: Diversity of the Ramayana” at the 3 IAFOR International Conference on Arts & Humanities (IICAH2023), Hawaii, USA from 05-08 January 2023

Dr. Hina Nandrajog participated in the “Routledge: Writer in Context” session in the Litfest, organised by Translation and Translation Studies Centre, Indraprastha College, University of Delhi from 9-10 February 2023

Dr. Jyotika Elhance presented a paper titled “Desolation of Muted Gender Trapped in Domestic Spaces: A Study of Women’s Plight in the fiction of Tasneem Khan” in the International Conference on Volution in the New Millennium-Innovation, Ethics and Sustainability: A Multidisciplinary Approach, organised by Vivekananda College, University of Delhi from 2 -3 February 2023

Dr. Jyotika Elhance presented a paper titled “Technology Today: The Saviour and The Enabler in The Times of Covid-19” organized by Guru Ram Dass College of Education, on 04 February 2023

### **National/International MoUs Signed**

An MoU with University of Buraimi, Oman for academic partnership was extended for the duration of 21 September 2021 to 21 September 2022

As part of the collaboration (MoU) of Vivekananda College with the Institute of Industrial Development (MSME), fifteen students of B.Sc. (H.) Home Science and B.A. Programme Food Technology participated



in the Workshop on “Pradhan Mantri Formalization of Food Microenterprises (PMFME)” on 05 August 2022 at Indira Gandhi National Centre of Arts

### **Other Inter-Institutional Collaboration**

In view of centenary year of Delhi University, a one-day national webinar, titled “Information Literacy and Skills” was organized by the Library under the aegis of IQAC and in collaboration with the Indian Library Association (ILA) to celebrate “Azadi Ka Amrut Mahotsav” and the Centenary Year of University of Delhi” on 17 August 2022 virtually via Google meet.

A Workshop on “Orientation to Placement” was organized on 8 November 2022 by the IQAC in collaboration with Catch A Cloud and HuntOver4U to orient students about placements.

Mentoring Programme Committee in collaboration with MentorW organised an interactive session on the topic “Building Personal and Professional Life” for students on 10 November 2022.

In collaboration with Unnat Bharat Abhiyan, SSF volunteers conducted a “Survey in Patparganj Slum” on 31 August 2022. 16 student volunteers and 2 faculty members (Dr. Gargi Sengupta and Mr. Jaspertap Singh) visited the area.

In collaboration with District Election Officer, District Shahdara and under the banner of LEAP, an Add-on Course of 10 hours on “Legal Awareness” was started on 21 February 2023. The session is still going on.

A career counselling session was held in collaboration with ICAI Institute on 6 September 2022 for students of B.Com. II and III years.

Knowledge-sharing programmes were organized in collaboration with IBS ICFAI Business School on “Career after Graduation” on 9 September 2022 and on “Work & Stress Management” on 23 November 2023.

**Number and percentage of students placed: 05**

**Number of Companies visited for campus recruitment: 08**

### **Extension and Outreach Activities**

Social Outreach and Community Development Committee organized a donation drive for Jhilmil camp which included items like books, pencils, colors, erasers and notebooks along with the conduct of offline classes for camp children from Monday to Saturday. In collaboration with Unnat Bharat Abhiyan, VNC SSF volunteers celebrated Diwali with the children of Jhilmil colony, conducting activities like painting of diyas, singing and dancing. Children’s Day was celebrated in the Jhilmil Camp with cake cutting. Republic Day too was celebrated in the same way. The volunteers set up a game stall to collect some funds for the camp during the annual college fest.

National Service Scheme organized activities like Tiranga yatra, silent march, flag hoisting ceremony, vaccination campaign, blood donation camp, pledge on Swacchta, plogging (sewa diwas), health checkup

camp, life support session, pre RD Camp, Yuva Utsav, mat data junction, cleanliness campaign, awareness regarding non- violence on non-Violence day, skill development program, film Screening, unity rally, Gurbani recital, webinar on social evil, culture fest, traffic rules awareness drive, poster Exhibition on Janjatiya Gaurav Diwas, cloth donation drive, essay competition, poster making competition, visit to old age home, nukkad natak on acid attack, fitness and yoga session, Delhi Youth Parliament, Inter-Generational Mela, sanitary pad distribution drive, Global Millet Conference, G20 event, paper bag donation, sex education webinar, National Integration Camp 2023 and many other.

### **Library Development**

The varied facilities in the library include web-based information services, using web 2.0 tools, online services and e-resources such as mobile library, wherein the library website is made mobile compatible and bilingual (Hindi and English). Moreover, with the implementation of biometrics and RFID, the library is in the process of eliminating the redundant process of readers' tickets which will help in stock verification and rectification of mid-shelved books.

The total number of books is 66120 at present. The library subscribes to 16 print journals, and 10 newspapers. It is also equipped with audio-visual media like CDs, DVDs and audio cassettes, and Braille books in its collection for visually challenged students.

Also, the library provides access to various e-resources through the DULS platform. Millions of journals, ebooks, and many online databases are available through the e-shodhsindhu of DULS. The electronic resource management is done through DULS and NList and J-Gate helps in federated search. The Library has been trying to develop an institutional repository of faculty publications and the digital question paper archive, for posterity.

Initiatives such as a book drop facility to cut down the time taken to return the books, RFID implementation, honorary content writing internship to students for the Library's social media handle, honorary internship for library science graduates, biometric system for check-in and check-out of books (data being recorded in ILMS), have been implemented.

New information service like 'e-Vaartalaap' has been initiated and is being pilot-tested. This enables the library staff to respond to the queries of the members in real time mode (virtually). Also recording of visitors' footfall digitally for analyzing the statistics of usage of the library has been done along with maintenance of online public access catalog (OPAC).

**Faculty Strength:** Permanent 35, Ad hoc 43

### **Financial Allocation and Utilization**

Grant sanctioned: UGC – Rs. 24,75,63,000/- & Govt. of NCT of Delhi – Rs. 47,00,000/-

Grant Utilized: UGC – Rs. 25,86,99,784.45 & Govt. of NCT of Delhi – Rs. 99,18,130.55

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## ZAKIR HUSAIN DELHI COLLEGE

### Brief history of the College

The journey of Zakir Husain Delhi college started as the Oriental College for literature, science and art in 1792. In 1824, the institution was renamed Delhi College by the British East India Company's government. By the early twentieth century it became the center of vibrant scientific and literary intellectual activities that would be referred to as the 'Delhi Renaissance'. The British authorities closed the institution after the 1857 revolt. Between 1864 and 1871 intermediate B.A. and M.A. classes commenced. However the British government transferred the Delhi Oriental College to Lahore in 1877. It was reconstituted as the Anglo-Arabic Intermediate College in 1924. It was affiliated to Delhi University in 1925 and became one of its constituent degree colleges in 1929. The college was attacked and set on fire by mobs following the partition. Somehow, the library and office records were saved. With the support of Dr. Zakir Husain and others, the Delhi College was revived in 1948. In 1975, the college was renamed Dr Zakir Husain to honour his contribution to the college. In 1986, the college campus was shifted to its present location, Jawaharlal Nehru Marg. In 2010 the college was renamed Zakir Husain Delhi College.

### Major Activities and Achievements

The college has received an Indian patent for Solar water distiller. Our college has been awarded DBT- Star College Scheme sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India. Gandhi Study Circle launched a short-term skill enhancement and value-making course in collaboration with Gandhi Smriti and Darshan Samiti, Union Ministry of Culture. Dr B.R. Ambedkar Centre launched its flagship program on reading Ambedkar's "Writings and Speeches Volumes." The NSS Unit of the college started its activities with the Yoga Day Celebration on International Yoga Day on June 21, 2022. Prof. Amit Bardhan, Treasurer of the College Governing Body was the Chief Guest. To 11 celebrate Independence Day, a Tiranga Yatra was organised on August 13, 2022, under the aegis of Azadi ka Amrit Mahotsava. The NSS Unit also organised a cleanliness drive on October 29 and 31, 2022, inside the college campus. A job fair by Career and Placement Cell was held on 8th and 9th of February. More than 40 companies hired students for various responsibilities. Within two days, more than 120 students got job placement offers.

### Honours/Distinctions

Prof Narendra Singh, Principal of the College, represented India in a research coordination meeting held in Vienna, Austria, from 19th-21st October 2022. He delivered a talk during the meeting on "Excitation energies, radiative data, and collisional excitation cross-section of Sn and W ions."

Prof. Ravi Ranjan is a faculty member in the Political Science Department. He was awarded the Rajya Sabha Fellowship (Rajya Sabha Secretariat, Parliament of India, A National Level Academic fellowship granted to research on legislative themes).

### Students with Distinctions

S.No.	Name of Students	Class
1	Hamid Ansari	B. Com Prog. III Year

2	Divyank Shami	B.Sc. Prog III Year
3	Vikrant Sagar	B. Com(H) III Year
4	Shreya Dixit	B.Sc. Prog III Year
5	Anubhuti Gupta	B.Sc.(H) Chem. III Year

## Publications

F. Yadav, Goyal A. and Singh N. (2023). Analysis of line intensity ratio for optical transitions of 3d6 levels and plasma screening effect on the atomic structure of Fe III ion. *Radiation Physics and Chemistry*, 206(110795), NA.

Gupta S., Shishodia G. and Shishodia P. K. . (2023). A comparative study of ZrS<sub>2</sub>-based thin film solar cells using the SCAPS solar cell capacitance simulator. *Semiconductor Science and Technology*, 38(NA), 025012-025023.

Gupta S., Shishodia G. and Shishodia P. K. . (2022). Computational analysis to study the effect of selenization on ZrS<sub>2</sub>/CZTS heterostructure performance. *Engineering Research Express*, 4(NA), 035026-035038.

Verma, A., Gupta, A., Gaharwar, U...S. et al. (2023). Effect of wastewater on physiological, morphological and biochemical levels and its cytotoxic potential on Pisum sativum. . *Int. J. Environ. Sci. Techno*, NA, 1-18.

Yograj Singh and Dinesh C. S. Bisht . (2022). "Innovative Entropy Measure in" Pythagorean Fuzzy Environment with real-life application. *"Nonlinear Studies, ELSEVIER*, 29(NA), NA.

Poonam Garg, Surbhi Madan, Ritu Arora, Dhiraj Kumar Singh. (2022). Covid-19 cases in Morocco: A comparative analysis. *Nonlinear Analysis*, 5(3), 2636-7556.

Poonam Jorwal, Mohd. Arif, Dharmendra Kumar. (2023). An enormous diversity of soliton solutions to the (2+1)-dimensional extended shallow water wave equation using three analytical methods. *International Journal of Modern Physics B*, NA (24501 04), NA.

Singh, N. and Goyal, A. (2022). 2. Theoretical study of atomic parameters, electron impact excitation, and photoionization of 4d and 4d<sup>2</sup> states in Sn ions. . *European Physical Journal Plus*, 1054(137), NA.

Singh, N. Aggarwal S. and Goyal A. (2022). 3. Theoretical analysis of atomic parameters of Sm-like and Nd-like W ions in soft X-ray region. . *Physica Scripta*, 075401(97), NA.

Singh N., Goyal A., and Aggarwal S., . (2022). Study of excitation energies of doubly excited states and identification of EUV, SXR and HXR spectral lines in M1 transitions of W LXXIII and Au LXXVIII. . *Journal of Electron Spectroscopy and Related Phenomena*, 147205(257), NA.

## **Research Projects**

Department of Biotechnology, Government of India, Ongoing (since 2020), DBT Star-College Scheme, 63 lakhs.

DRDO, 31-1-2022 to 31-1-2026, Fabrication and Evaluation of polymer Composites for microwave Absorption (2-18 GHz), 47.59 lakhs

Govt. of India, Min. of Science, Department of Science and Technology, National Council for Science & Technology Communication, 4-2-2022 to 3-2-2024, NOUR 1 Science Media Research and Outreach, Youth Science Media Challenge, 37,64,066

## **Patents Filed/Granted**

Indian Patent Number 383711 and Solar Water Distiller

## **Seminars Organized**

Prof. Bijoy Kumar, Professor, JNU, Magnetic Nanostructures and Nanodevices Vision', Magnetic Nanostructures and Nanodevices, under the aegis of IQAC, ZHDC, 31-05-2022

Professor Shibnath Mazumder, Proctor and Dean of South Asian University, Shaping of the Immune System, Shaping of the Immune System, under the aegis of IQAC, ZHDC, 09-09-2022

Prof. Shams Kamal Anjum, BGSBU, "Shamsul Ulama Deputy Nazeer Ahmad: Delhi College's Most Eminent Arabic Poet & Writer.", Ghaziuddin Khan Lecture-8, 11-01-2023

Dr Suhaib Alam, Department of Arabic, JMI,, "India-Arab Relations: Understanding the Old & New Trajectories.", Special Lecture-3, 16-02-2023

Prof. Naimul Hasan, Head of the Department of Arabic, University of Delhi,, "Use of Information Technology in Learning and Teaching of Arabic Language.", Mamlukul Ali Lecture-5, 29-04-2023

## **Seminar/Conference Presentations**

Dr Babeeta C. Kaula Paper presented at the conference held at Zakir Husain Delhi College at International Conference cum Workshop on Proteomics, Transcriptomics and Molecular Drug Design: An Integrated Omics Approach. (2022)

Dr Kaula has participated in various academic events, including an International Conference cum Workshop on Proteomics, Transcriptomics and Molecular Drug Design and a National Webinar on Experiential Learning as Envisaged in NEP 2020

Dr Mohd. Qasim presented a paper on "The Arab Feminist Novel and Arab Women's Issues: A Critical Study" at an International Conference on the Development of Arabic Literature

Dr Mohd. Qasim presented a paper on "Features of Indian Society in Contemporary Arab Travel Books" at an International Seminar on Indian Culture and Civilization

Dr Usha Bansal actively participates in conferences and academic events. She served as a resource person and organized the International Conference on "Advances in Chemical Sciences and Nanocomposites" at Zakir Husain Delhi College & ISAS in 2022. She also attended the International Conference on the "9th Asian Network for Natural & Unnatural Materials (Annum-9)" organized by the Department of Chemistry, University of Delhi, India on April 8th, 2022

Prof. Sarita Passey from the Chemistry Department recently attended the International Conference on "Emerging Trends in Higher Education" held in the United Kingdom. The conference was jointly organized by NPTC Group of Colleges & UK Awards and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College. Prof. Passey presented a paper titled "Mental Health - A Challenge in Higher Education" in the oral mode.

Dr Shraddha Adityavir Singh Chaired the Keynote Address of the Spec-Fic Seminar "Imagining New Worlds on New Terms: Reading Speculative Fiction" delivered by Dr Giti Chandra and organised by Grubstreet, English Department, Kirori Mal College, University of Delhi on 21st April 2022

Prof. Gurpreet Singh Tuteja, has been invited to deliver several lectures on various topics. These include a lecture on Basic Conjectures and Dimension for The Mathematical Society of Motilal Nehru College, an Online Orientation Cum Guidance Program for the Common University Entrance Test, a discussion on the impact of "ChatGPT, a Boon or a Bane" for the Mathematical Society at Zakir Husain Delhi College, and a session on "College & University Admissions" for the Police Families Welfare Society in PHQ, New Delhi

**Number and percentage of students placed: 237 and 45%**

**Number of Companies visited for campus recruitment : 52**

### **Extension and Outreach Activities**

The workshop entitled 'Understanding the Technique of Histology' took place from September 12-17 2022. The second workshop, focusing on "Techniques for Gene Expression Analysis," occurred from December 22-28 2022. Both workshops were specifically tailored for B.Sc. (Hons.) zoology and B.Sc. (Prog.) life sciences students, aiming to familiarize them with essential techniques such as histological slide fixation, microtomy, RNA isolation, PCR, and gel electrophoresis for gene expression analysis. Department of Mathematics organized a highly beneficial one-week national workshop on "Manipulation and Realization of Data through R" from December 16-21 2022. An enlightening workshop on "Introduction to Python for Meta-analysis of Data" was conducted from November 1-5 2022. Under this scheme, a research article titled "Estimating the Parameters of Covid-19 Cases in South Africa" was published in Biosciences Biotechnology Research Asia, Volume 19 (1): 153-162, in 2022. On 20 August 2022, the 8th edition of the Distinguished Gandhi Lecture Series on the topic 'Gandhi's Vision' was delivered by eminent Prof. Uday Singh Mehta. For the Gandhi Jayanti Utsav 2022, commemorating the 153rd birth anniversary of Mahatma Gandhi a field Trip to Gandhi Smriti was organized on 28 September 2022. A Crossword Puzzle Competition on the topic, 'Early Life of Gandhi and in South Africa', was organised on 29 September 2022. The first student seminar on the theme of 'Contemporizing Gandhi' was held on 30th September 2022. The 9th Session of the Distinguished Gandhi Lecture Series was held on 3rd October 2023. Prof. Vinay Lal, an eminent professor of History and Asian American Studies at the University of California, Los Angeles spoke on 'A Philosophy of Care: Gandhi and the Ethics and Poetics of Nursing'. On 15th November 2022, the Orientation Programme for the academic session of 2022-23 was organised. On 23 January 2023, Orientation Session for the Value-Added

Certificate Course on ‘Non- Violent Communication’ offered in collaboration with Gandhi Smirti Darsan Samiti, Ministry of Culture was organised virtually. On 27 January 2023, a lecture on ‘Gandhi's True Politics and the Concern for Justice:The Unilateral Duty of Owning Kinship with the 'Other'’ was delivered by Prof. Bindu Puri, Jawaharlal Nehru University. On 30th January 2023, a poster-making competition on the theme- ‘Gandhi's Gallery: Recreating Chapters from his Life’ was held. On 31st January 2023, a field trip to Teen Murti Bhavan Museum was organised.

### **Library Development**

Number of Books Acquired: 1483

Number of National Journals Subscribed: 01

Number of Newspapers: English:10, Hindi: 06, Urdu: 05, Bengali: 01, Malayalam: 01

Number of Magazines: English:13, Hindi: 09, Urdu:12, Bengali: 01

An online National Level Library and Information Science Quiz were organised on National Librarians’ Day 2022 in collaboration with the IQAC under the aegis of “Azadi Ka Amrit Mahotsav” on 12th August 2022. A book exhibition on India’s Freedom Struggle was held from 12th to 18th August 2022 in collaboration with Library Committee and IQAC to celebrate Azadi Ka Amrit Mahotsav and the Centenary Year of the University of Delhi, in the College Library. Another book exhibition on the Partition of India and its Tragedies was held from August 17th -27th, 2022. A Book Exhibition on Gandhi and His Path of Non-violence was held from 13th to 20th October 2022 in collaboration with the Library Committee and IQAC under the aegis of Swachh Bharat Abhiyan of the Government of India to celebrate Azadi Ka Amrit Mahotsav, in the College Library. A book exhibition was held on Veer Bal Diwas 2022 in memory of the sacrifices of Sahibzada Zorawar Singh Ji and Sahibzada Fateh Singh Ji, the two young sons of 10th Sikh Guru Gobind Singh Ji from 26th to 31st December 2022 in collaboration with the Library Committee and IQAC to celebrate Azadi Ka Amrit Mahotsav and Centenary Year of University of Delhi, in the College Library

### **Financial Allocation and Utilization**

Grant Sanctioned: 20,11,200.00

Grant Utilized: 9,70,206.00

### **Faculty Strength: 154**

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## **ZAKIR HUSAIN DELHI COLLEGE (EVENING)**

### **Brief history of the College**

Zakir Husain Delhi College, one of the oldest and most prestigious colleges in Delhi, comes with the legacy of a rich and a historically significant past. The institution traces its origins back to a Madrasa, founded by Ghaziuddin Firoz Jung that went on to become one of Delhi’s leading places of learning. Until the late eighteenth century, the Madrasa was located near a Mosque just outside Ajmeri Gate, one of the gates of the walled city of Shahjahanabad. Built in the Indo-Saracenic style, the old building was designed with all the elements of a Madrasa-Mosque, Maktaba, a library and a double tier of Hujras for the students. The

Madrasa, at that time, functioned as a traditional Muslim institution of higher learning with Arabic and Persian being taught to a small number of students.

The British took over Delhi in 1803, and this humble abode of learning became Delhi College, also popularly known as 'Dilli College' in 1825. The institution remained one of the centres of the Delhi Renaissance during 1830-40s. It was closed down after the War of Independence in 1857, only to open two decades later in 1877, when it was merged with the Government College of Lahore.

Initially, Arabic and Persian were the main languages taught at the Madrasa. However, with the establishment of British rule across the country, there was an increasing desire for teaching-learning of English. The College, however, retained Urdu as medium of studies with special emphasis on Arabic, Persian and Sanskrit. One of the salient features of Delhi College was that modern subjects like Mathematics, Geometry, Philosophy, and Physics, amongst other sciences were taught in Urdu. The college set up the Delhi Vernacular Society in 1832 for the translation of scientific treatises, Greek classics and Persian works into Urdu. The teachers and the students became the centre of a scientific and literary flowering that C.F. Andrew's referred to as 'the Delhi Renaissance'.

The old Delhi College progressed with Oriental and Western education, a step to uphold secularization and modernization because its purpose was to provide both traditional and modern knowledge to the students. With the advancement of science, the College was able to create an atmosphere of rationality to challenge shackles of conservatism. As has been said by Sir Syed Ahmed Khan "We should have philosophy in our right hand, Natural Science in the left and the crown of 'Kalma-e-Tayyaba' on our head".

The partition of India, in 1947, led to the brief closure of the College. But the strenuous efforts of Mirza Mehmood Begg, a thorough philanthropist and a visionary in the field of education, led to the revival of Delhi College. With the cooperation of a few old and new members of the faculty and patrons, he instilled a new lease of life in the College. Begg's position as the Principal of the college ensured a modest beginning in 1947 with 200-250 students which later flowered into a fully-fledged institution accommodating more than a thousand students. It was under his stewardship that evening classes were started in 1958 to enable employed youth to continue their education. Thus, the Evening College catered to a wide variety and a relatively bigger number of students. In the mid-1970s, the college suffered from an absolute cash crunch and financial crisis, and was subsequently handed over to the Zakir Husain Memorial Trust. The new name of the college was Zakir Husain College in 1975.

The Evening College began with a course called Preparatory Class. It received a grant from the UGC in 1969 and, thereafter, new rooms were constructed for Vice-Principal, the Bursar and a separate library for the students. The infrastructure of the College improved in the subsequent years under the able guidance of the former Principals-Mr. Manzoor Husain Musavi, Dr. Mohit Kumar Haldar, Dr. Syed Ahmad Ali, Mr. Salman Ghani Hashmi, Mr. Roop Lal Sharma, Mr. Mohd Riaz Umar, Dr. S.A. Hamideen, Dr. M.N. Sitaraman and Dr. Shankar Lal. As a recent development, air conditioners were installed in the college office, staff-room and in the library. The facility of networking and internet was made available to the teachers as well as the students. Today, the College has a modern computer lab. Computers have also been provided in the library. Compactors have been installed in the library to create more space and to keep books free from dust.

The college has maintained its sustained trajectory of development under the leadership of the Principal, Dr. M.A. Beg who joined the College in 2015. The infrastructure of the college has greatly improved. With more CCTV cameras at various spots, vigorous patrolling by an increased number of security personnel and a vigilant Proctorial Board, student discipline has seen a tremendous improvement. Classrooms are well lit, and equipped with LCD projectors. The elevators have been made functional for the Evening



College. LCD screens in the staffroom and outside the Academic Block ensure that the college fraternity is informed of important circulars and notices, including schedule of classes and teachers on leave.

### **Major Activities and Achievements**

Prajatantra, this National Youth Festival was designed to give participants an immersive experience of city governance where they get to role-play different wings of a Municipal Corporation. Prajatantra especially encourages youth to critically analyze local issues and present their vision for the 'Model City Governance'.

Prajatantra 2022-23 is the fourth edition of the festival and was organized by Praja Foundation in association with NIUA. Truly a national event, 216 teams comprising 1385 participants enrolled for Prajatantra 2022-23. Collectively they represented 23 States, 5 Union Territories and 79 Indian cities. The event was organized jointly by the Ministry of Housing and Urban Affairs and Ministry of Youth Affairs and Sports under G20 forum.

Eco-Club successfully organized a field trip to Yamuna Biodiversity Park, Delhi on 17 February 2023. This trip was organised under the guidance of our Mr. Arbin Kr Thakur (Teacher-In-charge) and Dr. Smita Sundaram from the Department of Environmental Studies.

The team members were joined by the YBP's Scientists and their team who guided students and enlightened them. 40 students from our college joined us. They got to know about park which harbours a wide range of ecosystems indigenous to the Yamuna river basin and supports more than 1,500 plant and animal species also hundreds of varieties of birds, reptiles and amphibians.

It was an amazing trip and also a perfect way to interact with our newly selected members with whom the club will be going to work for the next 1-2 years with enthusiasm, fun, dedication and hard work towards our nature.

The Eco-Club of Zakir Husain Delhi College (Evening), University of Delhi, organized a two-days inter-college fest "Panchtatva" on 21-22 March 2023, with the aim of providing a platform for students to Showcase their talents and participate in various engaging and cultural activities. The fest was open to students from all departments of different colleges of Delhi University and Universities other than DU.

The first day of the fest started with the ribbon cutting ceremony, which was graced by the our honourable Principal Prof. (Dr.) Masroor Ahmed Beg, Convener Dr. Tariq Sayeed, Mr. Arbin Kr Thakur, (Teacher-In-charge), Dr. Smita Sundaram and other eminent professors of our college. The event began with a semi classical dance and singing performance by the Eco-Club members. The Principal addressed the gathering, highlighting the importance of such events and the need for students to actively participate in extracurricular activities with full enthusiasm and remarked the annual eco fest as the milestone event of the college. Later Principal sir and faculty members visited all 30 stalls set up by different college of Delhi University, Amity University and Campus of Open Learning, University of Delhi.

Lokchitra: Pot Painting Competition on the theme Indian folk art representation and Alfaaz: Shayari & Poem Competition on the theme Nature and Social Causes, these two took place on the day 1 to bring awareness among students about the nature conversation, social issues and paperless artistry. Students from different colleges showcased their talent through poetic and artistic ways. At the end of the event, winners were announced which included the following participants: Neha Katharia, Bhanu Sachdeva, Akansha and Nibha Ranjan for the pot painting competition & Mohini Rai, Hemant Bisht, Utkarsh Pathak and Mohd. Jafar for the shayari and poem competition. The winners are awarded by certificates and gift vouchers of three different brands.

Overall, the day 1st was a grand success, with students actively participating and enjoying the various events. The society received appreciation for organizing such a well-planned and executed event, which provided a platform for students to showcase their talents and skills. The fest also served as a great opportunity for students to interact with each other and learn from their peers in person.

The eco-club organised a pot painting competition under the name Lokchitra on the theme "Indian folk-art representation." 22 Students participated from various colleges of Delhi University, Amity University and DU Sol. Lokchitra was an initiative by the eco-club where students showcased their talent in a paperless artistry competition.

### **Honours/Distinctions**

Dr Manjula Gupta has been awarded with Snehil Educational Award 2022 by Dr. Mahesh Sharma.

### **Students with Distinctions**

Suraj Pratap Singh of B.A (Hons.) Sanskrit 3rd year secured 1st position in the college-cumulative Results.

Naudhad Ahmad of Urdu Hons 3rd year secured 1st position in his discipline.

### **Seminars Organized**

Seminar entitled, 'Basics of Stock Market Investing' by Anish Nandalike, Finance Educator organized on 30 September 2022.

Seminar entitled, 'Road Map to B-School' by Pramod Kumar, President of ISB &M organized on 14 October 2022.

Seminar entitled, 'How to Crack GD & PI' by Swati Bhatnagar, Faculty in New Delhi Institute of Management organized on 17 January 2023.

### **Conferences Organized**

Organised a one day conference on 'From Disabled Bodies to Able Subjects' on 20 March 2023 under the aegis of Zakir Husain Delhi College (Evening).

### **Seminar/Conference Presentations**

Dr. Shahla Tabassum presented a paper titled "Empowering Panchayati Raj Institutions to achieve Sustainable Development Goals in India" in the National Conference on Local Governance in India@75: Issues, Challenges, and Contemporary Developments from 25-26 March 2023 organised by Centre for the Study of Law and Governance, JNU in association with RGNIYD, Tamil Nadu at Delhi.

Dr. Shahla Tabassum presented a paper titled "Status of Indian Women in Higher Education: An Analysis" in the International Conference on Public Administration in India at the 75th Year of independence: Changes and Challenges from 23-24 December 2022 organised by JNV University Jodhpur.

Dr. Shahla Tabassum presented a paper titled "Politics and Administration of Emperor Asoka: An Analysis" in the International Webinar on Emperor Asoka's contribution & His Legacy on 10 April, 2022 organised by Department of Sanskrit, Marwari College, Lalit Narayan Mithila University, Darbhanga, Bihar.

## **Library Development**

Number of text Book in Text Book Section up to 2021-2022 : 30524

Number of text Books added in Text Book Section during 2022-2023: 62

No. of Books in General Section up to 2021-2022 : 65569

General/Other Books added in General Section during 2022-2023: 834

Number of monthly, fortnightly and weekly magazines in different languages:

English : Monthly -6, Fortnightly-4, Weekly-4

Hindi : Monthly-4, Weekly-3

Urdu : Monthly-4, Weekly-2, Bi annual-01

Arabic : Fortnightly-01

Bengali : Fortnightly-01 (Total-30)

Number of News Papers in different languages:

English-4, Hindi-4, Urdu-2, Bengali-1 (Total-11)

Spine of books printed through thermal printer installed in the Library.

Created Enabling unit in the Library for Visually Impaired students and faculty members.

Purchased separate computer with printer, NVDA screen reading software and KIBO XS Scanner for enabling unit.

Total No. of Books in library: 96989

Total No. of Magazine and Journals subscribed: 41

## **Faculty Strength: 100**

## **Financial Allocation and Utilization**

Grants Allotted: Rs. 3915.56 Crore

Grants Utilized: Rs. 3842.85 Crore

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## GENERAL FACILITIES

### ALUMNI AFFAIRS

As a part of the Centenary Celebrations of the University, the Alumni Affairs Office undertook preparations for a mega “Centenary Alumni Meet” event. The objective was to connect alumni with their alma mater, which would see participation from eminent alumni from diverse spheres.

Hon’ble Vice Chancellor felicitated eminent alumnus Prof. C. Jagdish Chennupati, who has received Australia’s highest Civilian Honour, AC, Companion of the order of Australia, for his contributions to physics and engineering and has also been elected as the next President of the Australian Academy of Science.

DU Alumni Association (DUAA) continues to play its statutory role in University decision-making. DUAA representatives to the DU Court are Mr. Hari Shankar Gupta, Prof. Virendra Kumar Agrawal, Prof. Jai Prakash Sharma, Mr. Aman Kumar, Prof. J. L. Gupta, Mr. Rajesh B Mangla FCA, Adv. Nathu Ram Sharma, Dr. Sanjeev Kumar Singhal, Dr. L. S. Chaudhary and Mr. Swarn Swarup Dubey. An online membership registration was initiated to facilitate and enhance the membership of DU Alumni Association (DUAA) through the Samarth Portal. Fresh membership and renewal of DUAA were carried out within the norms.

As per Ministry of Education regarding Guidelines for Central University Endowment Fund (CUEF) for the purpose of mobilizing donations, funds and contributions from well-wishers, alumni, philanthropists and Industries for the development of Students, Faculties and Institutions, University of Delhi has constituted, a seven-member Delhi University Endowment Fund Board (DUEF) with the following composition:

Prof. Yogesh Singh, Hon’ble Vice Chancellor (Chairman)

Prof. Balaram Pani, Dean of Colleges

Prof. Shri Prakash Singh, Director South Campus

Dr. Vikas Gupta, Registrar

Finance Officer

Sr. Professor Shyama Rath, Dept of Physics & Astrophysics (Dean, Alumni Affairs)

Prof Anil Kumar, Dept. of Commerce.

Further, University of Delhi has established a not-for-profit Section 8 company by the name of “University of Delhi Foundation” incorporated under Section 8 of the Indian Companies Act 2013. Efforts and plans are ongoing for strengthening the Alumni engagement.

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### CULTURE COUNCIL

The Culture Council of the University of Delhi has developed an array of programs and projects to achieve its objectives. One of its core focuses is nurturing a diverse range of performing arts groups and providing a platform for student performers to explore various artistic disciplines at all proficiency levels. Throughout the year, the Culture Council engages students through captivating performances, enlightening workshops,

and informative talks, often integrating arts into the curriculum through collaborations with different colleges, faculties, and industry professionals. We also raise awareness about pertinent social issues and foster positive changes and activism among the student community. Through mentorship, networking opportunities, and resources, the Culture Council also supports students interested in cultural entrepreneurship, empowering them to turn their passion for art and culture into sustainable ventures.

#### Major Activities and Achievements

Tbilisi Akhmeteli State Drama was organized from Georgia on 7 September 2022 at Hindu College. A hindi historical play 'CHANAKYA' was organized on 30 November 2022 at Rugby Stadium.

Various competitions were also organized as follows: (i) Mime Comp on 13 February 2023 at HRCA. (ii) Folk Orchestra competition was organized on 14 February 2023 at IP College. (iii) Folk dance competition was organized on 20-21 February 2023 at Miranda House.

Eight motivational sessions on communication skills, confidence building, redefining aptitude, presentation skills and public speaking were organized at various colleges and centers. Three-day workshop on drawing and painting was also organized on 21-23 March 2023 at the Conference Centre, University of Delhi. Office of Culture Council played a pivotal role as the Nodal Office for all Undergraduate(UG) Admissions under the Extra-Curricular Activities (ECA) Category.

#### Objectives and facilities

Culture Council is an active cultural forum of University of Delhi and involved in organizing various cultural events throughout the year. It is actively engaged in developing and promoting art and culture among the students. Culture Council organizes several cultural programs around the academic year. These cultural activities include:

Debates (both in Hindi & English)

Theatre and Street Plays

Music (classical, semi-classical, vocal, instrumental)

Creative Writing (both in Hindi & English)

Inter-college Competitions

Dances (classical, folk)

Workshops for painting, clay modelling, wire sculpture, theatre

Painting Exhibitions

Photography Exhibitions

Furthermore, objectives of Culture Council include:

Encourage and promote the study and practice of arts among the students and staff of the university. Inculcate the value of respect for our diverse socio-cultural heritage.

Instill sensitivity in interpersonal relations and a sense of human care through cultural expression and interaction.

Provide guidance and assistance in professional, infrastructural, and fiscal manner.

Coordinate and monitor the organization of socio-cultural activities and programs in faculties, departments and colleges/institutions affiliated with the University.

Coordinate socio-cultural activities of various clubs, societies, forums and similar bodies in the University and colleges.

Identify and nurture genuine socio-cultural talent and interests of the students and the staff.

Contribute to the cultural enrichment of education.

Other Significant Information:

Office of the Culture Council is organizing various cultural-cum-academic activities at college level during the month of August-November 2023 as India is heading the G20 Leaders' Summit for the first time in 2023. The activities will aim to showcase the culture (through cultural programs), contemporary issues and future bilateral possibilities (through debates & symposiums, etc.). Eighteen Nodal centres (Colleges and Departments) of the University of Delhi are identified by the Office of Culture Council based on their available resources, interest, and capability to participate in the activities.

The Office of Culture Council is also in the process of organizing Inter-college competitions as recommended in Steering Committee meeting on 12 January 2023, in five main categories during the month of September-October 2023 in following categories:

Music (Folk Orchestra)

Dance (Folk/Tribal dance)

Theatre (Mime)

Literary Events (Debate)

Fine Arts (a) Poster Making (b) Rangoli (c) Mehendi (d) On the spot photography (e) On the spot painting

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### **DELHI UNIVERSITY COMPUTER CENTRE**

Delhi University Computer Centre is involved in the proper strategic planning, oversight and working of the University's IT infrastructure, resources and services. It is involved in consulting with academic and administrative units to evaluate their IT requirements, capabilities and requests along with suggesting them the possible solutions. Managing IT infrastructure and services of University of Delhi including academic and collaborative applications, accessible technology, administrative systems and information management, classroom technology, computing infrastructure, customer service, data centers, information security and privacy, IT services and strategic sourcing, networking, technology process continuity and telecommunications are also other salient features. DUCC is constantly working closely with the administrative Heads, Deans, Office Bearers and appropriate governance committees (IQAC, Planning, Admissions, Examinations, Libraries etc.) to determine IT needs, policies, priorities and resource allocations. Representing IT interests of University of Delhi at the national and international levels and collaborating with the organizations of repute at National and International levels through MoUs and other possible ways to collaborate are other initiatives of DUCC.

## **DUCC Digital Initiatives**

### **Incorporation of Indigenous Bilingual University Website**

University of Delhi incorporated indigenous bilingual website with a new robust design to facilitate all stakeholders with not only the easy access to information, but also the utilization of that information for optimum output. The University website is an authentic source of information for all users. It is accessible through following links: [www.du.ac.in](http://www.du.ac.in) [www.uod.ac.in](http://www.uod.ac.in).

### **Enterprise Resource Planning-ERP (e-Gov) Digitalization of DU through Samarth (e-Gov) ERP**

Samarth is an Open Source, Open Standard enabled Robust, Secure, Scalable and Evolutionary Process Automation Engine for Universities and Higher Education Institutions by MHRD. It has 9 core modules and 40+ sub modules to smoothen the functioning of university processes. Samarth will help the University to migrate to a system which is secure, reliable and scalable. The University has initiated the process of Samarth implementation.

#### **DU e-Gov Samarth**

Samarth is being implemented by the University of Delhi. The objective is to provide flexible solutions with seamless integration of diverse processes to provide effective access to information to all the stakeholders of the University.

#### **Modules available on DU portal**

Various modules related to Academics and Admissions, Student Life cycle management, Examination, Training and Placement, Timetable, Online Attendance System, Enrolment No. generation system, Finance and Accounts – Grants Management, Assets and Inventory, Research Projects Management, Online Fees, Vendor Bill Tracking Management System, HR and Payroll – Recruitment, Employee Information System, payroll, Leave Management, Administration – Estate Management, File Tracking, Grievance Management and Redressal, Legal Case Management are available on the DU portal.

#### **Automation of University process**

Online forms that were launched last year were further strengthened to cut down the manual intervention and to provide the services. The details of the various other automation initiatives are as follows:

Campus is Wi-Fi enabled, Application Campus Wi-Fi reset of password Email No Dues Certificate.

GeM User Registration

E-Procurement User Registration

Web-space Registration for Departments / Colleges/ Centers / Hostels Medical Reimbursement

#### **Setting up of Helpdesk / Samarth e-Gov Centre**

e-Gov Centre has been established at DUCC to facilitate students and faculty members and staff to get support for various services being offered by DUCC including DU eGov Samarth. Constant support is provided through a dedicated phone, WhatsApp, email and in-person visit.

Online OBE Examination with support of Samarth

University of Delhi conducted an 'Online Open Book Examination' with the support from Samarth portal of University of Delhi.

Online Admissions with support of Samarth

University of Delhi conducted online admissions of various UG / PG/ M.Phil. / Ph.D. programmes including Foreign Students and Faculty of Medical Sciences, with the support from Samarth portal of University of Delhi.

Implementation of following modules for Online Facility to students

Online Digital Degree

Online application for Transcript

Usage of Plagiarism detection tool (URKUND)

Faculty members and departments have been facilitated with an online plagiarism detection tool (URKUND/ Original). This is extensively being used with 1182 users and numbers are ever increasing. During last year 68,967 research papers / books were checked for plagiarism.

Microsoft Campus License to facilitate faculty members and students

In order to facilitate faculty members and staff members, campus agreement has been made with 'Microsoft' for availing Operating Systems for Windows and also Microsoft Office along with various other MS softwares. Microsoft Teams accounts facilitated faculty members and also students to conduct various conferences and other events.

### **VPN Facility for Faculty members to access e-Resources from home / anywhere**

Faculty members were provided with a VPN facility so that the e-Resources could be accessed remotely from their homes or anywhere.

Email System integrated with G-Suite

DUCC integrated the email services which are hosted in house over open source 'Zimbra' platform with G-Suite. As a result, the user experience about the availability of services and space requirements has increased manifold. All the stakeholders have access to all the services like Classroom, Google Meet, Drive, Sheets etc.; which enable them to be part of the Online Teaching Learning process.

C-Panel on Cloud for website hosting for Departments / Centers / Hostels / Research Projects

In order to provide different departments/faculties/colleges better experience, C-Panel -Web Host Manager (WHM) has been configured and websites are migrated to the Cloud server. The WHM platform has provided a more secure and flexible platform to the users.

Security Layer on Web-Hosting

All websites as sub-domains on du.ac.in are secured through SSL (https).



### Bandwidth of 10 Gbps at both the Campuses

The bandwidth utilization at both North & South Campus and associated colleges was utilized to its full capacity. The National Knowledge Network (NKN) continued to provide 10 Gbps bandwidth. University of Delhi continues to be among the highest utilizers of NKN resources across the country.

### Campus Connect Project

With the grant received from MHRD for augmentation of Wi-Fi Network and to establish the robust backend, DUCC reestablished the connectivity to all the departments and increase the terminated bandwidth from existing 1 Gbps to 10 Gbps. The bandwidth among the core switches and distribution switches is envisaged to increase from 10 Gbps to 40 Gbps. Buildings across the campus would be connected through a hybrid network with ring architecture to ensure maximum availability of network. Entire campus buildings will be part of the ring and connected from two sides so that the network will remain available even if the network gets disrupted from one side.

### Campus Wide Software

DUCC continue to provide the following Network License Software for the use of University faculty, staff, research scholars, PG and UG Students:

SPSS V 22 + AMOS (Windows 32 bit & 64 bit, Unix and Mac platform) Matlab R2014b (Windows 32 bit & 64 bit, Unix and Mac platform) Sigma Plot 12 (for Windows Only)

University has also procured Microsoft Campus License which includes Windows, Microsoft Office for all Faculty members, Staff and Student Labs of various Departments.

### **Campus wide Wi-Fi at both North and South Campuses with AAA Authentication**

Campus wide Wi-Fi was successfully launched and running across both North and South Campus. The service is available to faculty, students and staff of the University. At present all the faculty, staff and students who want to avail themselves of the Wi-Fi facility have been provided campus wide Wi-Fi access with individual login and password. The Wi-Fi setup has been built to have Authentication, authorization, and accounting (AAA) at individual internet user level. More than 6000 users have already availed the Campus Wi-Fi facility, and the count is increasing day by day.

### Network monitoring

In order to proactively monitor the Wi-Fi network, the monitoring software (Zabbix) is put in place which can help in proactive troubleshooting and help in maintaining maximum uptime for network, servers and applications.

### College Network

The bandwidth of 100 Mbps continued for all the off-campus colleges. In view of the requirement to maintain the maximum uptime of internet services, DUCC has taken strong steps to ensure that the college VPN connectivity should be in ring architecture. In case of disruption of VPN connectivity from one side the network remains available from the other side of the ring.

### Live Webcasting through YouTube

DUCC has been putting up all major events of university live e.g. Annual Convocation, Foundation Day, Centenary Events etc. DUCC is also maintaining a repository of Photographs and Video as [glimpses.du.ac.in](http://glimpses.du.ac.in).

### Microsoft Campus Licences Trainings Conducted at DUCC

DUCC has organized various Online training programs for the faculty, staff, Research Scholars, PG students, college system administrator/ technical staff covering all the verticals starting from the basic to advanced courses.

### Regular Activities

Apart from new initiatives, Delhi University Computer Centre (DUCC) designs and administers India's biggest educational IT network feeding more than 15000 devices through wired network and more than

1.5 lakh users over Wi-Fi for Internet needs as on date through National Knowledge Network (NKN). DUCC is managing the University's core IT infrastructure comprising of:

Data Centre with more than 60 active devices including Servers, Core switches, Zonal switches, Routers, UTM devices, Storage etc.

Wired equipment comprising of more than 400 network switches (and increasing) Wi-Fi equipment comprising of 100+ switches and 500 wireless access points Fiber optic cable network of 43 kilometers laid across both campuses

Servers hosting different applications like College and Department website along with the University's main website, DNS, Proxy, Email, Payment Gateway, License and Webcast server.

Colocation servers for Examination, Administration, Finance, School of Open Learning, Library catalogue and Braille software etc.

DUCC is also actively doing/providing Content Management of the University's website, Technical Support & Regular updates on the University's Facebook Page, Web Hosting services for Colleges / Departments / Centers, Faculty Members Web Hosting Services. Apart from Network and Website designing and maintenance, DUCC has successfully provided technical support and hosted videos for events such as Public Lecture series, Studio lectures, Gyanodya, Annual Convocation, Antardhvani etc.

DUCC has more than 1500 members comprising PG students, Research Scholars, Faculties and staff who can avail internet and printing services free of cost. The future of DUCC includes virtually combining the Campus and College Wi-Fi so that users remain connected to the internet irrespective of the location. This will ensure seamless connectivity for end users.

### Provisioning of ICT VPS to different units of the University Webcast Live Streaming

Provisioning of technical infrastructure for core events of DU viz. AC/EC meetings, Court Meeting and other key events/meetings. This includes Wi-Fi setup, computing facilities etc.

### Management of e-Procurement and GeM

Single points of solution to all e-Procurement and GeM related utilities are provided to the University community.

Following key supports are provided to administrative units and departments: - Provisioning and facilitating of GeM accounts

Provisioning and facilitating of e-Procurement accounts.

Training progra for DU officials/faculty from various Administrative Offices, Departments, Colleges.

GeM - 594 704 Users of 121 129 Departments -

DU e-Procurement Users: appx 550 Users of 58 Departments and 37 Colleges

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## **DELHI UNIVERSITY LIBRARY SYSTEM (DULS)**

### **Major Activities and Achievements**

Delhi University Library System (DULS) is a federally managed combination of physical and virtual collections and associated information services, where in on the one hand, the traditional system of library holding is maintained and on the other hand, ICT based services are implemented. The library system has taken several measures to revamp the library and information services provided through its 33 constituent libraries, in keeping with the newly revised Ordinance XVI. A brief listing is given below.

### **Print Resources**

The Library System added 6574 volumes of books to its collection by purchase from Capital Assets Budget. The total collections as on 31-03-2023 are 1716705 volumes. The current print Periodicals subscribed by DULS is 998 which are renewed out of maintenance grant. It also holds a well-organized collection of 49173 thesis/Dissertation.

### **Electronic Resources**

The DULS continued to strengthen the accessibility of electronic resources to the users. Thereare 49 electronic databases in different subjects and disciplines that are available to the user community of the University.

### **Audio Book Resources and Braille Library**

The Braille Library is actively engaged in supporting teaching, learning and research for the visually impaired students and faculty members. It has 3 audio book production studios, 1 high-capacity Braille embossers, network of 22 latest computers with software like Daisy System, Sparsha, OBI, PUTTY, Sigtuna, Jaw, Duxbury, Leap Office etc. There are 1863audio books, 2020 Braille books, 1873 e-text and 403 books in E-Pub format. Presently 15 members are enrolled in the library. It has circulated 200 books on CDs and Pan drives. Braille Library is also a member of Sugamya Pustakalya under which the user can download the study material in the form of Audio Books or E-text by remote access.

## **Activities In Other Major Libraries:**

### **Central Library (Including the Arts Library)**

The Central Library has been able to add a collection of 1930 volumes in the last financial year with a membership of 4926 users and the circulation of 21967 books. The library has been providing Plagiarism Checking Services to students and teachers. A dedicated desk has been established with trained staff to check research work and generate similarity reports. The library subscribes to 248 periodicals in print format. The total collection of thesis and dissertation in Central Library is 49173. Several visitors from outside Universities like Agra, Banaras, Priyagraj, Rohtak, Mahendergrah, Kerala, Karnatak, and Mumbai etc. visited the library.

### **Central Science Library**

The Central Science Library has a membership of 2555 users with a circulation of 38278 books. The library received and sent several documents / articles to and from different libraries in the country through JCCC. The current periodicals subscription including print and online is 195.

### **Ratan Tata Library**

Ratan Tata Library has a membership of 1059 users. The RTL has augmented its computing facility and unique e-library with 107 terminals to access various resources and one High End server. The total periodicals subscription of RTL is 236 including print and online journals. It also has approx. -1500 thesis and dissertations in its collection. It also acts as a deposit center of UN's and Govt. of India's publications.

### **South Delhi Campus**

South Delhi Campus Library has been able to add a collection of 1458 volumes in the last financial year with a membership of 1277 users and the circulation of about 9528 books. It has Subscription of 104 print journals, holds 15928 back volumes of periodicals and is fully computerized. Library activities like circulation-Issue-return, reminder, membership, Acquisition-ordering and billing, Serial Control, OPAC takes place in a fully automated environment using Troodon Library Management system.

### **Faculty of Music and Fine Arts Library**

Library of Music and Fine Arts has a total collection of 16793 books with a membership of 602 users. In its digital collection it has 2643 cassettes, 1187 CD's and 104 Talking Books beside 344 Braille Books. As an extension of the Audio-Visual Library, it has a Listening Room with 10 CD players where students can listen to the audio material.

<b>Category of training</b>	<b>Number of training courses organized Conducted</b>	<b>Topics</b>
e-governance programs and IT projects	59	Samarth e-Gov ERP, UG/PG/Ph.D. Admission Portals, Examination portals for colleges, departments and students, OBE portal for administration, evaluators and

students for uploading answer sheets.

Specialized training	Specific Modules of Samarth portal i.e. Employee Profile, Payrol Management System, Leave Management System, Estate & Buildings, Inventory Management System, Vendor Management System, File Tracking System, IT Support/Helpdesk	44
	Government e-Marketplace/Central Public Procurement Portal Training for Administrative staff/Faculty of the University and its colleges	
	Internet Technologies and Email, Virtual Private Network training	
General training		24
Others		19

Honours/Distinctions

#### SEMINARS / CONFERENCES / WORKSHOPS/ EXHIBITION

Dr. Rajesh Singh, University Librarian, has delivered several lectures in workshops on a variety of issues that were of interest to the academic community. In addition, he has also served as a panelist in many academic talks. Few of the activities are listed below: -

Dr. Rajesh Singh has delivered a lecture as invited speaker to 16<sup>th</sup> International Conference on webometrics, Infometrics and scientometrics (WIS) & 21 Century, Thailand from 10-12 November 2022.

Dr. Rajesh Singh Attended 3 days convention 13<sup>th</sup> International Convention on Automation of Libraries in Education & Research Institutions (CALIBER) 2022 from 17 to 19 November 2022.

Dr. Rajesh Singh Invited by Asian Library Association (ASILA) for a panel discussion on “Challenges Before Library Professionals” on Saturday, the 26 of November 2022 at Aligarh Muslim University.

Dr. Rajesh Singh Presented a paper during the 8<sup>th</sup> International Conference of Asian Special Libraries with the theme “Advancing Asian Special Libraries towards the Fifth Industrial Revolution”. The conference was organized by the special libraries Association Asia Community. (SLA Asia) in Cebu City, Philippines during 22-24 February 2023.

The following activities, workshop & webinars were conducted by the DULS, which received over whelming response from the user:

Organized Webinar on “Use of Web of Science in Research” held on 7 April 2022.

Organized an International Conference on Academic Libraries (ICAL- 2023) on 5-8 April 2023 at Conference Centre, University of Delhi on the theme “Transforming Academic Libraries: Evolution, Innovation, Quality, Transfiguration”.

Organized an online event in collaboration with ProQuest, Part of Clarivate on ‘New PQDT Global & Citation Connection: Ideating your Literature Review with New Insight’, held on 14 July 2022.

Organized Author Workshop by SAGE Publishing on 28 July 2022.

Session on Information Literacy & Search Strategies in Vivekananda College, University of Delhi

A Memorandum of Understanding is signed with Information and Library Network (INFLIBNET), Gandhinagar for Shodh Chakra.

Initiated the implementation of Shodh Chakra: An Online Research Management System.

Created DU Research Information Management (DURIM) team to extend support for creation of faculty profile at du.irins.org.

A user awareness Webinar is organized on ‘Managing References made easy using Mendeley

Bibliographic details with full text link of e-books were purchased and uploaded on DU e- Library as well as on e-book portal.

DU e-Library’s online workshop on Librarian’s Day, 12 August 2022.

Webinar on ‘Academic Plagiarism IPR & Plagiarism Testing’ was held on 18 August 2022.

Interactive training session on Database Prowess IQ in collaboration with CMIE on September 22, 2022.

Workshop on EIKON: Financial Analysis & Trading Software in collaboration with CMIE was held on 28 October 2022.

Convocation Exhibition of Doctoral Research was organized on 24-28 February 2023 which was presided by Prof. Balaram Pani

Facilities

### **Delhi University E-Library**

DU E-LIBRARY Platform was launched on 3 December 2021. The DU E- library is the latest initiative to connect with more users and serve them with millions of DU- subscribed and open access e-Resources, anywhere, anytime and on any device.

The DU E-Library serves as a common gateway to:

20,000+ eBooks from top rated Indian and International Publishers including Wiley, Elsevier, Sage, DeGrutyer, Brill, IGI Global, World Scientific, Cambridge University Press and many gold standard open access publishing platforms.

25,000+ eJournals from most renowned publishers like Springer, Taylor and Francis, OUP, CUP, ACS, IOP, Sage, DeGrutyer and more.

10,00,000+ eTheses and dissertations from 1000+ Universities from India and abroad.

1,30,000+ Video Lectures from IITs, IIMs, NITs, ISB, many foreign universities like MIT, Harvard, Yale, UCI, many publisher's broadcast channels like Royal Society of Chemistry and Ted-ED.

Legal Databases include LexisNexis, SCC Online, Westlaw and Manupatra.

News from 50+ eNews publications like TOI, The Hindu, CNN, Time, etc.

Topic collections on emerging areas in Science, Technology, Social Sciences, Arts and Humanities

1000s of Expert Talks and Literary Works in English, Hindi and Urdu for leisure reading

The platform is also powered with:

A single click discovery window for scholars to discover latest research articles from all subscribed and open access publishers; thus, saving time and effort.

A Personal Reading List feature for students to save content for future reference.

An inbuilt remote authentication layer that makes all subscribed e-Resources accessible to students 24x7, from anywhere.

Unique 'Socio Lib' feature that allows users to follow peers and discover library resources in a social manner.

The DU e-library facility is also available on smart phones through the mobile app.

A response team has also been set up by the service provider to cater to student requests and help them take full advantage of the platform.

***Similarity Detection:*** The Central Library is continuing the work of similarity detection for the research assignment submitted by students during April 2022 to March 2023. Central Library has verified a total of 2756 Ph.D. Thesis and M.Phil. Dissertations, other research assignments and faculty research papers for promotions.

***HUMAN RESOURCES DEVELOPMENT:*** Training of Library Attendants was held from 26 May 2022 to 1 June 2022. Training for Semi Professional Assistants was held from 9 June 2022 to 15 June 2022.

***Information Literacy Program:*** DULS continues its information literacy activities with a view to empowering the students, researchers and faculty members to seek, evaluate, use and create information effectively and efficiently. DULS organizes orientation programs, workshops and hands on training.

***Opening of Faculty Publication Corner:*** A faculty publication corner comprised of books written by the faculty members of University of Delhi is developed. In the main hall of the Central Library, it is inaugurated by Prof. Balram Pani, Dean of Colleges.

Other Significant information

## **DULS—Website**

DULS-Website which includes the catalogue of selected libraries (OPAC); a provision of e- referencing, A-Z list of E-journals, Online Information Literacy Tutorial, Subject Portal, ask your Librarian, access to electronic resources including open access resources and several other user-friendly features, is in operation.

## **E-Books**

During the financial years 2022-2023 DULS has been able to procure e-books titles in perpetual access mode. Presently, DULS has 86586 total numbers of e-books. The bibliographic details of these e-books have been incorporated in the DULS OPAC to provide access. Besides, an e-book search facility has also been developed for use by different stockholders. It is available at [www.eb.du.ac.in](http://www.eb.du.ac.in).

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## **DELHI UNIVERSITY SOCIAL CENTRE CO-ED SCHOOL**

### **Alumni reunion**

We were delighted to host a reunion for our alumni, who shared fond memories of the school and pledged their support for future endeavours.

### **Awards and Honours**

We recognized and facilitated our outstanding students and teachers for their exceptional contributions and achievements.

### **Major Activities**

The highlight of this year was our school's Platinum Jubilee celebration commemorating 75 years of educational excellence. We were honored to have Prof. Yogesh Singh, the Honorable Vice Chancellor of University of Delhi as our esteemed chief guest and Dr. Vikas Gupta, Registrar of University of Delhi for the event. Our students actively participated in various extracurricular activities, including sports, arts and cultural events, Zonal level competitions etc.

### **Achievements**

Uditi of Class IX was at II position in the Zonal Science Debate.

Diksha of Class VII was at III position in the Zonal Poetry Competition.

### **Facilities**

Well Equipped Science Lab

Computer Lab

Library

Clean & Hygiene Toilets

Clean & Safe Drinking Water

### **Other Significant Information**

Honourable Vice Chancellor Prof. Yogesh Singh in his address on Platinum Jubilee Celebration conveyed his assurance to support our school's endeavour to upgrade to senior secondary level.



His commitment to this cause is a significant milestone in our journey towards providing comprehensive education to our students.

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## **DELHI UNIVERSITY WOMEN'S ASSOCIATION**

### **Brief History**

Delhi University Women's Association (DUWA) is a social welfare organization and was registered under the Societies Registration Act XXI of 1860 (Punjab Amendment Act 1957) as extended to the Union Territory of Delhi, on 31 October, 1964. It was established with an aim to promote and to carry on social, cultural, recreational, educational and economic activities for the benefits of the women in and around Delhi University. DUWA was started by Dr. Durgabai Deshmukh, a social activist, a great visionary and wife of the then Vice Chancellor Prof. C.D. Deshmukh with the vision of empowering deprived and under privileged women.

### **Major Activities and Achievements**

Yamuna cleaning drive was organized on 5 May 2022. A Workshop on Yoga for humanity was organized on 21 June 2022. Van Mahotsav was celebrated from 1 -7 June 2022. Teachers and parents training programme was organized on 16 July 2022. A one day workshop on "Educational ethics interphase amongst family, school and community" was organized on 23 July 2022. One day seminar on "Participation of women in the freedom struggle of India" - was organized on 27 August 2022. Couple of other activities were also organized.

### **Facilities**

Delhi University Women's Association runs the following Units: 1. Play School- Usha Ganguli Shishu Vihar and Durgabai Deshmukh Balwadi Play School 2. Day care Centre - Vatsalya 3. Hostel for Ph.D. and working Women 4. Mind Body Centre- Naturopathy, Counselling services and Homoeopath 5. Souvenir Shop 6. Sahyog - Tuitions for Underprivileged children 7. Skill development courses- Computer course, music, Painting, craft/ stitching, Dance class, cooking and body care. 8. Foreign language courses- German, Chinese, Spanish 9. Drishti- teaching and project work for Physically and visually handicapped 10. Wall of Kindness- helping hand for poor people in surrounding communities Delhi University.

The primary purpose of this activity is to promote the DU brand and to simultaneously inculcate a sense of pride and belonging amongst the students and other members of the DU community. The design and sale of the souvenir items is being managed by DUWA members. There has been a great demand for some souvenir items like folders, sweatshirts, bags, pens, key chains, mugs, etc.

**Sahyog:** The Sahyog program helps school students of standard from I - XII from the neighborhoods with the objective of improving their academic performances. In this tuition support program, the children are served nutritious snacks and health drinks. Classes are held six days a week from 3-5 pm., and there are about 40 children enrolled in this program.

**Drishti:** DUWA members have made significant contributions through Drishti Programmed by addressing the needs of the visually challenged students at Delhi University. Members read out and record lessons, arrange study materials and provide emotional support to visually challenged people.

Jagriti: Recognizing the growing incidents of cancer among women this program strives to spread awareness through organizing lectures, discussions, screening camps, street plays competitions and other activities among the students at Delhi University.

Computer Literacy Program: In this four-month computer course which is conducted to impart the basic knowledge that includes MS-Word, Excel, PowerPoint, Access and Internet. The aim of this program is to help girls to acquire basic computer skills.

Language familiarization Program: DUWA is taking the initiative to conduct free short-term language familiarization courses for DUWA members, DU staff, faculty and students. The program started with a three-month course of Chinese Language.

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## **DIRECTORATE OF THE HINDI MEDIUM IMPLEMENTATION**

### **Implementation**

Directorate of the Hindi Medium Implementation publishes high standard textbooks in Hindi, primarily on Social Sciences and Humanities for the benefit of under-graduate and post-graduate students who opted for Hindi as the medium of their study. We have published approximately 280 books in various subjects including History, Political science, Education, Commerce, Law, Sports and Physical Education, economics, Philosophy, Geography, Literature, Music etc. so far.

For the year 2023-2024, the Directorate has five new titles, five revised editions and more than a hundred reprints ready to publish. Out of these 17 books are ready to be sent for printing soon including 4 new titles.

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## **EQUAL OPPORTUNITY CELL**

Committed to the vision of an inclusive University and mission of empowering Persons with Disabilities, the Equal Opportunity Cell of the University has continued to endeavor towards the improvement of various facilities for such students during the period April 2022 –March 2023. Some of its salient activities are detailed below:

### **1. Volunteer Support:**

The Equal Opportunity Cell provides need-based volunteer support to students with disabilities for academic purposes. This year 7632 hours were utilized at the Equal Opportunity Cell from April 2021 –March 2022. This support has rendered significant help to students with disabilities in terms of reading services, completing their assignments and filling out their forms etc.

### **2. Conversion of reading materials in an accessible format:**

The availability of material in an accessible format is vital for the study of visually impaired students. Thus, this year nearly one lakh pages were added to our collection of accessible reading materials. The Equal Opportunity Cell had done this work with a new initiative i.e. KEBO Camera-Scanner. Through

the help of this device, it will now be possible to convert books in Hindi and some other Indian languages into e-text format at a faster speed.

**3. Admissions:**

Like every year, important counseling and support were provided to students with disabilities seeking admission to various courses of the University during the period under report. Individualized guidance to such students and their parents helped them resolve their queries and difficulties.

**4. International Day of Sign Languages:**

On 23<sup>rd</sup> September 2022 International Day of Sign Languages was celebrated by Equal Opportunity Cell for deaf communities to recognize and promote the different sign languages around the world. Sign Language is an essential human right for deaf people and signs for human rights. A large number of participants joined the event and Equal Opportunity Cell aware the participants about the importance of Sign language and protecting the linguistic identity of people who are **deaf**.

**5. Centre of Disability Studies :**

The Equal Opportunity Cell has actively coordinated for setting up of the Center for Disability Studies. The Executive Council of the University approved the setting up of the Centre for Disability Studies vide ordinance 20Q of the ordinances of the University. Prof. Anil K.Aneja has been appointed as Director and Prof. Bipin.K.Tiwary as Officer on Special Duty (OSD) of the Centre for Disabilities Studies

**6. Concession/ Waiver of fee in respect of Persons With Physical Disabilities**

Provided that since 2012 Persons with Physical Disabilities have been waived all the fees payable including the Examination fee and other University fees, except Admission fee, subscription towards Delhi University Students' Union, and Identity Card fee for pursuing Undergraduate, Post-graduate, or other courses in the University or its Colleges.

**7. Other Activities:**

Equal Opportunity Cell took many initiatives during the period such as:

- i) The University of Delhi has celebrated its Centenary year from 1<sup>st</sup> May 2022 to 1st May 2023 through yearlong programs/ events, as a mark of commemoration of the historic Centenary year of the University. The University had organized a Centenary Run on 18.11.2022 as part of the Commemoration of the Centenary Year. Equal Opportunity Cell encouraged PwBD students to participate in the Centenary Run and several disabled students with the help EOC Office have actively participated in the Centenary Run.
- ii) The Office of the Equal Opportunity Cell organized a trip to the Auto Expo for disabled students of Delhi University at Greater Noida with the help of NGO Nipman Foundation to view the new cars on 12.10.2022.
- iii) The University of Delhi organized Mann ki Baat: Empowering Divyangjan- A Dialogue on Social Transformation on 27<sup>th</sup> April 2023 wherein the Hon'ble Vice Chancellor along with officials of Delhi University emphasized the importance of inclusion, opportunities, and support for persons with disabilities. They have also highlighted the significance of Mann ki Baat in the context of Divyangjan.

The above clearly demonstrates that despite limited resources, the University, through its Equal Opportunity Cell, has done its utmost to augment the support for students with disabilities, the EOC hopes to further expand its activities in the coming year under the umbrella of Centre for Disability Studies.

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## **FOREIGN STUDENTS REGISTRY**

### **Brief History**

We have very active students who excel in various fields of learning both while studying here and after reaching back to their parent countries.

### **Major Activities and Achievements**

FSR office takes care for the admission of students from overseas countries. FSR has a chequered history of 60 years. We have two categories of admissions: the ICCR sponsored students, and those who pay the fees by themselves. We have thus seen students from all continents. Some of the celebrated scholars have been Heads of State; one of them has received the Noble Prize as well. There has been an increase among the international student community seeking admission to various program offered by the University of Delhi. The office of foreign students receives between 8000-10,000 admission requests from over 100 countries (from certificates courses to Ph.D.)

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## **GANDHI BHAWAN**

### **Brief History**

Gandhi Bhawan, University of Delhi, was established on 24 July 1958. The foundation stone of the building was laid by Late Pandit Jawahar Lal Nehru on 17 December 1959 and was inaugurated by Lok Nayak Late Jayaprakash Narayan on 9 September 1962. Among the dignitaries who attended the inaugural function were Shri U. N. Debhar and Shri G. Ramchandran. Professor Sadgopal was appointed the first Director of Gandhi Bhawan. The genesis pertaining to the establishment of the Gandhi Bhawan lies in the meeting of the Executive Council held on 24 July 1958.

To achieve stipulated objectives, Gandhi Bhawan organizes programs – Lectures, workshops, symposia and seminars on Gandhian Ideology, Discourse on Gita, Yoga and Meditation classes, Gandhi Study Circles in various colleges, International Day of Yoga, World Environment Day, Library, debate, peace marches, poster & slogan, essay writing, painting, declamation contest, etc. One of the important initiative of Gandhi Bhawan is the Library-cum-Reading Room comprising of Gandhian Philosophy and Indian culture. As on date Gandhi Bhawan has 56 colleges under the aegis of Gandhi Study Circle.

The Gandhi Bhawan has provided a forum for occasional discussions on Gandhian thought and practice; it has organized national/ international seminars; it has endeavored to promote awareness of Gandhian concept and methods of health and well-being. It has built up a sizeable working library. And it provides the academic meeting ground for socio-cultural issues.

### **Major Activities and Achievements**

International Day of Yoga: Gandhi Bhawan celebrated the 8th International Day of Yoga 2022 ‘Yoga for Humanity’ under the auspices of Azadi Ka Amrit Mahotsav and Centenary Celebrations of University of

Delhi (1922-2022), as Yoga Week from 21-27 June 2022. A mega event on 22 June 2022 was organized at the Multipurpose Hall of University Stadium with the august presence of Yogrishi Ramdev ji, Founder, Patanjali Yogapeetha, Haridwar and Shri Arjun Ram Meghwal ji, Minister of State for Parliamentary Affairs & Culture, Govt. of India.

Inaugural Ceremony of International Yoga Day was organized at Gandhi Bhawan, University of Delhi. At the onset, Lighting of Lamp and Saraswati Vandana took place. Yoga Protocol was followed. All present in the auditorium sang the National Anthem. The program started at 8:00 a.m. with Yogasanas and Meditation. More than 500 students, faculty and staff registered themselves for the Yoga Week. At 9:00 a.m., the program started with the Introduction to the program and welcome speech by Prof. KP Singh, Director, Gandhi Bhawan. On this occasion, Dr. Tanuja Manoj Nesari, Director, All India Institute of Ayurveda, New Delhi, was the Chief Guest on this occasion. Among others, Prof. Balaram Pani, Dean of Colleges, Prof. Shri Prakash Singh, Director, South Campus, Dr. Vikas Gupta, Registrar, Prof. Payal Maggo, Director, Campus of Open Learning and Prof. Rajni Abbi were also present on the Dais. The Director, then, welcomed the Chief Guest and dignitaries present in the ceremony by Sapling Plants, Mementos, Souvenir, Coffee-table book of University of Delhi. The very next day, a Grand event was organized at the Multipurpose Hall of University Stadium with thousands of students, faculty and staff members of Delhi University with the august presence of Yogrishi Ramdev ji, Founder, Patanjali Yogapeetha, Haridwar and Shri Arjun Ram Meghwal ji, Minister of State for Parliamentary Affairs & Culture, Govt. of India. First, the National Anthem was sung. Lighting of Lamp with Saraswati Vandana was sung with the National Anthem. The welcome address was delivered by Prof. Yogesh Singh, Vice Chancellor, University of Delhi.

### **Honours/Distinctions**

Gandhi Bhawan was awarded the First prize in medium category Garden for outstanding contribution to the maintenance and improvement of medium category garden on the Annual Flower Show at University of Delhi.

### **Facilities**

Yoga & Meditation classes, Khaddi (Handloom) classes, Charkha Spinning classes, Typing-Shorthand course in Hindi-by-Hindi Prasar Kendra (Govt. of NCT of Delhi). Apart from that he also conducts short-term courses on Yoga, Charkha, Khaddi.

### **Other Significant Information**

Apart from organizing various programmes/ events, Gandhi Bhawan also collaborates with academic Institutions – viz. Departments and Colleges of University of Delhi and other Universities and academic entities including the Govt. of India entities like, Gandhi Smriti, in order to propagate Gandhian Philosophy and Action.

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## **GARDEN COMMITTEE**

### **Major Activities and Achievements**

A series of native trees and large, medium and small shrub-planting events involving 1342 saplings from diverse taxonomic plant families was conducted during the months from August - October 2022 to enhance and rejuvenate green spaces. High quality saplings were procured from Saharanpur, Uttar Pradesh, and saplings raised by 'mails' of the University Garden committee were also used. This green endeavor to

educate stakeholders about the essential role of plants for healthy ecosystems was initiated in 2018 with monsoon plantations.

Around thirty-eight colleges, Institutes, Departments and Hostels of the University enthusiastically participated in the Vriksharopan 2022 drive with tree and shrub species like ‘Belpatra/Bael (Aegle marmelos), ‘Gulmohar’ (Delonix regia), ‘Mango’ (Mangifera indica), ‘Karonda’ (Carissa carandas), Arjun (Terminalia arjuna) etc. Renovation of 5 lawns of University Stadium near multipurpose hall during the year 2022 -23.

### **Honours/Distinctions**

Was awarded with nine running cups and trophies for competing in various categories like lawns, gardens, medicinal, fruit & vegetable plants grown in pots organized by Indraprastha Flower Show Society held on 10-11 February 2023.

Was the winner of two trophies for the best vegetable gardens and lawns in Flower Show organized by Delhi Technology University held on 9-13 March 2023.

### **Facilities**

The ‘mails and staff of the University Garden Committee provided support in Decoration and Flower arrangements at Convocation Day, and various official functions/activities like seminars, conferences and lectures during the centenary Celebration of the University of Delhi throughout the day.

### **Other Significant Information**

65th Annual Flower Show of the University of Delhi, based on the theme “Pushpotsava” 2023 – Celebrating Centennial Blossoming of University of Delhi” was held on the 2 of March 2023 at the Gautam Buddha Centenary Garden (opposite the Vice-Regal lodge), North Campus, University of Delhi. The event was inaugurated by Hon’ble Shri Satish Upadhyay, Vice Chairperson, New Delhi Municipal Council (NDMC), in the presence of Prof. Yogesh Singh, Hon’ble Vice- Chancellor, University of Delhi; Dr. Vikas Gupta, the Registrar; Prof. Balaram Pani, the Dean of Colleges; Prof. Sri Prakash Singh, Director of South Campus, Prof. Rajni Abbi Proctor & Chairperson of Flower Show and other dignitaries of the University and beyond. The University Garden was resplendent with floral exhibits, succulents, cacti, foliage plants, bonsais etc. that reflected the colors and diversity of spring blossoms and greenery.

Several students competed in on the spot photography competitions. Another competition for decorating Selfie Point was introduced for the first time to make the venue of the event more beautiful. The contest was a great success with participation of nine colleges of University of Delhi. Rolling shields, cups and trophies were awarded to various colleges, hostels/halls, schools and institutions that competed in categories of potted plants, lawns & gardens. The stupendous efforts of university gardeners (malis) were recognized and Best Malis were felicitated for their outstanding service towards upkeep of gardens.

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## **INTERNATIONAL GUEST HOUSE**

### **Brief History**

Repair & Maintenance of the following below mentioned has been done as per the need and to provide comfort and quality of stay to the University guests during the year:-

Routine repair work of the surroundings of the building, electric/sanitary fittings, wooden furniture and cooking station has been done.

Renovation work of the lounge, storeroom, dining room, conference hall has been done.

Installation of fiber sheet over the roof of Genset to provide new lease of life, fixing of granite coping over the parapet wall to protect seepage & granite flooring over the UGR to provide new lease of life has been done.

### **Major Activities and Achievements**

Catering arrangements were made to six hundred forty-one (641) requests received from Centenary Year Celebrations Committee, Conferences of the Departments and other Academic/Administrative meetings of the University/Colleges.

One Thousand Four Hundred Ninety-Seven (1497) guest rooms were provided with boarding & lodging facilities for the guests invited by University/Colleges. Guests showed their satisfaction and appreciated the services provided by the staff of IGH.

### **Facilities**

Procurements of linen, kitchen utensils, steam iron, cloth stands, LED TV's, oil filled heaters, microwave, tea wending machine, electric induction plate, mats, curtains, carpets have been made as per the need of the IGH and to provide quality of services to the University Guests during the year.

### **Other Significant Information**

1. Installation of twenty-five (25) NEW CCTV setup with the facility of night vision.

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### **NATIONAL CADET CORPS**

NCC in India was formed in the year 1948. It can be traced back to the 'University Corps', which was created under the Indian Defense Act 1917, with the objective to make up for a shortage of personnel in the Army. In 1949, the Girls Division was established to provide equal opportunities to school and college-going girls. The NCC was given an inter-service image in 1950 when the Air Wing was added, followed by the Naval Wing in 1952.

The enrolment of NCC Cadets in the Senior Wing and Senior Division of the colleges within the University of Delhi was managed by individual college NCC units. NCC Cadets actively participated in a wide array of university-level activities, including events like the University Convocation, Road Safety Program, Republic Day, Independence Day, and Constitution Day.

NCC Cadets also enthusiastically engaged in various national campaigns such as the Fit India Campaign, International Day of Yoga, Swachh Bharat Abhiyan (Clean India Campaign), Ekta Diwas (Unity Day), Tree Plantation initiatives, Ek Bharat Shreshtha Bharat Camp, CM Rally, Republic Day Camp, and Youth Exchange Programs. Notably, the Combined Annual Training Camp, Special National Integration Camp, Pre-Republic Day Camps, CM Rally, and participation in events like Amar Jawan Jyoti were organized by the NCC Directorate Delhi, utilizing a hybrid mode and day camps.

NCC Cadets from various colleges within Delhi University actively took part in various events of Centenary Celebrations of Delhi University addressed by honorable Prime Minister Sh. Narendra Modi ji, Sh. Amit Shah ji, Sh. Rajnath Singh ji including events such as the Vice Chancellor's Guard of Honour and played a significant role in the Independence Day and Republic Day celebrations.

Annually, NCC Cadets have earned recognition and honor for the Delhi Directorate by successfully gaining admission to prestigious military academies in the country through the NDA/CDS entry and the NCC Special Entry Scheme.

Furthermore, Value addition courses on NCC were added in alignment with the National Education Policy's Undergraduate Curriculum Framework for 2022 (NEP UGCF 2022).

This comprehensive involvement and achievements of NCC Cadets in various activities and their significant contributions to the nation are a testament to their dedication and commitment to both personal growth and the betterment of society.

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## **NATIONAL SERVICE SCHEME**

### **Brief History**

The Contribution and achievement of NSS have been noteworthy and much acclaimed with year passing year and since its inception in 1969.

### **Major Activities and Achievements**

Pariksha Pe Charcha 1 April 2022

National Integration Camp at Bangalore: 22 May to 28 May 2022

National Integration Camp at Delhi: 23 May to 29 May 2022

Observation of World Bicycle Day 3 June 2022

Cyber Jaagrookta Diwas 5 July 2022

National Adventure Camp: 12 September to 21 September 2022

State Level Trial for Selection of NSS Volunteers

National Unity Day 31 Oct. 2022

Celebration of Constitution Day 26 November 2022

Republic Day Parade Camp 2023

National Youth Festival 12-16 January 2023

National Integration Camp: 26 February to 4 March 2023

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## NON-COLLEGIATE WOMEN'S EDUCATION BOARD

### Major Activities and Achievements

Admission Process 2022-23: - The admission process has been completely online. Registration as well as the admission form was filled through online process. A separate Grievance Addressal mechanism was introduced for NCWEB students. 100% seats were filled under SC category in UG Admissions.

Total Admission in UG Courses (2022-2023) :11319

Total Admission in PG Courses (2022-2023): 378

### Facilities

During the Covid -19, NCWEB provided the E-resources links and soft copy of study material given by the guest faculty to the students at various NCWEB centers.

Financial aids of Rs. 3000/- was provided to 234 needy and deserving students during the year 2022-23 approx. amount Rs 7,02,000/-

### Other Significant Information

Interpersonal Communication Skills organized by MAITREYI COLLEGE NCWEB TEACHING CENTRE and approx. 250 students participates in this orientation which was held on 6 April 2022.

Yoga & Traditional Medicine Camp was organized during the month of June 2022 and approx. 300 students enrolled for the same. Yoga has been acknowledged worldwide to be a medium to bring joy, health, peace from within and deepens a sense of connection in an individual.

NCWEB in collaboration with DUCC organized a Skill development Training “Banking and Financial Literary” on 14 September 2022 which was sponsored by ICT Academy. 150 NCWEB students with annual family income less than Rs 4 Lakh participated in this workshop. 100 students from the 26 UG teaching centers of NCWEB participated in the program and placement support and facilitation by ICT Academy was given to the successful students in the program.

Delhi University Computer Centre, DU provided 75 hours of training in their labs for our students. An MOU Signing Ceremony program was held at the Convention Hall of Delhi University with Dr. Vikas Gupta, Registrar, University of Delhi, Prof. Balram Pani (Dean of Colleges, DU), Prof. Sanjeev Singh (Director DUCC, DU), Mr. Raghav Shree Niwas (Head of ICT Academy), Prof. Ratnabali, (Dean Academics, DU), Prof. Geeta Bhatt (Director, NCWEB) were present. The MOU was signed between the Registrar Dr. Vikas Gupta and Mr. Raghav Shriniwas.

A Health Checkup Camp was organized by MAC NCWEB TEACHING CENTRE on 9 July 2022 with approx. 467 students enrolled in this camp.

Fifth Rashtriya Poshan Maah is a signature program of the Government of India held during the month of September where intake of Nutritious food specially for Women and Children is publicized. NCWEB in collaboration with National Commission for Women, organized the fifth Rashtriya Poshan Maah program on 26 September 2022. Ms. Meeta Rajivlochan, Member Secretary of the National Commission for Women was the Chief Guest of the program who emphasized the importance of traditional foods and how the recent pandemic has taught us to consume nutritious food. To grace the occasion NCWEB invited Dr. Vikas Gupta, Registrar, University of Delhi as the Guest of Honour.

A Two-Day National Seminar entitled “Footprints of Women in Making of Bharat” was organized by Non-Collegiate Women Education Board (NCWEB) on 25-26 November 2022 at the Conference Centre, University of Delhi. A total of 206 abstracts were received for presentation as research papers in the national

seminar. The seminar was an initiative to recall the role of women, as architects in the making of Bharat, their struggles and contribution to the freedom struggle

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## **STUDENTS' WELFARE OFFICE**

### **Brief History**

The Office of Dean Students' Welfare at the University of Delhi is dedicated to promoting welfare activities that contribute to the comprehensive and well-rounded development of students. In the academic year 2022 - 2023, the office has undertaken various initiatives as listed below.

Placements and Internships JOB MELA

Grievance Redressal Counselling

Financial Support Scheme

Vice Chancellor Internship Scheme Prime Minister Visits

### **Major Activities and Achievements**

Office of Dean Students' Welfare at the University of Delhi is dedicated to promoting welfare activities that contribute to the comprehensive and well-rounded development of students. In the academic year 2022 - 2023.

The office has undertaken various initiatives as listed below:-

Placements and Internships- The Central Placement Cell (CPC) serves as a bridge between the academic institution and the industry.

JOB MELA- Organized by CPC.

Grievance Redressal- Students Grievance Redressal Cell (SGRC) resolved all types of Grievances of the students.

Counselling- The Office conducts various awareness campaigns to educate students about their rights, duties, and responsibilities.

Financial Support Scheme- Beginning in the academic year 2022-23 introduced a fee waiver all students fees, except examination and hostel fees.

Vice Chancellor Internship Scheme- Beginning from 2022-23 introduced a valuable initiative known as the University Internship program.

Prime Minister Visits- on 30th June 2023 closing of the University Centenary Celebrations.

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## **UNIVERSITY GUEST HOUSE**

### **Brief History**

University Guest House has 33 rooms in the main building and 06 Bamboo Cottage rooms with attached bathroom. Phone, TV etc. Two people can stay in one room. University Guest House provides free internet and Wi-Fi facility to the room guests. University Guest House has a kitchen to provide safe,

healthy, hygienic and delicious food.

University Guest House has a clean and spacious dining hall with a sitting capacity of 35-40 people. Guest House has a Lounge with mike and projector facility for meetings, get-togethers with a sitting capacity of 70-80 persons. University Guest House also has a small committee room for meetings around 10-12 persons.

### **Major Activities and Achievements**

Major Activities and Achievements: - The University Guest House caters to the needs of major academic meetings by providing accommodation and meals. It is also a venue for meetings. Several examiners and visiting scientists are provided hospitality.

Renovation work has been done in the University Guest House.  
New Air Conditioners installed in all rooms.

New LED television 32" installed in all rooms.

### **Facilities**

University Guest House has 33 rooms in the main building and 06 Bamboo Cottage rooms with attached bathroom. Phone, TV etc. Two people can stay in one room. University Guest House provides free internet and Wi-Fi facility to the room guests. University Guest House has a kitchen to provide safe, healthy, hygienic and delicious food. The University Guest House has a clean and spacious dining hall with a sitting capacity of 35-40 people. Guest House has a Lounge with mike and projector facility for meetings, get-togethers with a sitting capacity of 70-80 persons. University Guest House also has a small committee room for meetings around 10-12 persons.

### **Other Significant Information**

The University Guest House provided all the meals to room guests & special catering arrangements for Breakfast/Lunch/Dinner/High Tea for programs like Conference/Seminars/Retirement parties/Get-together Etc.

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## **WORLD UNIVERSITY SERVICE HEALTH CENTRE**

### **Brief History:**

The W.U.S. Health Centre (North Campus) provides 24 x 7 hours services for the University employees, their dependents and students except on Sundays/Gazetted Holidays from 08:00 am to 08:00 pm.

Night duty (Emergency services only): All Days

W.U.S. Health Centre (North Campus) is the nodal point and has a team of 10 dedicated Medical Officers

[including 1 Medical Consultant on contract, 2 Medical Officers on contract and 3 Part- time Medical Officers, 14 Specialists [who provide Specialized services for two hours in Cardiology (three days per week), Neurology (one day per week), Psychiatry (one day per week), Orthopaedics (five days per week), E.N.T. (five days per week), Pediatrics (four days per week), Dermatology (4 days per week), Ophthalmology (three days per week), Gynaecology (six days per week), Dental (six days per week)], 8 Pharmacists.

W.U.S. Health Centre (South Campus) has a team of 3 dedicated Medical Officers [including 1 Medical Consultant on contract, and 1 Part- time Medical Officer, 4 Visiting Part-time Specialists [who provide Specialized services for two hours in Cardiology (two days per week), Orthopaedics (two days per week), Ophthalmology (three days per week), Gynaecology (six days per week Dental (two days per week)], 1 Physiotherapist and 2 Pharmacists.

W.U.S. Health Centre (East Delhi and West Delhi) each have 1 dedicated Medical Officer and each have 2 pharmacists.

### **Major Activities and Achievements:**

WUS Health Centre (North Campus) provides routine and emergency health services even on Sundays/Gazetted Holidays during normal working days and Tournaments and other functions organized by the University of Delhi viz Annual Convocation, University Centenary Celebrations, Deepawali, Annual Flower Show and Holi.

World Health Day, 2023 was celebrated in WUSHC (North Campus) on 7th of April 2023 with great fanfare. The theme of this year's World Health Day was "Global environmental public health: Standing up to protect everyone's health each and every day". An article on "Our Planet, Our Health" was uploaded on the University of Delhi website [www.du.ac.in](http://www.du.ac.in) and W.U.S. Health Centre website for the information of the University fraternity.

World Heart Day, 2023 was celebrated in W.U.S. Health Centre (North Campus) on 29th September, 2023 with great fanfare and the staff and WUS Health Centre beneficiaries were apprised regarding the preventive steps to be taken for averting Myocardial Infarction, Stroke and Heart diseases. The theme of this year's World Heart Day was "Use Heart, Know Heart".

Health check up camps, Cardiac check up camps, Diabetes Mellitus detection camps were organized in collaboration with the reputed Hospitals.

### **Facilities:**

Dental, Physiotherapy, Pathology Laboratory, Pharmacy, Nursing, ECG, X-ray and Dressing facilities.

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## UNIVERSITY HOSTELS/HALLS

### AMBEDKAR-GANGULY STUDENTS HOUSE FOR WOMEN

#### Brief History

Ambedkar-Ganguly Students' House for Women was started in October 2003. It is by and large a self-sustaining residence for post-graduate women students of University of Delhi. It can accommodate up to hundred residents and two guest residents. For the academic session 2022-23, the readmission process was started in November 2022 and 66 bonafide residents & 14 guest residents were admitted till 31.03.2023.

#### Major Activities and Achievements

***Celebration of Independence Day:*** On 15th August, Independence Day was celebrated by hoisting the National Flag, followed by the singing of the National Anthem. This event was attended by the Provost, Warden, Resident Tutor, all the staff and the residents of Ambedkar Ganguly Students' House for Women. It was followed by the distribution of sweets.

***Shatabdi Vriksharopan 2022:*** As per the direction of the University, a Shatabdi Vriksharopan was conducted in the hostel on 10th August 2022.

**Number of PG Students: 66, M Phil/PhD: 14**

#### Best Practices

***A community workshop by MCD on "Zero Waste Management":*** On 10th September, 2022, an awareness workshop was organised by the MCD on Zero Waste Management System. A talk on key features of Zero Waste Management i.e. segregation of waste at source, separate collection for each type, importance of segregation of garbage, community involvement in all activities. They also presented a short drama on the garbage disposal. The workshop was conducted with great detail with the demonstration of how to segregate the garbage.

***Demonstration regarding operation of fire extinguishers:*** On 14th February, 2023 a onetime demonstration was given to the residents & hostel staff to operate fire extinguishers in case of emergency.

***A workshop on "Go Green and Say No to Single Use Plastic":*** A workshop on "Go Green and Say No to Single Use Plastic" was conducted by MCD on 18th March, 2023. Officials of MCD delivered a brief lecture on the importance of "Say no to single use plastic" as plastic bags are threat to our environment. Because a single plastic bag takes up to 1000 years to decompose as it contains non-renewable petrochemicals. Every year a huge number of animals and birds died due to you eating plastic bags. Plastic is not found naturally and is non-biodegradable. Saying no to plastic is not just an environmental necessity but a step towards a sustainable future. The ceremony was followed by the vote of thanks and distribution of cloth bags and sweets.

## **Facilities**

Facilities a. PWD-friendly washroom b. Ramp for PWD c. Common Room (T.V. & Projector) d. Computer Room (Air-conditioned) e. Library (Air-conditioned) f. Mess (Air-conditioned) g. Gymnasium (Cardio-vascular equipments) h. Laundry Room (fully automatic washing machines) i. Solar Water Heater j. Fridge, microwave and hotplate on each wing of each floor. k. Water purifiers l. Cleaning staff for cleaning of residents rooms along with common areas m. Extensive lawns for morning and evening walk n. Badminton court o. CCTV surveillance.

## **Other Significant Information**

During 2022-23 various cultural activities were held in the Hostel. The glimpse of some events is as follows:

The function of Lohri was celebrated on 13th January 2023 by lighting a bonfire and all the students gave Aahuti on the bonfire.

Republic Day was celebrated by hoisting the National Flag, singing the National anthem and distributing sweets & snacks among the residents and staff.

On 8th March 2023, Holi (festival of colours) was celebrated with colours and sweets were distributed among staff and students.

The Fresher's Party was held on 25th March, 2023 with pomp & show to welcome the freshers. Prof. Ranjan Kumar Tripathi, Joint Dean of Colleges, University of Delhi was Chief Guest and Prof. Gyan Prakash Sharma, Department of Environmental Studies, University of Delhi was Guest of Honour.

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### **ARAVALI POST GRADUATE MEN'S HOSTEL**

The hostel has installed Automatic sanitizing machine. RO's waste water is used for gardening. Hostel provides security 24-7 to residents and Parking facility with Guard. Aravali hostel has also maintained lush greens, beautiful landscape, around the hostel.

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### **CENTRE INSTITUTE OF EDUCATION HOSTEL**

#### **Brief History**

The Central Institute of Education has two hostels, Shree Bhawan for women and Shakti Bhawan for men, established in 1950. Shree Bhawan has 08 room accommodating 23 female students and Shakti Bhawan has 03 dormitories and 01 two-seater room accommodating 24 male students. The hostel accommodates students from B.Ed., M.Ed., M.Phil. & Ph.D. Programmes.

## **Major Activities and Achievements**

The process of Installation of CCTV in the Hostel and surroundings is under progress. This year the hostel installed 03 R.O. Water Purifier in both the Hostels and Mess Dining Hall, Exhaust Fans were installed in the Dormitories. Induction Plate/Hot Plate were installed in both the Hostels.

**Number of PG Students: 42, M Phil/PhD: 04**

## **Best Practices**

This year hostel organised a Nature Walk, Plantation Drive, Celebration of Azadi Ka Amrit Mahatosava. The Festivals Holi, Id-ul-Fitr, Dussehra, Diwali, Christmas Day are celebrated in the Hostel.

## **Facilities**

Three Water Cooler for Cold Water are installed in Hostels, one each in Men's & Women's Residence and third in Hostel Mess Dining Hall

Three R.O. Water Purifier System are installed with Water Coolers in Hostels, one each in Men's & Women's Residence and third in Hostel Mess Dining Hall

There are four Washing Machines installed in Hostels, two each in Men's & Women's Residence.

There are Five Geysers for Hot Water installed in Hostels, two each in Men's & Women's Residence & fifth in Hostel Mess Kitchen.

LED TV with Dish

Visitors Room for the Guests

Four Newspapers for Residents, two each in Hindi & English

Round the Clock Security for Residents

Everyday Dusting & Cleaning of Hostels and Dustbins had been kept in each Room of the Hostel.

Mess Dining Hall for the Residents

Part Time Electrician for day-to-day electrical problems being faced by the Residents.

WUS Health Centre Membership compulsory for all the Residents on a nominal fee. Residents can visit the Health Centre to meet the Doctor in case of Health emergency. m) Wi-Fi Facility being provided to Residents from DUCC.

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## **D.S. KOTHARI HOSTEL**

### **Brief History**

The D.S. Kothari Hostel, tucked in the ridge area and named after the eminent physicist and educationist-Padma Bhushan, Prof D.S. Kothari- entered its 'silver jubilee' phase this academic year.

**Number of UG Students: 1, PG: 49, M Phil/PhD: 27**

### **Best Practices**

Annual Report of D.S. Kothari Hostel for University Annual Report on its centenary year (2022-23)

The D.S. Kothari Hostel, tucked in the ridge area and named after the eminent physicist and educationist-Padma Bhushan, Prof D.S. Kothari- entered its 'silver jubilee' phase this academic year.

It continued to provide clean and conducive environment for lodging around 100 students engaged in post graduate and doctoral research programmes in different departments of the University. This included 08 foreign students as regular residents.

The hostel has envisioned with a series of 'evening lectures' by prominent academicians and started its YouTube channel to document all such scholastic activities.

This year, the hostel made sustained efforts towards spreading environment awareness. It engaged in slogan writing activities on hostel walls, tree plantation drive and management of dry and wet waste and was lauded by the Municipal Corporation of Delhi by certifying the hostel as a 'zero waste area'.

The hostel installed NVR with 32 channel CCTV Cameras for the larger safety of the hostel.

As part of its rich corporate life, the hostel organised a memorable educational excursion to Agra- Fatehpur Sikri.

It had colourful celebrations on all the national holidays as well as popular hostel festivals like Saraswati Pooja, Lohri and Eid, nurturing a harmonious atmosphere amongst residents from the different communities.

Its residents excelled with an all-round performance in the inter hostel sports competitions and stood champions in cricket and table tennis.

The head - Mali of this hostel was awarded as one of the best gardeners of the University in the Annual flowers Show.

The hostel plans to strengthen its infrastructure and basic facilities in the new academic year.



## **Facilities**

Badminton Court, Common room, T.V Room, Washing Machine, Table Tennis, Guest Room, PWD Facilities, Union-cum-Library.

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## **GEETANJALI HOSTEL**

### **Brief History**

The Geetanjali Hostel for Post-Graduate Women Students was inaugurated on January 08, 1990, by then Vice Chancellor, Professor Moonis Raza. The hostel attained functionality on January 15, 1991 accommodating a modest 32 students. By 1996, it reached its maximum capacity, housing 96 residents, with six single rooms. However, in response to the surging demand for hostel accommodations, these single rooms were later converted into double seaters, expanding the capacity to 102. Situated at the heart of the South Campus, the hostel offers essential indoor recreational facilities and maintains a modest library to cater to the academic needs of its residents to propel its motto of “A home away from home.” The hostel's mess services are outsourced to a contractor, whose performance undergoes an annual evaluation.

### **Major Activities and Achievements**

The Geetanjali Hostel celebrated its Sports Day on February 12, 2023, featuring a variety of individual activities, including chess, table tennis, carrom, arm wrestling, and the lemon race. In addition to these solo events, team sports such as badminton and tug of war added excitement to the day. The residents demonstrated their enthusiasm and competitive spirit during these events. The hostel's Annual Day, marked on March 25, 2023, was a grand occasion filled with festivity and camaraderie. Hostel Night was organised for the residents to come together and celebrate the occasion. Furthermore, the hostel observed Independence Day on August 15, 2022, and Republic Day on January 26, 2023. These important national events were commemorated with flag hoisting ceremonies and cultural programs, followed by special dinners that brought the residents together in a spirit of unity and patriotism. Geetanjali Hostel also joyfully observed various cultural festivals, such as Holi, Lohri, and Diwali among others, fostering a rich tapestry of cultural diversity and inclusivity among the residents.

**Number of PG Students: 80, M Phil/PhD: 23**

### **Best Practices**

To ensure the safety and security of its residents, the hostel is equipped with an RFID System at the entrance. The residents are provided with unique cards to enter the premises. The curfew for the residents is 10 pm, however, if any lab or library access is required past that, they can take special permission to enter the premises post curfew. The students of Geetanjali Hostel are never made to feel like they are living away from home, as festivals are celebrated with much enthusiasm accompanied by special dinners in the mess. The annual fest of the hostel, Mridang, is held every year which boasts of vivacity, delicious food and lively performances, in which the residents take part whole-heartedly.

## Facilities

Well-maintained open spaces Well-equipped gym and sport equipment Television in common room Music system with speaker Reading room Sanitary Pad dispensing machine Library Refrigerators Induction cooktop for each floor Microwave Washing machines

## Other Significant Information

The hostel is secure with sufficient lighting on the premises and four CCTV cameras at relevant areas. Four security guards are shuffled duties to maximise their efficiency. The hostel has posters on anti-ragging, anti-substance abuse and ethical eating habits in the mess. A sufficient number of sanitation workers on each floor have been given the responsibility of maintaining the utmost hygiene of the premises on a daily basis. Fumigation is practiced regularly to ward off insects and mosquitoes to prevent the spread of dengue or malaria. Hand sanitiser dispensers have been fixed on the premises for visitors and staff.

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## GWYER HALL

### Brief History

Gwyer Hall is the oldest & prestigious men's Post Graduate Hostel of the University of Delhi. This is unique distinctive feature of this hostel where students and faculty members live and dine together. Over the years Gwyerians have made their presence felt in all walks of life in India and abroad. The hostel takes necessary step to ensure that the spirit and rich heritage that have survived over the years of its existence continues to flourish.

### Major Activities and Achievements

Thirty Post graduate and Ph.D. students passed out during this period. Hostel had celebrated Ambedkar Jayanti, Holi, Diwali, New Year, Lohri, Saraswati Puja etc. Gwyer Hall won first prize on 65th Annual Flower Show 2023 along with the Kalicharan Award-I and fourteen other awards in the various category, Gwyer Hall has organised following programme.

A Workshop has done on 'Environment Awareness and Waste Management' on 19-10-2022.

Lecture on 23-8-2022 "Who is Gandhi" by Professor Bidyut Chakravarty, Vice-Chancellor, Visva Bharati University.

**Number of UG Students: 5, PG: 43, M Phil/PhD: 37**

## Facilities

Air-conditioned Computer Room, Common Room, and Reading Room

Purified drinking water for all the residents.

Free Washing Machines facilities for residents

PwD facilities

On-line gas connections installed in the kitchen

New ceiling fans were installed in the rooms

Staff quarter renovated.

Duck system is replaced in Mess.

Two submersibles have replaced old to new.

Four halogens street lights converted into LED Flood Street lights.

### **Other Significant Information**

The Gwyer hall received the Vice-Chancellor's Cup for the highest marks in the 65th Annual Flower show 2023. Gwyer Hall also received the following awards in the flower show:

The Vice-Chancellor's Cup (Kalicharan Award-I)

The Delhi School of Economics Cup

The Lady Irwin College Cup

The University Architect's Cup

The Dr N.S. Pradhan Cup

The Kalindi College Trophy

Delhi School Of Social Work Cup

University Library Cup

The Sriram College of Commerce Cup

The Treasurer's Cup

The Registrar's Cup

Department Of Hindi Cup

The Janaki Devi Memorial Cup

Department Of Zoology Cup

The College Nursing Cup

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## INTERNATIONAL STUDENT'S HOUSE

### Brief History

International Students' House was set up in 1964 by Indian Council for Cultural Relations, Ministry of External Affairs for foreign students and postgraduate Indian students. There are 98 rooms and all are single seated. During the academic year 2022-23, 56 foreign students from 32 countries and 20 Indian students were admitted in the House, presenting an amalgamation and diverse mosaic of International and Indian cultures. Because of its international nature, ISH occupies a special position in the hostel system of Delhi University.

### Major Activities and Achievements

Ever since, its inception, the ISH has been acclaimed for its diversified cultural activities. As the hostellers are considered to be the children of hostel, the ISH authorities work upon the growth of their hostellers with some specific skill based Cultural & sports activities.

The highlights of some activities are:

The International Students' House celebrated a diverse array of cultural and national festivals with great enthusiasm during the year, including the grand observance of India's "75<sup>th</sup> Independence Day" under the "Azadi Ka Amritmahotsav" initiative. These celebrations featured the participation of esteemed guests like Director South Campus Professor Shri Prakash Singh and other dignitaries from Delhi University, creating an environment that allowed international students to experience the spirit of India's independence. Additionally, festivities for Deepawali, Christmas, New Year's Day, Republic Day, Lohri, Swami Vivekananda Jayanti, Id-ul-Fitr, Id-ul-Zuha, Saraswati Pujan, and Holi were carried out with fervour and enthusiasm. These occasions not only enriched the understanding of Indian culture among international students but also provided an opportunity for Indian students to embrace and appreciate the diverse cultures of their international peers.

The International Students' House organised an activity Swachhta Pakhwada 1st to 15th September, 2022 to promote "Swachh Bharat Abhiyan" lieu of Swachh Bharat Abhiyaan which is being organised by Govt. of India. On this occasion, the Provost, Warden, Resident Tutor, Students and Employees have enthusiastically participated in this campaign. All participants have taken oath to make and keep campus clean; they have also cleaned the campus on the occasion. Since then, continuous cleanliness drives had taken place from time to time and regularly organise cleanliness drives in the Hostel Campus.

A Fresher's welcome party coupled with inauguration of the House Union was arranged on 25th February, 2023.

Project Green Campus- "Project Green Campus," launched during the year, created environmental awareness and eco-consciousness among students. It led to remarkable transformations, including a lush green campus, improved air quality, waste reduction, and a 40% reduction in landfill waste. The initiative received recognition and a first prize award from the Municipal Corporation of Delhi.

In the academic year 2022-23, the International Students' House (ISH) at Delhi University embarked on a transformative journey with "Project Green Campus." This initiative was designed to instil environmental

awareness and foster eco-consciousness among its residents. The results achieved through this initiative are remarkable.

### **Key Achievements:**

The first notable achievement of "Project Green Campus" was the transformation of the ISH campus into a verdant haven. Through extensive tree planting drives and the dedicated efforts of students and staff, the once ordinary campus now boasts an abundance of greenery. This not only enhances the aesthetics but also contributes to a healthier environment. Notably, Professor Balaram Pani, Dean of Colleges University of Delhi, actively joined these trees planting efforts, underscoring the collaborative spirit.

**Waste Reduction:** "Project Green Campus" prioritised waste reduction as a fundamental goal. Waste reduction campaigns were organised to raise awareness and encourage responsible waste disposal practices among residents. As a result, there has been a significant reduction in the generation of waste within the ISH premises.

**Zero Plastic Campus:** One of the initiative's standout achievements was the successful implementation of the "Zero Plastic Campus" initiative. This ambitious endeavour, aimed at eliminating plastic usage on campus, received resounding approval from the Municipal Corporation of Delhi (MCD). ISH has set an example for sustainability by minimizing its environmental footprint and making a positive impact on the community.

### **Leadership and Engagement:**

"Project Green Campus" was made possible through the collective efforts of students, staff, and faculty. Notably, Professor Balaram Pani, Dean of Colleges at the University of Delhi, actively participated in tree planting drives, setting an example for environmental stewardship. The initiative received recognition and was awarded the first prize by the Municipal Corporation of Delhi (MCD). This prestigious award underscores ISH's dedication to promoting sustainable living and environmental consciousness.

**Number of UG Students: 19 (foreigner), PG: 34, M Phil/PhD: 23**

### **Best Practices**

#### ***Emphasizing Cultural Exchange:***

Encouraging celebrations of diverse cultural and national festivals to foster an understanding of different cultures.

Creating an environment for international students to experience and appreciate the essence of Indian cultural heritage.

Providing a platform for Indian students to embrace and learn from their international counterparts.

### ***Environmental Initiatives:***

Initiating the "Project Green Campus" to raise environmental awareness and promote sustainable living among students.

Achieving a significant transformation in the campus's greenery, waste reduction, and the implementation of the "Zero Plastic Campus" initiative.

Involving key stakeholders, including the provost and faculty members, to actively participate in environmental initiatives, promoting a culture of sustainability.

### ***Inclusive Community Engagement:***

Establishing committees to address specific issues, including anti-ragging, North Eastern matters, sexual harassment, and Swachhta Abhiyan, among others.

Providing a range of facilities that cater to the diverse needs of students, including common rooms, computer rooms, reading rooms, washing facilities, a canteen, and sports facilities.

Ensuring the safety and security of residents through CCTV surveillance and the presence of security guards.

### ***Transparency and Accountability:***

Clearly stating the distribution of seats to ensure transparency in the hostel's admission process.

Highlighting the procurement of various facilities and equipment to improve the living standards of the residents.

Providing detailed information about the facilities available, ensuring residents and stakeholders are aware of the resources and services provided.

These best practices exemplify the commitment of the International Students' House (ISH) to fostering a vibrant and inclusive community that prioritises cultural exchange, environmental sustainability, and the holistic development of its residents. The engagement of key stakeholders and the dedication to creating a conducive environment for learning and growth have contributed to the success and accomplishments of ISH during the academic year 2022-23.

### **Facilities**

Facilities ISH continues to offer a range of facilities, including common rooms, computer rooms, reading rooms, washing facilities, a canteen, gymnasium, guest rooms, sports facilities, Wi-Fi, telephones, security/CCTV, geysers, and water coolers with R.O. purification.

## **Other Significant Information**

The year was also marked by the improvement of services to the residents, such as the purchase of 50 Room Chairs, 2 Executive table, 1 R.O. (Kent) 1 Double Door Refrigerator, 2 Revolving Chairs, 1 Printer, 5 Cooler, 2 Water Cooler, 1 Microwave Oven, 1 double door deepfreeze, 1 four door deepfreeze, 2 Desktop Computer, 18 Geysers, 2 Bain Marie and 2 AC for students 'and Office Staff use.

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## **INTERNATIONAL STUDENTS HOUSE FOR WOMEN**

### **Brief History**

International Students' House for Women (ISHW) is located in the Dhaka Complex of the North Campus of the University. It came into existence around 20 years ago. Established on June 3, 2002 the multicultural character of the International Students' House for Women is central to all the activities organised by the House. Residents from more than 34 countries jointly celebrate their cultural festivals and important national occasions in the spirit of harmony and friendship.

### **Major Activities and Achievements**

A number of programmes were organised in the House in the past one year. The session began with Id-ul-Fitr 03-05-2022, Yoga Day was celebrated on 21-06-2022, Independence Day 15-08-2022 which generated feelings of patriotism among the students and staff, celebrated with flag hoisting, sweets and special breakfast. Diwali 21-10-2022 to 24-10-2022 the House decorated with lights. A formal party replete with lights and diyas was followed by a lavish dinner, most of the residents wore traditional Indian outfits and enjoyed the festivities. Christmas 25-12-2022, New Year 31-12-2022, Republic Day 26-01-2023 were also celebrated. ISHW won the best Mali Award in Annual Flower Show 02-03-2023. Annual Picnic 04-03-2023. Holi 08-03-2023 was celebrated with a splash of colours. Fresher's Party 11-03-2023. Farewell Party was held for the outgoing residents on 07-06-2023 who relived and narrated the wonderful time they had spent in the House.

**Number of UG Students: 18, PG: 45, M.Phil./Ph.D.: 19 (PhD)**

### **Best Practices**

Residents from more than 34 countries jointly celebrate their cultural festivals and important national occasions in the spirit of harmony and friendship.

### **Facilities**

ISHW has various facilities for its student residents namely:

98 well-furnished rooms containing a single bed, almirah, mattress, curtain, study table, chair etc.

The whole house campus is CCTV – enabled to provide a secure environment to its residents.

Visitors' Lobby, Committee Room, Medical Room, Dining Hall, Library, Reading Room, Lounge room (with LCD projector, big screen and sound system), Badminton court, Internet Room, TV room, Gymnasium. There are Pantries on every floor. The bathrooms are equipped with solar heaters for hot water

through geyser and solar system. The House provides wi-fi facility to its residents. Entire House complex is equipped with wi-fi connections.

RO water coolers are available on all the floors. Fully equipped pantry with electric heater, microwave, water dispenser, electric kettle and two fridges one for vegetarian residents and another for non-vegetarian residents on all the four floors.

Washing of clothes of all the residents is done by our laundry attendant in the laundry room which consists of five fully automatic washing machines situated on the ground floor. Separate ironing room is also available on the 1st - 3rd floor of ISHW.

Complete Gymnasium on the 3rd floor with modern equipment.

Fully air-conditioned dining hall on the ground floor.

Failure / breakdown of electricity, Genset facility is provided in the entire complex of the ISHW.

24x7 security is provided to the students.

First Aid kit is available. Residents are members of WUS Health Centre, (DU).

### **Other Significant Information**

To enrich the House life for not only the students but also the House staff, regular interaction of the House authorities with the staff and students is ensured.

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## **JUBILEE HALL**

### **Brief History**

Jubilee Hall is Hall of residents for full time course of P.G. and Research students of University of Delhi. It was found in the year 1947 on the occasion of Silver Jubilee of University of Delhi. The internal Administration and discipline of the hostel is vested in the provost who is assisted by a Warden and a Resident Tutor. The policies decision of the Hall is taken by the Managing Committee under the overall guidelines of the policies of the University of Delhi.

### **Major Activities and Achievements**

The Hall functions under the control of Provost -Prof. Sunil K. Shar, Warden - Prof. Subhash Anand and Resident Tutor - Dr. Netrananda Sahu. To keep harmony and its basic character of "Unity in Diversity" Hall celebrated all festivals viz Sarswati Pooja, Holi, Id, Independence Day, Deepawali and Christmas with lot of gaiety and enthusiasm.

**Number of UG Students: 02, PG: 38, M Phil/PhD: 41**

### **Facilities**

Mess: The mess in the hall is to be run on no profit no loss basis by a Mess Committee under the supervision of the Provost, the Warden and the Resident tutor. The Mess Committee functions in accordance with the mess rules framed by the provost in the consultation with Jubilee Hall Students' Union.



**Common Room:** The Hall has a jumbo size Common Room equipped with various means of entertainment like 65 inches LED T.V. Table Tennis, Carrom. The halls also work as knowledge spot of the hall as it consists of various daily newspapers (English, Hindi) and magazines of different arena, where students come and have insight of surrounding, national and global incidence.

**Computer Room:** The Hall provides internet connected computer facility to the residents. There is an air-conditioned Computer Room which provides the space to work on computer as well as provides printing facility at nominal charges.

**Gymnasium:** As physical and mental health is very important in today's busy life therefore the Hall has big size Gymnasium equipped with all type of modern body maintenance machineries.

**Parent's Guest Room:** There is a fully furnished air-conditioned parent's guest room in the hall which is available for the parents of the residents at a nominal charge.

**Canteen:** There is a canteen in the Hall which runs on contract basis providing resident's quality food under the supervision of Jubilee Hall Students' Union and the Hall Administration.

**Reading Room:** There is air-conditioned reading room in the hall with a sitting capacity of 20-25 residents at a time. Laundry facility There are 12 semi-automatic machines installed on each floor of the Hall for the use of the residents with minimum maintenance charges.

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## **MANSAROVAR HOSTEL**

### **Brief History**

Day and Republic Day the Provost, Prof. Surendra Singh unfurled the flag. All the hostel residents, staff and guests were present. The festivals like Dussehra, Diwali, Holi, Eid, Saraswati Puja, Christmas, Gandhi Jayanti and Ambedkar Jayanti were also celebrated in the hostel premises.

The hostel Residents' Union has organised fresher party and New Year.

The residents of the hostel participated in various out-door and indoor games during the year.

**Number of UG Students: 05, PG: 97, M Phil/PhD: 29**

### **Facilities**

The Hostel provides many facilities to its residents to make their stay comfortable.

**Dining Hall:** The Dining Hall serves quality vegetarian and non-vegetarian food for its resident members. Guests and others may have meals after buying coupons for the purpose.

**Reading Room:** A well-lit furnished AC room provides good space for studying/reading.

**Computer/ Internet Room:** The computer with internet facility is available for all bonafide residents. The computer connected to the University network can be accessed for academic pursuits.

**Common Room:** The common room is equipped with a big screen TV set with cable connection.

**News Paper Room:** Newspapers and magazines are available for the residents.

**Gymnasium:** A gymnasium on the top floor is equipped with a number of modern machines, which help the residents to exercise and keep themselves fit & healthy.

**Guest Room:** The hostel has one furnished guest room. The room is available for the parents and immediate family members of the residents, visiting Scholars and researchers. The room has to be booked in advance through the Hostel office on payment of the rent as per rules. The check out timing from the Guest room will be before 11 a.m.

**Visitor's Room:** The hostel has one furnished Visitor's room.

**Cafeteria:** The Mansarowar Hostel cafeteria is run by a contractor where food and beverages are served at reasonable rates approved by hostel authority. The cafe is open seven days of the week from morning until late-evening.

**Laundry:** The Hall has semi-automatic washing machines in all washrooms for use by the residents.

**Telephone/Fax/Photostat:** A shop within the hostel premises provides all kind of daily uses stationary/ printout/scanning/ lamination and photocopying services.

**Generator Room:** The hostel has a generator facility which used in an emergency.

**Health Centre:** The residents of the hostel get an opportunity to be enrolled as members of the world university service (WUS) health centre maintained by the University of Delhi. WUS provides facility to all types of basic as well as emergency health treatment at a negligible cost.

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## **MEGHDOOT HOSTEL**

### **Brief History**

The Meghdoot Hostel accommodates full time post-graduate/research women students of the north campus of University of Delhi. The foundation stone was laid on 26th August 1989 by the Vice Chancellor Prof. Moonish Raza and was inaugurated by then Dean of Colleges, Dr. S.S. Rana on 23rd Sept 1992. The hostel is having capacity for 100 residents. It has two blocks with 100 rooms. It is situated opposite to School of Open Learning (SOL) on G.C. Narang Marg. The internal administration and discipline of the hostel are vested in the provost of the hostel. The provost is the administrative Head of the Hostel. For internal administration, she is assisted by the Warden. There is also a Resident Tutor who looks after extra-curricular and cultural activities among the residents and their general welfare.

### **Major Activities and Achievements**

Throughout the academic year 2022-23, Meghdoot Hostel saw a variety of initiatives and energetic activities. Here is a list of some of them:

Celebration of Independence Day (The Meghdoot Hostel enthusiastically celebrated Independence Day on 15.08.2022, A special Guest was present.)

Dussehra Celebration (With a special feast the residents participated in ethnic dance and enjoyed the music.)

Diwali Celebration (Festival of lights, Deepawali was joyfully observed. The hostel was elegantly decorated and lit. The hostel residents made rangoli.)

Lohri Celebration (The Holy fire was lighted by the provost and everyone in the hostel gathered around it to celebrate the festival and made wishes for a joyful and successful new year)

Republic Day Celebration (The Provost, Warden, Resident Tutor and students raised the tricolour flag.)

Saraswati Pooja

Holi Celebration

Environmental Day Celebration

Yoga Day Celebration

**Number of PG Students: 45, M Phil/PhD: 12**

### **Best Practices**

Self Defence Training and all cultural activities.

### **Facilities**

TV Room, Dining Hall, Computer Lab, Laundry Room, Security Room, Medical Room, Study Room, PWD Study Room, Common Room, Gym facilities and CCTV

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## **NORTH EASTERN STUDENTS' HOUSE FOR WOMEN**

### **Brief History**

North Eastern Students' House for Women was established in 2002. NESHW has 101 single rooms and one guest room fitted with Air conditioner and attached bath. Out of 101 rooms, 71% of the seats are reserved for the girls from North Eastern States of the country, and 30% for the girls from rest of India.

### **Major Activities and Achievements**

During the year, Independence Day, Fresher Night, Christmas, Lohri, Republic Day, Holi, Annual Guest Night and Farewell Party were celebrated by the residents. The hostel has also organised a series of 3 lectures on the theme of "Health and Well-being" by Dr. Ruchi Sharma, who is a Senior Homoeopathic Consultant in Dr. Sharma's Ideal Cure in Indira Vihar, Dr. Neetu Kataria, an Ayurvedic Medical Officer in Government of Haryana and by Dr. Bhawani Sekhar, an Obstetrician Gynaecologist and IVF Specialist in Sir Gangaram Hospital in Delhi.

**Number of PG Students: 101**

### **Best Practices**

Efforts are made to maintain as much greenery as possible in and around the hostel premises. Organic manure used is prepared by the staffs through mulching, composting. Chemical fertilisers are fully avoided.

### **Facilities**

The hostel provides the following facilities to its residents: a) Air-conditioned Common room with LED TV and music system. b) laundry room equipped with four fully automatic washing machines. c) Each floor has a Hot plate, refrigerator, microwave and water dispenser/cooler. d) Air-conditioned Computer room with printer and internet facility. e) Air-conditioned Reading room with latest magazines and Newspapers.

f) Major RO system for drinking water. g) Badminton court i) CCTV surveillance J) Solar Water Heater k) Gymnasium (Cardio-vascular equipments) l) Extensive lawns for morning and evening walk

### **Other Significant Information**

On the occasion of 153rd Gandhi Jayanti and 118th Shastri Jayanti the environmental awareness workshop conducted by Delhi MSW Solutions Ltd on October 2, 2022 was a significant initiative aimed at educating participants about sustainable waste management practices. The workshop focused on three key areas: Awareness of waste management through skit, the creation of a landfill for organic waste transformation, and effective recycling strategies for plastic waste. Our hostel gardener is now effectively handling the organic manure landfill, residents and the authorities of the hostel have made a point to put the plastic waste in the specific plastic dustbin, segregation of the waste at the initial point promoting the culture of waste segregation. Our hostel has also got the Zero waste certificate.

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## **POST GRADUATE MEN'S HOSTEL**

### **Major Activities and achievements**

Throughout the academic year, our hostel pulsated with a vibrant tapestry of cultural and celebratory events. Commencing with the commemoration of Ambedkar Jayanti on April 15, 2022, the festivities continued with the joyous observance of Eid and "Iftar" on April 29. Notably, the installation of a Centenary Celebration board adorned the outer wall of the hostel, a testament to a century of collective existence. The hostel resonated with cultural diversity, marking occasions such as Vyas Pooja, Jamashtami, Navratri Pooja, Diwali, Christmas, and New Year's Eve. Each celebration brought a unique radiance, culminating in the exuberant observance of Lohri on January 13, 2023.

Patriotism soared during the Flag Distribution and Hoisting ceremonies on August 9, 2022, and Independence Day on August 15, 2022, respectively, followed by Republic Day on January 26, 2023. The spectrum of festivities encompassed Holi on March 8, 2023, weaving a rich mosaic of shared experiences and cultural unity within our hostel community.

### **Committees**

Common Room: to organise common room activities

Cultural: to organise cultural activities and events

Health & Hygiene: to look after cleanliness of the hostel

Sports: to organise sports activities

Mess: to organise mess menu and purchase of raw materials

Anti Raging and Disciplinary: to avoid raging and to resolve issues relating to raging.

Holi: to combat Holi hooliganism in the hostel.

Anti-Smoking: to avoid smoking in the hostel premises

## Facilities

The Hostel has significantly in terms of facilities such as TV/Common room, Air-conditioned library cum computer lab with internet with Wi-fi facilities, Gym with motorised treadmill, laundry and also semi-automatic washing machines on each floor, photocopy outlet, two badminton courts and recreation hall.

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## RAJIV GANDHI HOSTEL FOR GIRLS

### Brief History

The Rajiv Gandhi Hostel for Girls (RGHG) is a very spacious and beautiful Hostel situated at Dhaka Hostel Complex, Mukherjee Nagar, Delhi. The Hostel building was constructed by University of Delhi with the financial assistance from Ministry of Development of North Eastern Region (MDONER/NEC) and Ministry of Tribal Affairs (MTA). The Hostel came into existence in June 2012.

The Hostel Complex is by and large a self-sustained residence for women students (post graduate and research scholars) from North East and other parts of India.

### Major Activities and Achievements

***Cultural Activities & Achievements of the Hostel:*** India is a culturally diverse nation and land of colourful festivities. Hostel organises flag-hoisting ceremony on national festivals like Independence Day and Republic Day. National festivals of India are celebrated in the Hostel with much gusto and fervor. Festivals like Holi, Diwali, Christmas, Eid, Lohri and Sarsawati Pooja are celebrated with much excitement and enthusiasm. Residents also actively participate in various cultural activities conducted by the Hostel from time to time.

**Number of PG Students: 414, M Phil/PhD: 60**

### Best Practices

The Hostel conducted the weekly Yoga-Meditation session for physical and mental well-being.

Hostel proved its mettle by participating in the 65th Annual Flower Show held on 2nd March, 2023 by giving different entries of flowers and lawn and has been awarded three first prizes -- The Hans Raj College Cup, The Lady Shri Ram Cup and The Department of Philosophy Cup.

Municipal Corporation of Delhi inspected the Hostel and declared Rajiv Gandhi Hostel for Girls as ZERO WASTE CAMPUS and awarded a certificate for site composting, efforts of Wet & Dry waste Segregation and proper implementation of SUP (single use plastic)

## Facilities

Common Facilities: The Hostel has two common rooms and one visitor's room. Television with cable is also provided. Other facilities include spacious air-conditioned reading room and library, computer lab with

Wi-Fi facility, beauty parlour and tuck shop. Store room in each cluster is available to keep luggage at the time of vacating hostel. Induction plate is available at each floor of every cluster. Water Coolers with R.O. units are installed. 4 Dispensers are also available for drinking water for the residents. Round the clock security is provided. The Hostel premises are secured with CCTV Cameras at strategic points to ensure the safety of the residents, a complete smoke and vehicle free zone, well maintained lawns & gardens that add beauty of the Hostel.

**Medical facilities:** The residents of the Hostel get an opportunity to be enrolled as member of World University Service (WUS) Health Centre (HC), University of Delhi. WUS provides basic as well as emergency health treatment. In case of medical emergency, the resident is taken to the nearest available hospital, the local guardian is informed to take charge of her ward. Besides, there is a medical room equipped with first-aid facilities.

**Sport Facilities:** a) Gym Room: Basic exercise equipment - Cycles + Dumbbells, Cross Trainer + Aerobic Steps, b) Indoor Games: Table Tennis + Carom + Ludo + Chess Table Tennis + Carom + Ludo + Chess c) Outdoor Games: Basket Ball + Badminton Courts + Yoga Mat + Badminton, Bat and Ball + Skipping Ropes

### **Other Significant Information**

The Hostel ensures regular maintenance and upkeep of all facilities. Two full time Caretakers are appointed by the Hostel to ensure the cleanliness, sanitation, water supply, electricity and security to update the Hostel authorities about daily state of affairs. Great care is being taken to keep the entire place neat and tidy. The Hostel provides a comfortable, congenial and homely environment to the residents.

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## **SARAMATI POST GRADUATE MEN'S HOSTEL**

### **Brief History**

The Saramati Post Graduate Men's Hostel has been established by the North East Council, Ministry of Home Affairs, Government of India and University of Delhi. It provides residential facility to the students from the north eastern parts of the country studying in University of Delhi as well as other students pursuing academic programs and bonafide students of South Campus. It is one of the modest and well-equipped hostels of the University. It has the capacity to accommodate 130 students on twin sharing basis.

### **Major Activities and Achievements**

Hostel celebrated the Republic Day and the Independence Day with high student's participation

**Number of PG Students: 110, M Phil/PhD: 1**

### **Best Practices**

Saramati P.G. Men's Hostel adopted the online admission and fee payment system. Students can apply admission online without being physically present in the university. Admission list shared to all by E-mail.

## **Facilities**

The hostel provides quality food breakfast, lunch, high tea and dinner to the residents of the hostel. Hostel has recreation room fitted with high-definition LED TV set along with DTH service and common reading place with dozens of newspapers and magazines. The hostel provides gymnasium and sports facilities for indoor games such as table tennis, chess, carom-board etc. Hostel is equipped with modern Wi-Fi facility to provide smoother and faster internet service to the residents. Hostel has installed CCTV with 8 cameras at the important places to have a better security system and surveillance. Hostel provides security 24-7 to residents and parking facility with Guard. The hostel has installed Automatic sanitizing machine and prepared isolation room. Hostel has a double occupancy Guest Room and Guest house equipped with the Air Conditioner and Heat Convector. Both of the facilities are open for the visiting guests and parents of the residents. Saramati hostel has also maintained lush greens, beautiful landscape, around the hostel.

## **Other Significant Information**

As per the MoU signed between University of Delhi and North East Council, Ministry of Home Affairs, Govt. of India, 70% of seats are reserved for students belonging to North Eastern states. However, if seats reserved for North Eastern States students remain vacant, these seats would be made available to other students.

Application for admission to the Hostel should be made on the prescribed form that can be downloaded from the University of Delhi South Campus website (i.e. [www.south.du.ac. in](http://www.south.du.ac.in)) and also from the hostel website (<http://pgmenhosteludsc.du.ac.in>)

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## **SOCIAL WORK HOSTEL**

### **Brief History**

The Department has its own hostel. The foundation stone of this hostel was laid by Mrs. Durgabai Deshmukh, Chairman, Central Social Welfare Board, Government of India on 25th July, 1962. The Hostel became functional from 16th July, 1966. Being an attached hostel within the Department premises, it adds to the development of overall personality of the social work students and helps in reinforcing their professional elements.

In the current academic session, eighteen women and twenty-five men students (totalling 43) are being accommodated in forty-three rooms.

**Number of PG Students: 43, M Phil/PhD: 1**

## **Facilities**

The campus is quite friendly towards persons with disabilities. Its entrance has been modified and fitted with ramps to suit their special needs. There are forty nine rooms; a students' managed Mess with well-furnished kitchen and dining facilities; three drinking water points with reverse osmosis filtering facilities; an Air Conditioned common room; two sick/isolation rooms (one in each wing); a meeting room; office rooms; Warden's residence; lush green lawns; groves and gardens; a bore well in addition to municipal water supply; CCTV surveillance in addition to security services; TV with DTH services in the common

room; and a number of newspapers, magazines and periodicals. DSW Hostel has its own website <http://dswh.du.ac.in> which provides information about the hostel. There is a provision for security in the Department campus throughout the day. For the hostel, there is an additional security during the night time. Two security guards provide their services in two shifts daily. Fire safety measures are also in place.

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### **UNDER GRADUATE HOSTEL FOR GIRLS**

The Hostel was established in October 2012. The Hostel is aesthetically designed on a vast campus with seven blocks and a total of 344 rooms on double occupancy.

It is the first hostel to accommodate Under Graduate students from 49 Colleges/Departments Comprising both the North and South Campus of Delhi University.

#### **Major Activities and Achievements**

The hostel orchestrated a myriad engaging and enriching events throughout the year. Noteworthy activities included an Orientation Program for readmission students, a student-organised Farewell Celebration for third-year students, and a Fracture Prevention & Care program conducted by Dr. Krishna Gola. A Plantation Program led by the provost, a meeting on waste segregation with MCD Commissioner, and various sessions under the Centenary Celebration of the University of Delhi highlighted the hostel's commitment to holistic development.

Specialised sessions on topics such as violence against women, postgraduate studies at Queen's University Belfast, and a Thalassemia awareness camp added depth to the academic calendar. The hostel seamlessly blended academic and cultural dimensions, celebrating major festivals, hosting a Ganesha Mohotsava, Diwali, Christmas, New Year, Lohri, and Holi.

The vibrant atmosphere was further enhanced by a 15-day Yoga session and an International Women's Day celebration. The hostel's dedication to fostering a conducive learning environment was evident in its diverse and inclusive approach to student engagement.

#### **Awards**

The hostel participated in the Delhi University Flower show held on 2<sup>nd</sup> March, 2023 and won several prizes.

The Abhimanyu Sanghi Memorial Cup

Jewellar's Cup

Dr. Ramala Bhar Cup

Award Cash Prize Rs.3850/-



## **Committees**

During the 2022-23 period, the following committees were constituted:

Anti-Smoking Committee

Anti-Sexual Harassment Committee

Anti-Ragging Committee

Racial Discrimination Committee

Nodal Officer for North-East

Holi Committee

Nodal Officer for Tobacco-Free Campus

## **Facilities**

The hostel boasts several modern facilities, including air-conditioned

Common Room, Computer Lab, Two Reading Rooms, Gymnasium, Sports Room, Library, Visitors' room, medical room with medical facilities, including a daily nurse and doctor's visits thrice a week, Two TV Rooms, the hostel also has a well-ventilated Dining Hall.

## **Other facilities include**

Laundry Room, Tuck-shop, Badminton Court, Basket Ball Court, Table Tennis court

## **Other Significant Information**

Lush green lawns and flower beds greet the residents. The walls are decorated with pictures, keeping alive India's rich heritage. CCTV cameras are installed in common areas and at the gates for the students' security. There are disabled-friendly washrooms and ramps. All fees are collected online. The mess serves four meals a day, including the facility for packed lunch. The hostel adopts green practices, including waste segregation, composting garden waste, switchover to eco-friendly LED lighting, minimal paper usage, etc.

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## **UNIVERSITY HOSTEL FOR WOMEN**

### **Brief History**

To be a catalyst to women empowerment, in terms of encouraging them to pursue higher studies and support the growth of society, the University of Delhi decided to commence a residential institution, in February, 1973. It was named as Post Graduate Women's Hostel, which was later renamed as University Hostel for Women. This hostel was gestated to provide "A home away from home" to scholars not only from India, but from across the globe. The idea was to have "a no profit no loss" structure where women of all the classes and the masses could find an affordable residence.

This institution today provides a home to post graduates and research scholars of more than 55 departments across all the faculties of University of Delhi.

### **Major Activities and Achievements**

Major Activities and Achievements; It has always been in the tradition of UHW to hold several functions and celebrations. The following celebrations were organised in 2022-2023.

### **Festival Celebrations**

All festivals such as Diwali, Christmas Eve, New Year Eve, Lohri, Saraswati Puja and Holi were celebrated in the hostel.

National festivals and activities to increase consciousness;

15<sup>th</sup> August 2022, Independence Day: All authorities, residents and staff joined the country in its celebration of Independence Day by singing National Anthem and other patriotic songs.

2<sup>nd</sup> October 2022, Swachh Bharat Abhiyan: In accordance with the drive of Swachh Bharat Abhiyan programme University Hostel for Women (UHW)

**Number of PG Students: 96, M Phil/PhD: 57**

### **Best Practices**

We UHWians take pride in ourselves on the fact that all the Administration and the residents reside together as family and celebrate each and every Festival and Occasion with great zeal and zest

### **Facilities**

Common Room/Reading Room, Visitors Room, Sick Room, Ra Room, Laundry Room, Television & Refrigerator, Multipurpose Hall, Badminton Court

### **Other Significant Information**

Water Coolers are installed at appropriate points in the building to provide cool, filtered and safe drinking water to the residents. Hot Plates & Induction facility is provided on floors. All the residents are provided with Health Centre Cards facility of World University Services (W.U.S.) Health Centre.

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## **V.K.R.V. RAO HOSTEL**

### **Brief History**

VKRV Rao Hostel named after Professor V.K.R.V. Rao was established in 1999. It is an exclusive hostel for the students and research scholars from the Faculty of Management Studies (FMS) and Delhi School of Economics (DSE), University of Delhi.

## **Major Activities and Achievements**

The residents of the hostel celebrated national days including Independence Day, Republic Day and Gandhi Jayanti with gaiety and fervour. Independence Day and Republic Day were celebrated with the hoisting of tri-colour flag to instil a culture of national integration while Gandhi Jayanti gives emphasis on cleanliness through Swachh Bharat Abhiyan.

The residents of the hostel celebrated various festivals covering Diwali, Holi, Lohri, Saraswati Puja and Christmas Eve with lot of enthusiasm by maintaining the protocols of Covid-19. The Cultural events of the hostel begins with the Freshers' welcome at the beginning of the session and ends with the farewell party towards the end of the session.

This year the hostel had celebrated its annual function 'Umang' with great enthusiasm.

During the annual function the hostel organised cultural, literary and intra hostel sports competition also. In which, the students from various colleges and hostels participated.

At the end, the prize distribution ceremony was held, in which the hostel authorities and the Chairman of the hostel distributed the prizes to the winning candidates.

**Number of PG Students: 108, M Phil/PhD: 10**

## **Best Practices**

The hostel has constituted a SEWA Committee to cater to the needs and welfare of the residents. Further, it has constituted many other committees including Anti-ragging Committee, Welfare of North East Students, and Grievance Committee for students that encompasses all issues confronting the residents of the hostel.

## **Facilities**

The Hostel offers a full range of services and resources to support and enhance the quality of life of its residents.

Guests' facilities for residents' guests, Guest Rooms for Parents only, Medical Facilities, Mess and the Dining Hall, Canteen, Computer and Internet & Wi-fi Facilities, Common Room, Gym & Sports events, First Aid Box, Book Bank, Laundry Services, Reading room, Visitors' room, Hostel Security with CCTV Cameras, PwD Friendly resources.

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## **WUS UNIVERSITY HOSTEL**

### **Brief History**

WUS University Hostel for Women is residence for Ph.D Students. Teachers of the University, Visiting Teachers and Post-Doctoral Researchers with a capacity of 18 rooms. The Hostel was taken over by the University from the World University Science in 1990.

**Number of M Phil/PhD Students:**18

### **Facilities**

The following facilities have been provided to the residents:

Visitor's Room (AC), Colour TV, Refrigerators on both Floors & Kitchen, Newspapers (Hindi and English), CCTV, Washing Machine

Mess functions on co-operative basis. However, infrastructure for the Mess facility is being provided by the Hostel.

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# UNIVERSITY OF DELHI

## BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2023

		₹ in Crores	
Particulars	Schedule	Current Year	Previous Year
<b>SOURCES OF FUNDS</b>			
CORPUS/CAPITAL FUND	1	(2388.36)	(1989.67)
DESIGNATED/ EARMARKED/ ENDOWMENT FUNDS	2	1199.95	1599.19
CURRENT LIABILITIES & PROVISIONS	3	4106.88	3244.96
<b>TOTAL</b>		<b>2918.47</b>	<b>2854.48</b>
<b>APPLICATION OF FUNDS</b>			
Tangible Assets	4	759.98	763.84
Intangible Assets	4	2.14	2.98
Capital Works-in-Progress	4	3.47	----
INVESTMENT FROM EARMARKED / ENDOWMENT FUNDS	5	63.81	66.52
INVESTMENT - OTHERS	6	----	----
CURRENT ASSETS	7	1953.26	1878.19
LOANS, ADVANCES & DEPOSITS	8	135.81	142.95
<b>TOTAL</b>		<b>2918.47</b>	<b>2854.48</b>
Significant Accounting Policies	23		
Contingent Liabilities and Notes to Accounts	24		

Dated: 7th August, 2023

**UNIVERSITY OF DELHI**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2023**

		₹ in Crores	
Particulars	Schedule	Current Year	Previous Year
<b>INCOME</b>			
Academic Receipts	9	153.52	153.47
Grants / Subsidies	10	766.11	697.28
Income from Investment	11	2.23	1.62
Interest Earned	12	1.59	1.93
Other Income	13	10.58	8.38
Prior Period Income	14	4.30	0.00
Increase in Stock		1.02	0.77
<b>TOTAL (A)</b>		<b>939.35</b>	<b>863.45</b>
<b>EXPENDITURE</b>			
Staff Payments & Benefits (Establishment expenses)	15	1039.35	804.60
Academic Expenses	16	91.67	76.53
Administrative and General Expenses	17	142.89	118.74
Transportation Expenses	18	1.35	0.56
Repairs & Maintenance	19	34.61	17.65
Finance costs	20	0.01	0.01
Depreciation	4	35.64	31.97
Expenditure on Grants, Subsidies etc.	21	16.93	13.81
Prior Period Expenses	22	37.28	11.49
<b>TOTAL (B)</b>		<b>1399.73</b>	<b>1075.36</b>
<b>Balance being excess of Income over Expenditure/ (Expenditure over Income) ( A- B )</b>		<b>(460.38)</b>	<b>(211.91)</b>
<b>Transferred to / from Designated Fund Corpus/ Capital Fund (Schedule 1)</b>			
<b>Balance being Surplus/(Deficit) carried to Corpus/Capital Fund</b>		<b>(460.38)</b>	<b>(211.91)</b>
Significant Accounting Policies	23		
Contingent Liabilities and Notes to Accounts	24		
Dated: 7th August, 2023			



**UNIVERSITY OF DELHI**  
**BALANCE SHEET AS AT 31st MARCH, 2023**

			Amount in ₹	
Particulars	Schedule	Current Year	Previous Year	
SOURCES OF FUNDS				
CORPUS/CAPITAL FUND	1	(23883612378)	(19896737698)	
DESIGNATED/ EARMARKED/ ENDOWMENT FUNDS	2	11999545279	15991877962	
CURRENT LIABILITIES & PROVISIONS	3	41068792016	32449632762	
TOTAL		29184724917	28544773026	
APPLICATION OF FUNDS				
FIXED ASSETS				
Tangible Assets	4	7599842715	7638378423	
Intangible Assets	4	21379611	29848025	
Capital Works-in-Progress	4	34675556	-----	
INVESTMENT FROM EARMARKED / ENDOWMENT FUNDS	5	638100000	665183000	
INVESTMENT – OTHERS	6	-----	-----	
CURRENT ASSETS	7	19532636063	18781856056	
LOANS, ADVANCES & DEPOSITS	8	1358090972	1429507522	
TOTAL		29184724917	28544773026	
Significant Accounting Policies	23			
Contingent Liabilities and Notes to Accounts	24			

Dated: 7th August, 2023

# UNIVERSITY OF DELHI

## INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2023

Particulars	Schedule	Amount in ₹	
		Current Year	Previous Year
<b>INCOME</b>			
Academic Receipts	9	1535159573	1534725903
Grants / Subsidies	10	7661138800	6972795725
Income from Investment	11	22273788	16178940
Interest Earned	12	15944141	19326702
Other Income	13	105797565	83836579
Prior Period Income	14	43015515	-----
Increase in Stock		10242765	7661742
<b>TOTAL (A)</b>		<b>9393572147</b>	<b>8634525591</b>
<b>EXPENDITURE</b>			
Staff Payments & Benefits (Establishment expenses)	15	10393472688	8045976222
Academic Expenses	16	916744953	765337471
Administrative and General Expenses	17	1428926768	1187417190
Transportation Expenses	18	13549903	5568048
Repairs & Maintenance	19	346093041	176530299
Finance costs	20	83093	69473
Depreciation	4	356437186	319662566
Expenditure on Grants, Subsidies etc.	21	169301972	138117277
Prior Period Expenses	22	372807549	114871468
<b>TOTAL (B)</b>		<b>13997417153</b>	<b>10753550014</b>
<b>Balance being excess of Income over Expenditure/ (Expenditure over Income) ( A- B )</b>		<b>(4603845007)</b>	<b>(2119024423)</b>
<b>Transferred to / from Designated Fund Corpus/ Capital Fund (Schedule 1)</b>			
<b>Balance being Surplus/(Deficit) carried to Corpus/Capital Fund</b>		<b>(4603845007)</b>	<b>(2119024423)</b>
Significant Accounting Policies	23		
Contingent Liabilities and Notes to Accounts	24		



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

		Amount in ₹	
<b>SCHEDULE 1 - CORPUS/CAPITAL FUND</b>	<b>Current Year</b>	<b>Previous year</b>	
Balance at the beginning of the year	(19896737698)	(18161577781)	
Add: Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure			
(a) Plan Grant, OBC Grant, Excellence Grant etc.	53431387	40292004	
(b) FRP/CPDHE (0875)	11102404	-----	
(c) Capital Assets	135534087	157443633	
(d) Amount Released to CPWD on deposit basis under EWS	250000000	450067878	100000000 297735637
Add: Assets Purchased out of Earmarked Funds			
(a) Miscellaneous Accounts	8366595	1308370	
(b) Other Earmarked Funds	117603352	125969947	56725210 58033580
Add: Assets Purchased out of UGC Specific Schemes		-----	1516857
Add: Assets Donated/Gifts Received	742	1008	
Add: Assets transferred to University after closure of Projects	26960513	26961255	27696275 27697283
Add: Adjustment of Loan ACBR (2021-22).		-----	500000
Add: Adjustment related to Previous Years		19948251	
Add: Assets disposed off during the year		(4778209)	(1618851)
Less:- Adjustment in Building as per audit observation		(1198795)	-----
Add: Excess of Income over expenditure/(Excess of Expenditure Over income) transferred from the Income & Expenditure		(4603845007)	(2119024423)
<b>Balance at the year end</b>	<b>(23883612378)</b>	<b>(19896737698)</b>	

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 2 - DESIGNATED/EARMARKED/ENDOWMENT FUNDS

Particulars	Funds wise breakup			Total	
	Misc. A/c	Endowment Funds	Other Earmarked	Current Year	Previous Year
<b>A.</b>					
a) Opening balance	1620971379	1063958957	13306947626	15991877962	9515403543
Opening balance of Plan A/c	-	-	(4747144861)	(4747144861)	4781958314
Opening Balance of OEM(LDF)	-	-	-	-	42964506
Opening Balance of Donation Account	-	1661068	(1661068)	-	-
<b>b) Additions during the year</b>					
(i) Income from investments made of the funds	38031984	30728658	275109734	343870376	419774353
(ii) Accrued Interest on Investments/Advances	41215898	30661468	220047109	291924475	312277992
(iii) Interest on Savings Bank a/c	300425	936016	4706424	5942865	8393639
(iv) Other additions (specify nature)	52039625	54698614	767309336	874047575	1318093354
<b>Total(A)</b>	<b>1752559311</b>	<b>1182644781</b>	<b>9825314300</b>	<b>12760518392</b>	<b>16398865700</b>
<b>B.</b>					
Utilization/Expenditure towards objectives of funds					
ii) Capital Expenditure	8366595	-----	117603352	125969947	98325584
ii) Revenue Expenditure	425107038	54128203	155767925	635003166	308662154
<b>Total(B)</b>	<b>433473633</b>	<b>54128203</b>	<b>273371277</b>	<b>760973113</b>	<b>406987738</b>
<b>Closing balance at the year end (A-B)</b>	<b>1319085678</b>	<b>1128516578</b>	<b>9551943023</b>	<b>11999545279</b>	<b>15991877962</b>
<b>Represented by</b>					
<b>Cash And Bank Balances</b>					
Current Accounts	-----	-----	-----	0	3860940
Saving Accounts	8442291	9914172	131513983	149870446	370117108
Investments	-----	134200000	500900000	635100000	665100000
Fixed Deposit	1259785245	950007468	8523814209	10733606922	14281489266
Interest accrued but not due	41215898	30695635	220280348	292191881	312507809
Shares	-----	-----	3000000	3000000	83000
Other Loan & Advances	884925	-----	53393020	54277945	295819627
Amount Payable to University Press	-----	-----	-----	0	(18202)
Electricity Deposits	-----	-----	9409500	9409500	9409500
Grant not pertaining to Plan A/c	-----	-----	-----	0	(747353)
Capital Assets/Project A/c ACBR	-----	-----	-----	0	(19773445)
TDS's refundable	8757319	3699303	89631963	102088585	90470875
GST Receivable	-----	-----	-----	0	66960
Other Grants Received Under Specific Schemes	-----	-----	-----	0	(16508123)
Loan to Institute of Eminence(IE)	-----	-----	20000000	20000000	-----
<b>Total</b>	<b>1319085678</b>	<b>1128516578</b>	<b>9551943023</b>	<b>11999545279</b>	<b>15991877962</b>

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 2A - ENDOWMENT FUNDS

Amount in ₹

1. Sr. No.	2. Name of the Endowment	Opening Balance		Additions during the Year		Total		9 Expenditure on the object during the year	Closing Balance		Total (10+11)
		3. Endowment	4. Accumulated Interest	5. Endowment (Misc.Receipts)	6. Interest	7. Endowment (3+5)	8. Accumulated Interest (4+6)		10. Endowment	11. Accumulated Interest	
1	Sir Shankar Lal Instt. Of Music	2560144	737331	0	72885	2560144	810216	10047	2560144	800169	3360313
2	Shri Sri Ram Chair in Physics	8075484	4390764	0	282772	8075484	4673536	47	8075484	4673489	12748973
3	Shri Shankar Lal Chair in Chemistry	8942830	4998119	0	294608	8942830	5292727	1100118	8942830	4192609	13135439
4	IFC Chair in Faculty of Mgmt. studies	16159640	8735929	0	585875	16159640	9321804	93	16159640	9321711	25481351
5	SP Jain Advanced Mgmt. Research	2179569	1118764	0	66530	2179569	1185294	71	2179569	1185223	3364792
6	Pt. Man Mohan Nath Dhar	1422014	790657	0	36205	1422014	826862	24	1422014	826838	2248852
7	Professorship in Economics	14723096	8326912	0	425578	14723096	8752490	47	14723096	8752443	23475539
8	Publication of Orient Insect	622573	323937	0	17225	622573	341162	0	622573	341162	963735
9	DU Endowment Fund	271855784	97614544	0	20981998	271855784	118596542	39564786	271855784	79031756	350887540
10	Pt. Man Mohan Krishan Kaul	1691856	942475	0	62869	1691856	1005344	0	1691856	1005344	2697200
11	Book Grant RTL	311091980	99672840	0	25250055	311091980	124922895	12268521	311091980	112654374	423746354
12	DU Amway Professorship in Enter. Dev.	13004520	6578679	0	409766	13004520	6988445	47	13004520	6988398	19992918
13	Cluster Innovation Centre Corpus Fund	115472131	58651388	0	10986018	115472131	69637406	0	115472131	69637406	185109537
14	MHRD IPR CHAIR	488	7398	0	185	488	7583	0	488	7583	8071
15	State Bank of India Scholarship (Advance RPA Scholarship) (46397)	2779255	387133	0	174957	2779255	562090	0	2779255	562090	3341345
16	DU Corpus Fund (94542)	100000	725	0	2746	100000	3471	0	100000	3471	103471
17	Donation A/c (300433)	1597075	63994	51347731	6026753	52944806	6090747	1184402	52944806	4906345	57851151
		<b>772278439</b>	<b>293341589</b>	<b>51347731</b>	<b>65677025</b>	<b>823626170</b>	<b>359018614</b>	<b>54128203</b>	<b>823626170</b>	<b>304890408</b>	<b>1128516578</b>

#### Notes

- 1 The total of Columns 3 & 4 will appear as the opening balance in the column "Endowment Funds" in Schedule 2, of Earmarked Funds forming part of the Balance Sheet.
- 2 The total of Col.9 should normally be less than the total of Col. 8, as only the interest is to be used for the expenditure on the object of the endowments. ( except Endowments for Chairs)
- 3 There should not normally be a debit balance in the schedule. If in a rare case, there is a debit balance against any of the Endowment Funds, the debit balance should appear on the Assets side of the Balance Sheet as "Receivables", in Schedule-8 Loans, Advances & Deposits.



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

	Amount in ₹	
<b>SCHEDULE 3 - CURRENT LIABILITIES &amp; PROVISIONS</b>	<b>Current year</b>	<b>Previous Year</b>
<b>A. CURRENT LIABILITIES</b>		
1. Sundry Creditors		
a) For Goods	31568280	92836606
2. Deposit-others (including EMD, Security Deposit)	----	492159
3. Statutory Liabilities (GPF,TDS,WC TAX,CPF,GIS,NPS)		
a) Deduction/Remittance	47185764	54409924
b) Duties & Taxes	42627409	40756774
4. Other Current Liabilities		
a) Salaries	178467009	164701157
b) Receipts against Sponsored Projects	1842961104	2620210419
c) Receipts against Sponsored Fellowships & Scholarships	105994165	109382375
d) Unutilized Grants	5246551256	408070808
e) Interest Refundable to UGC	29456930	10930244
e) Amount refundable to UGC (CPF Contribution)	167090231	63629445
f) Other funds	625984718	269314139
g) Other liabilities	8036024	48388238
<b>Total (A)</b>	<b>8325922890</b>	<b>3883122288</b>
<b>B. Provisions</b>		
1. Gratuity	1322713538	1370980441
2. Superannuation Pension	29416399413	25525982894
3. Accumulated Leave Encashment	1825366796	1620850862
4. Others (Specify)/Expenses Payable	178389379	48696277
<b>Total (B)</b>	<b>32742869126</b>	<b>28566510474</b>
<b>Total (A+B)</b>	<b>41068792016</b>	<b>32449632762</b>

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE - 3 (a) SPONSORED PROJECTS

							Amount in ₹	
1	2	3	4	5	6	7	8	
Sr. No.	Name of the Project	Opening Balance		Receipts/Recoveries during the year	Total	Expenditure during the year	Closing Balance	
		Credit	Debit				Credit	Debit
1	Research Scheme A/c (298650)	583755057	0	146288287	730043344	132874374	597168970	0
2	IASE Scheme A/c (Educ) (295853)	869670	0	0	869670	62652	807018	0
3	Research Scheme A/c (SDC) (546386)	899289514	0	195428362	1094717876	274262117	820455759	0
4	B.R.A. Project A/c (298264)	66275749	0	20666324	86942073	28358792	58583281	0
5	Young Research Scientist A/c (298593)	192168506	0	24084768	216253274	69194471	148725683	0
6	CEMDE\Bio-Diversity Park (DDA)	52740553	0	88647636	141388189	118097620	23290569	0
7	Institution of Eminence	825111370	0	667682406	1492793776	1300613709	192180067	0
8	Dr. Ambedkar Centre of Excellence University of Delhi	0	0	3750000	3750000	2000243	1749757	0
9	University of Delhi TRI ECE SCHEME 15025 LC2RP010	0	0	466360	466360	466360	0	0
10	University of Delhi BRD Scheme PR23640 BOTRP001	0	0	14344972	14344972	14344972	0	0
11	University of Delhi DSTITDD scheme	0	0	1934941	1934941	1934941	0	0
12	University of Delhi RnD Scheme RFBR394	0	0	542982	542982	542982	0	0
13	University of Delhi REACHOUT Scheme95	0	0	1823781	1823781	1823781	0	0
14	University of Delhi STHICB CSRI 1 62G ANTRP009	0	0	6462273	6462273	6462273	0	0
15	University of Delhi SDC DBT	0	0	19701456	19701456	19701456	0	0
16	NMEICT SAMARTH PROJECT UDSC ACCOUNT	0	0	83335505	83335505	83335505	0	0
17	USDC STARS PROJECTS ACCOUNT	0	0	1437993	1437993	1437993	0	0
18	DST SCHEME	0	0	365053	365053	365053	0	0
19	PMRF ACCOUNT	0	0	1858750	1858750	1858750	0	0
20	University of Delhi Nidi Scheme	0	0	0	0	0	0	0
<b>Total</b>		<b>2620210419</b>	<b>0</b>	<b>1278821849</b>	<b>3899032268</b>	<b>2057738044</b>	<b>1842961104</b>	<b>0</b>
<b>Previous Year (2021-22)</b>		<b>1952517182</b>	<b>0</b>	<b>1224643564</b>	<b>3177160746</b>	<b>556950327</b>	<b>2620210419</b>	<b>0</b>

1. The Projects may be listed agency-wise, with sub-totals for each agency.

2. The total of Col. (credit) will appear under the above head on the liabilities side of the Balance Sheet (Schedule 3).

3. The total of Col. 9 (Debit) will appear as Receivables in Schedule 8, Loans, Advances and Deposits, on the Assets side of the Balance Sheet.

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

**SCHEDULE 3(b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS**

Amount in ₹

Sr. No	Name of Sponsor	Opening Balance As on 01.04.22		Transactions During the year		Closing Balance As On 31.03.23	
		3 CR.	4 DR.	5 CR.	6 DR.	7 CR.	8 DR.
1	CSIR Fellowship (298413)	48333655	0	8327892	4406200	52255347	0
2	UGC Fellowship (298560)	15693090	0	1282998	2855694	14120394	0
3	Other Bodies Scholarship (298707)	40301675	0	19944766	26432922	33813519	0
4	CSIR Fellowship (SDC) (545269)	493919	0	1094391	577414	1010896	0
5	UGC Fellowship (SDC) (545258)	4560036	0	234622	649	4794009	0
<b>Total</b>		<b>109382375</b>	<b>0</b>	<b>30884669</b>	<b>34272879</b>	<b>105994165</b>	<b>0</b>
<b>Previous Year (2021-22)</b>		<b>107139520</b>	<b>0</b>	<b>48629533</b>	<b>46386678</b>	<b>109382375</b>	<b>0</b>

Note:

1. The total of Column 7, (Credit) will appear under the above head, on the liabilities side of the Balance Sheet (Schedule 3).
2. The total of Column 8 (Debit) will appear as Receivables on the Assets side of the Balance Sheet in Schedule 8 (Loans, Advances and Deposits).



# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

SCHEDULE 3 (c) UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS		Amount in ₹
	Current Year	Previous Year
<b>A. Grants from UGC for Specific Scheme</b>		
Balance B/F	18175003	4781958313
Unspent Balance Previous year for SAP and other Grants	27958727	----
Add: Receipts during the year	22123716	23804318
Total(a)	68257446	4805762631
Less: T/f to Earmarked Fund	1666880	4781958313
Less: Refunds	11476389	----
Less: Utilized for Revenue Expenditure	27572441	4112458
Less: Utilized for Capital Expenditure	11102404	1516857
Total (b)	51818114	4787587628
Unutilized carried forward (a-b)	16439332	18175003
<b>B. Grants from UGC for Capital Assets</b>		
Balance B/F	229035115	317049705
Add: Receipts during the year	85000000	70000000
Total (c)	314035115	387049705
Less: Utilized in Previous Year Now Transferred to Capital Fund	20218199	
Less: Refunds	----	----
Less: Grant released to Hostels for Capital Expenditure	3359043	570957
Less: Utilized for Capital Expenditure	135534087	157443633
Total (d)	159111329	158014590
Unutilized carried forward (c-d)	154923786	229035115
<b>C. Grants from UGC for OBC/Excellence/Plan</b>		
Balance B/F	4719186134	----
Add: Receipts during the year	264698390	----
Total (e)	4983884524	----
Less: Refunds	-----	----
Less: Utilized for Revenue Expenditure	2417738	----
Less: Utilized for Capital Expenditure	53431387	----
Total (f)	55849125	----
Unutilized carried forward (e-f)	4928035399	0

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

		Amount in ₹
<b>D. Grants from EWS</b>		
Balance B/F	160860690	----
Add: Receipts during the year	250000000	100000000
<b>Total (g)</b>	<b>410860690</b>	<b>100000000</b>
Less: Refunds	----	----
Less: Utilized for Revenue Expenditure	13707951	----
Less: Utilized for Capital Expenditure	250000000	100000000
<b>Total (h)</b>	<b>263707951</b>	<b>100000000</b>
<b>Unutilized carried forward (e-f)</b>	<b>147152739</b>	<b>----</b>
<b>D. UGC Grants for Salary and Recurring</b>		
Balance B/F	----	597639000
Opening Balance	----	0
Add: Receipts during the year	7614081627	6531334000
<b>Total (i)</b>	<b>7614081627</b>	<b>7128973000</b>
Less: Refunds	----	0
Less: Utilized for Revenue Expenditure	7614081627	6968112310
Less: Utilized for Capital Expenditure	----	0
<b>Total (j)</b>	<b>7614081627</b>	<b>6968112310</b>
<b>Unutilized carried forward (g-h)</b>	<b>----</b>	<b>160860690</b>
<b>Grand Total(A+B+C+D)</b>	<b>5246551256</b>	<b>408070808</b>

**Notes:-**

Unutilized grants includes advances on Capital Account

Unutilized grants include grants received in advance for the next year

Unutilized grants are represented on the Assets side by Bank balances, Short term Deposits with Banks and Advances on Capital Account



# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 4 Fixed Assets

Amount in ₹

S.No.	Assets Heads	Rate of Depreciation	Opening Balance 01.04.2022	Gross Block			Closing Balance 31.03.2023	Depreciation for the year 31.03.2023					Net Block	
				Additions	Deductions	Prior Period Adjustments		Depreciation Opening Balance	Depreciation for the year	Deductions	Prior Period Adjustments	Total Depreciation	31.03.2023	31.03.2022
1	Land	0%	19716892	0	0	0	19716892	0	0	0	0	0	19716892	19716892
2	Site Development/Minor work	0%	0	0	0	0	0	0	0	0	0	0	0	0
3	Buildings	2%	6756155127	39167095	1327616	0	6793994606	498677229	114036667	0	0	612713897	6181280709	6257477898
4	Roads & Bridges	2%	0	0	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	2%	0	0	0	0	0	0	0	0	0	0	0	0
6	Sewerage & Drainage	2%	0	0	0	0	0	0	0	0	0	0	0	0
7	Electrical installation and equipment	5%	38655003	0	207799	0	38447204	9850032	1944794	207799	-364653	11222373	27224831	28804971
8	Plant & Machinery	5%	674943065	15986453	1526291	0	689403227	180627437	35155645	1526291	1063498	215320289	474082939	494315628
9	Scientific & Laboratory Equipment	8%	749560155	120674689	309551	0	869925293	318950297	71306079	309551	51217084	441163908	428761384	430609858
10	Office Equipment	7.50%	80632565	70862657	2409638	0	149085584	20896775	10809710	2409638	-3192116	26104731	122980853	59735790
11	Audio Visual Equipment	7.50%	5055612	1583172	10031	0	6628753	1760254	498080	10031	-21615	2226687	4402066	3295358
12	Computers & Peripherals	20%	1917344944	51597917	132168	0	1968810693	1827340101	43161343	132168	764523	1871133799	97676893	90004843
13	Furniture, Fixtures & Fittings	7.50%	247247573	31558767	182515	0	278623825	119703701	20956583	182515	5176037	145653805	132970020	127543872
14	Sports Equipment	10%	215434	0	0	0	215434	170872	21543	0	0	192415	23019	44562
15	Vehicles	10%	5306806	1721287	0	0	7028093	2284267	769340	0	-203071	2850537	4177556	3022539
16	Lib. Books & Scientific Journals	10%	276632564	11460161	216	0	288092509	155888101	28829261	216	-88457	184628691	103463818	120744463
17	Small Value Assets	0%	0	289985	0	0	289985	0	21749	0	0	21749	268236	0
18	Work of Art	7.50%	3310000	0	0	0	3310000	248250	248250	0	0	496500	2813500	3061750
<b>Total (A)</b>			<b>10774775740</b>	<b>344902182</b>	<b>6105825</b>	<b>0</b>	<b>11113572098</b>	<b>3136397315</b>	<b>327759044</b>	<b>4778209</b>	<b>54351230</b>	<b>3513729381</b>	<b>7599842715</b>	<b>7638378423</b>
19	<b>Capital Work in Progress (B)</b>		<b>0</b>	<b>34675556</b>	<b>0</b>		<b>34675556</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>34675556</b>	<b>0</b>
S.No.	Intangible Assets		Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions/ Adjustment/ Prior Period	Prior Period Adjustments	Total Amortization/ Adjustments	31.03.2023	31.03.2022
20	Computer Software	40%	38602285	668685	0	0	39270970	24443224	9749909	0	0	34193133	5077837	14159061
21	E-Journals	40%	32752809	19541043	0	0	52293852	17098434	18918886	0	0	36017320	16276532	15654375
22	Patents	9 Years	84135	0	0	0	84135	49546	9347	0	0	58893	25242	34589
<b>Total (C)</b>			<b>71439229</b>	<b>20209728</b>	<b>0</b>	<b>0</b>	<b>91648957</b>	<b>41591204</b>	<b>28678142</b>	<b>0</b>	<b>0</b>	<b>70269346</b>	<b>21379611</b>	<b>29848025</b>
<b>Grand Total (A+B+C+D)</b>			<b>10846214969</b>	<b>399787466</b>	<b>6105825</b>	<b>0</b>	<b>11239896611</b>	<b>3177988519</b>	<b>356437186</b>	<b>4778209</b>	<b>54351230</b>	<b>3583998727</b>	<b>7655897882</b>	<b>7668226448</b>
<b>Previous year (2021-22)</b>			<b>10568233104</b>	<b>284983357</b>	<b>7001492</b>	<b>0</b>	<b>10846214969</b>	<b>2863708595</b>	<b>319662566</b>	<b>5382641</b>	<b>0</b>	<b>3177988519</b>	<b>7668226448</b>	<b>0</b>

Note: The figure in Column 'Deductions' under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.

The figure in column 'Additions during the year under Gross Block against Assets 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.

## UNIVERSITY OF DELHI

**SCHEDULE 4A - PLAN**

Amount in ₹

Gross Block										Depreciation for the year 31.03.2023				Net Block	
S.No.	Assets Heads	Rate of Depreciation	Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Depreciation for the year	Deductions	Prior Period Adjustments	Total Depreciation	31.03.2023	31.03.2022	
1	Land	0%	0	0	0	0	0	0	0	0	0	0	0	0	
2	Site Development/Minor work	0%	0	0	0	0	0	0	0	0	0	0	0	0	
3	Buildings	2%	2902816739	0	0	0	2902816739	242043369	58056335	0	0	300099704	2602717035	2660773370	
4	Roads & Bridges	2%	0	0	0	0	0	0	0	0	0	0	0	0	
5	Tubewells &Water Supply	2%	0	0	0	0	0	0	0	0	0	0	0	0	
6	Sewerage & Drainage	2%	0	0	0	0	0	0	0	0	0	0	0	0	
7	Electrical installation and equipment	5%	0	0	0	0	0	0	0	0	0	0	0	0	
8	Plant & Machinery	5%	401303005	250145	0	0	401553150	107408289	20090165	0	125073	127623527	273929624	293894716	
9	Scientific & Laboratory Equipment.	8%	370810538	52823129	0	0	423633667	182678761	35536960	0	50657841	268873562	154760105	188131777	
10	Office Equipment	7.50%	0	65908	0	0	65908	0	9886	0	49431	59317	6591	0	
11	Audio Visual Equipment	7.50%	1567898	0	0	0	1567898	712771	117592	0	0	830363	737535	855127	
12	Computers & Peripherals	20%	1712401059	292205	0	0	1712693264	1690130467	7614792	0	1402953	1699148212	13545052	22270592	
13	Furniture, Fixtures & Fittings	7.50%	74664630	0	0	0	74664630	41479100	5599847	0	0	47078947	27585683	33185530	
14	Sports Equipment	10%	0	0	0	0	0	0	0	0	0	0	0	0	
15	Vehicles	10%	976781	0	0	0	976781	781425	97678	0	0	879103	97678	195356	
16	Lib. Books & Scientific Journals	10%	31755129	0	0	0	31755129	19808763	3194661	0	0	23003424	8751705	11946366	
17	Small Value Assets	0%	0	0	0	0	0	0	0	0	0	0	0	0	
18	Work of Art	7.50%	1310000	0	0	0	1310000	98250	98250	0	0	196500	1113500	1211750	
Total (A)			5497605779	53431387	0	0	5551037166	2285141195	130416166	0	52235297	2467792659	3083244507	3212464584	
19	Capital Work in Progress (B)		0	0	0	0	0	0	0	0	0	0	0	0	

S.No.	Intangible Assets		Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions/A djustment/Pri or Period	Prior Period Adjustments	Total Amortization/A djustments	31.03.2023	31.03.2022
20	Computer Software	40%	0	0	0	0	0	0	0	0	0	0	0	0
21	E-Journals	40%	0	0	0	0	0	0	0	0	0	0	0	0
22	Patents	9 Years	19360	0	0	0	19360	12905	2151	0	0	15056	4304	6455
Total (C)			19360	0	0	0	19360	12905	2151	0	0	15056	4304	6455
Grand Total (A+B+C+D)			5497625139	53431387	0		5551056526	2285154100	130418317	0	52235297	2467807714	3083248812	3212471039
Previous year (2021-22)			5497625139	0	0		5497625139	2158294623	126859476	0	0	2285154100	3212471039	

**Note:** The figure in Column 'Deductions' under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.  
The figure in column 'Additions during the year' under Gross Block against Assets 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.



# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 4B(1)

Amount in ₹

S.No.	Assets Heads	Rate of Depreciation	Gross Block					Depreciation for the year 31.03.2023					Net Block	
			Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Depreciation for the year	Deductions	Prior Period Adjustments	Total Depreciation	31.03.2023	31.03.2022
1	Land	0%	19716892	0	0	0	19716892	0	0	0	0	0	19716892	19716892
2	Site Development/Minor	0%	0	0	0	0	0	0	0	0	0	0	0	0
3	Buildings	2%	407708564	0	0	0	407708564	64500731	8154171	0	0	72654903	335053661	343207833
4	Roads & Bridges	2%	0	0	0	0	0	0	0	0	0	0	0	0
0	Tubewells & Water Supply	2%	0	0	0	0	0	0	0	0	0	0	0	0
6	Sewerage & Drainage	2%	0	0	0	0	0	0	0	0	0	0	0	0
7	Electrical installation and equ	5%	20380918	0	207799	0	20173119	7765624	1031089	207799	-364653	8224261	11948858	12615294
8	Plant & Machinery	5%	95941902	231712	1526291	0	94647323	35324390	5405342	1526291	-4862790	34340651	60306672	60617512
9	Scientific & Laboratory Equipment	8%	88418769	3049449	309551	0	91158667	41413113	7358482	309551	-616603	47845441	43313226	47005656
10	Office Equipment	7.50%	38022219	1372656	2409638	0	36985237	14968554	2397241	2409638	-3241547	11714609	25270628	23053665
11	Audio Visual Equipment	7.50%	1550043	14000	10031	0	1554012	503855	117474	10031	-21615	589683	964329	1046188
12	Computers & Peripherals	20%	83381346	1973399	132168	0	85222577	76781928	4646388	132168	-638430	80657719	4564858	6599418
13	Furniture, Fixtures & Fittings	7.50%	117541846	3642502	182515	0	121001833	61508351	9134934	182515	-700536	69760233	51241600	56033495
14	Sports Equipment	10%	214690	0	0	0	214690	170277	21469	0	0	191746	22944	44413
15	Vehicles	10%	1534502	0	0	0	1534502	1222731	219981	0	-203071	1239641	294861	311771
16	Lib. Books & Scientific	10%	216664546	136538	216	0	216800869	128406357	21680949	216	-88457	149998634	66802234	38258189
17	Small Value Assets	0%	0	0	0	0	0	0	0	0	0	0	0	0
18	Work of Art	7.50%	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total (A)</b>			<b>1091076237</b>	<b>10420256</b>	<b>4778209</b>	<b>0</b>	<b>1096718284</b>	<b>432565911</b>	<b>60167521</b>	<b>4778209</b>	<b>-10737702</b>	<b>477217522</b>	<b>619500762</b>	<b>658510326</b>
19	<b>Capital Work in Progress (B)</b>													
			0	0	0		0	0	0	0		0	0	0
S.No.	Intangible Assets		Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions	Prior Period Adjustments	Total Amortization/Adjustments	31.03.2023	31.03.2022
20	Computer Software	40%	13800942	15929	0	0	13816871	13800931	6372	0	0	13807302	9569	11
21	E-journals	40%	0	0	0	0	0	0	0	0	0	0	0	0
22	Patents	9 Years	31575	0	0	0	31575	28064	3508	0	0	31572	3	3511
<b>Total (C)</b>			<b>13832517</b>	<b>15929</b>	<b>0</b>	<b>0</b>	<b>13848446</b>	<b>13828994</b>	<b>9880</b>	<b>0</b>	<b>0</b>	<b>13838874</b>	<b>9572</b>	<b>3523</b>
<b>Grand Total (A+B+C)</b>			<b>1104908754</b>	<b>10436185</b>	<b>4778209</b>	<b>0</b>	<b>1110566730</b>	<b>446394905</b>	<b>60177401</b>	<b>4778209</b>	<b>-10737702</b>	<b>491056396</b>	<b>619510334</b>	<b>658513849</b>
<b>Previous year (2021-22)</b>			<b>1111910246</b>	<b>0</b>	<b>7001492</b>	<b>0</b>	<b>1104908754</b>	<b>393336314</b>	<b>58441232</b>	<b>5382641</b>	<b>0</b>	<b>446394905</b>	<b>658513849</b>	<b>0</b>

Note: The figure in Column 'Deductions' under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.

The figure in column 'Additions during the year under Gross Block against Assets 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 4B (2) - CAPITAL ASSETS

SCHEDULE 4B (2) - CAPITAL ASSETS													Amount in ₹	
S.N o.	Assets Heads	Rate of Depreciation	Gross Block					Depreciation for the year 31.03.2023					Net Block	
			Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustment	Closing Balance 31.03.2023	Depreciation Opening Balance	Depreciation for the year	Deductions	Prior Period Adjustment	Total Depreciation	31.03.2023	31.03.2022
1	Land	0%	0	0		0	0	0	0		0	0	0	0
2	Site Development/Minor work	0%	0	0		0	0	0	0		0	0	0	0
3	Buildings	2%	17842755	12511787		0	30354542	496592	607091		0	1103683	29250859	17346163
4	Roads & Bridges	2%	0	0		0	0	0	0		0	0	0	0
5	Tubewells &Water Supply	2%	0	0		0	0	0	0		0	0	0	0
6	Sewerage & Drainage	2%	0	0		0	0	0	0		0	0	0	0
7	Electrical installation and equipment	5%	8565587	0		0	8565587	499757	428279		0	928036	7637551	8065830
8	Plant & Machinery	5%	35838226	5996790		0	41835016	4361543	2091751		0	6453294	35381722	31476683
9	Scientific & Laboratory Equipment	8%	80444627	18397176		0	98841803	15307768	7907344		0	23215112	75626691	65136859
10	Office Equipment	7.50%	36844598	18739349		0	55583947	4580509	4168796		0	8749305	46834642	32264089
11	Audio Visual Equipment	7.50%	1251554	1553172		0	2804726	278536	210354		0	488890	2315836	973018
12	Computers & Peripherals	20%	90586139	36096761		0	126682900	38136675	25336580		0	63473255	63209645	52449464
13	Furniture, Fixtures & Fittings	7.50%	20899970	12715141		0	33615111	2469939	2521133		0	4991072	28624039	18430031
14	Sports Equipment	10%	0	0		0	0	0	0		0	0	0	0
15	Vehicles	10%	2795523	1721287		0	4516810	280112	451681		0	731793	3785017	2515411
16	Lib. Books & Scientific Journals	10%	18478672	9479566		0	27958238	2979273	2795824		0	5775097	22183141	15499399
17	Small Value Assets	0%	0	289985		0	289985	0	21749		0	21749	268236	0
18	Work of Art	7.50%	0	0		0	0	0	0		0	0	0	0
Total (A)			313547651	117501014	0	0	431048665	69390703	46540583	0	0	115931286	315117379	244156948
19 Capital Work in Progress (B)			0	34675556	0	0	0	0	0	0	0	0	0	0
S.N o.	Intangible Assets		Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions	Prior Period Adjustments	Total Amortization/ Adjustments	31.03.2023	31.03.2022
20	Computer Software	40%	807709	168675	0	0	976384	659787	209159	0		868946	107438	147922
21	E-Journals / E-Books	40%	32752809	19541043	0	0	52293852	17098434	18918886	0	0	36017320	16276532	15654375
22	Patents	9 Years	24400	0	0	0	24400	2711	2711	0	0	5422	18978	21689
Total (C)			33584918	19709718	0	0	53294636	17760932	19130756	0	0	36891688	16402948	15823986
Grand Total (A+B+C)			347132569	171886288	0	0	484343301	87151635	65671339	0	0	152822974	331520327	259980934
Previous year (2021-22)			189688936	157443633	0	0	347132569	40661422	46490213	0	0	87151635	259980934	

Note: The figure in Column 'Deductions' under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.

The figure in column 'Additions during the year under Gross Block against Assets 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.

Prior Period Adjustments	1676645
Work in Progress	34675556
Actual Addition During the Year	135534087
Total	171886288

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

**SCHEDULE 4.C - INTANGIBLE ASSETS**

Amount in ₹

S.No.	Intangible Assets	Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjutments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions	Prior Period Adjutments	Total Amortization/ Adjustments	31.03.2023	31.03.2022
1	Computer Software	38602285	668685	0	0	39270970	24443224	9749909	0	0	34193133	5077837	14159061
2	E-journals	32752809	19541043	0	0	52293852	17098434	18918886	0	0	36017320	16276532	15654375
3	Patents	84135	0	0	0	84135	49546	9347	0	0	58893	25242	34589
<b>Total (C)</b>		<b>71439229</b>	<b>20209728</b>	<b>0</b>	<b>0</b>	<b>91648957</b>	<b>41591204</b>	<b>28678142</b>	<b>0</b>	<b>0</b>	<b>70269346</b>	<b>21379611</b>	<b>29848025</b>
<b>Previous year (2021-22)</b>		<b>25287855</b>	<b>46151374</b>	<b>0</b>	<b>0</b>	<b>71439229</b>	<b>18797982</b>	<b>22793223</b>	<b>0</b>	<b>0</b>	<b>41591204</b>	<b>29848025</b>	<b>0</b>



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

						Amount in ₹	
SCHEDULE 4( C) (I) PATENTS AND COPYRIGHTS		Op. Balance	Addition	Gross	Amortization	Net Block 20.....	Net Block 20.....
<b>A. Patents Granted</b>							
1. Balance as on 31.03.23 of Patents obtained in 2022-23 (Original Value - Rs.../-)		----	----	----	----	----	----
2. Balance as on 31.03.23 of Patents obtained in 2022-23 (Original Value - Rs.../-)		----	----	----	----	----	----
3. Balance as on 31.03.23 of Patents obtained in 2022-23 (Original Value - Rs.../-)		----	----	----	----	----	----
4. Patents granted during the Current Year		----	----	----	----	----	----
<b>Total</b>		----	----	----	----	----	----
Particulars		Op. Balance	Addition	Gross	Patents Granted/Rejected	Net Block 20.....	Net Block 20.....
<b>A. Patents Pending in respect of Patents applied for</b>							
1. Expenditure incurred during 20.....		----	----	----	----	----	----
1. Expenditure incurred during 20.....		----	----	----	----	----	----
1. Expenditure incurred during 20.....		----	----	----	----	----	----
<b>Total</b>		----	----	----	----	----	----
<b>C. Grand Total (A+B)</b>		----	----	----	----	----	----

Note : The Addition in Part A (Patents granted), will be the figure of patents granted during the year, transferred from Part B (column-Patents granted/rejected). The amount against grants rejected during the year is written off in the income and Expenditure Account

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 4D Others

Gross Block													Amount in ₹	
Depreciation for the year 31.03.2023													Net Block	
S.No.	Assets Heads	Rate of Depreciation	Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Depreciation for the year	Deductions	Prior Period Adjustments	Total	31.03.2023	31.03.2022
1	Land	0%	0	0	0	0	0	0	0	0	0	0	0	0
2	Site Development/Minor work	0%	0	0	0	0	0	0	0	0	0	0	0	0
3	Buildings	2%	3427787069	26655308	1327616	0	3453114761	191636538	47219071	0	0	238855608	3214259153	3236150531
4	Roads & Bridges	2%	0	0	0	0	0	0	0	0	0	0	0	0
5	Tube wells & Water Supply	2%	0	0	0	0	0	0	0	0	0	0	0	0
6	Sewerage & Drainage	2%	0	0	0	0	0	0	0	0	0	0	0	0
7	Electrical installation and equipment	5%	9708498	0	0	0	9708498	1584651	485425	0	0	2070076	7638422	8123847
8	Plant & Machinery	5%	141859932	9507806	0	0	151367738	33533215	7568387	0	5801215	46902817	104464921	108326717
9	Scientific & Laboratory	8%	209886221	46404935	0	0	256291156	79550654	20503292	0	1175846	101229793	155061363	130335567
10	Office Equipment	7.50%	5765748	50684744	0	0	56450492	1347713	4233787	0	0	5581500	50868992	4418035
11	Audio Visual Equipment	7.50%	686117	16000	0	0	702117	265092	52659	0	0	317750	384367	421025
12	Computers & Peripherals	20%	30976400	13235552	0	0	44211952	22291030	5563583	0	0	27854613	16357339	8685370
13	Furniture, Fixtures & Fittings	7.50%	34141127	15201124	0	0	49342251	14246312	3700668	0	5876573	23823553	25518698	19894815
14	Sports Equipment	10%	744	0	0	0	744	595	74	0	0	669	75	149
15	Vehicles	10%	0	0	0	0	0	0	0	0	0	0	0	0
16	Lib. Books & Scientific Journals	10%	9734217	1844057	0	0	11578274	4693708	1157827	0	0	5851535	5726738	5040509
17	Small Value Assets	0%	0	0	0	0	0	0	0	0	0	0	0	0
18	Work of Art	7.50%	2000000	0	0	0	2000000	150000	150000	0	0	300000	1700000	1850000
Total (A)			3872546073	163549525	1327616	0	4034767982	349299508	90634774	0	12853634	452787915	3581980067	3523246565
19	Capital Work in Progress (B)		0	0	0		0	0	0	0		0	0	0
S.No.	Intangible Assets		Opening Balance 01.04.2022	Additions	Deductions	Prior Period Adjustments	Closing Balance 31.03.2023	Depreciation Opening Balance	Amortization for the year	Deductions	Prior Period Adjustments	Total	31.03.2023	31.03.2022
20	Computer Software	40%	23993634	484081	0	0	24477715	9982507	9534378	0	0	19516885	4960830	14011127
21	E-journals	40%	0	0	0	0	0	0	0	0	0	0	0	0
22	Patents	9 Years	8800	0	0	0	8800	5866	978	0	0	6844	1956	2934
Total (C)			24002434	484081	0	0	24486515	9988373	9535356	0	0	19523728	4962787	14014061
Grand Total (A+B+C)			3896548507	164033606	1327616	0	4059254497	359287881	100170129	0	12853634	472311644	3586942854	3537260627
Previous year (2021-22)			3769008783	127539724	0	0	3896548507	271416236	87871644	0	0	359287881	3537260627	

Note: The figure in Column 'Deductions' under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.

The figure in column 'Additions during the year under Gross Block against Assets 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.

Note: The additions during the year include additions from

Gifted (Books)	742
Project Close (NC+SC)	26960513
0875 Scheme	11102404
Misc. Accounts Fund	8366595
Plan Accounts Fund	0
LDF	3431509
Other Earmarked Fund	114171843
	<u>164033606</u>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

<b>SCHEDULE 5 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS</b>	<b>Amount in ₹</b>	
	<b>Current Year</b>	<b>Previous Year</b>
1. In Central Government Securities	635100000	665100000
2. In State Government Securities	-----	-----
3. Other approved Securities	-----	-----
4. Shares	-----	83000
5. Debentures and Bonds	-----	-----
6. Term Deposits with Banks	-----	-----
7. Others (Earmarked Fund)	3000000	-----
<b>Total</b>	<b>638100000</b>	<b>665183000</b>



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

<b>SCHEDULES 5 (A) INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS (FUNDS WISE)</b>			Amount in ₹
<b>S. No.</b>	<b>Funds</b>	<b>Current Year</b>	<b>Previous Year</b>
1	Endowment Fund - Govt. Securities	133500000	164200000
2	Other Earmarked Fund - Govt. Securities	501600000	500900000
3	Endowment Fund - Shares (Friends of DU & Udhmodya Foundation)	3000000	83000
<b>Total</b>		<b>638100000</b>	<b>665183000</b>

Note : The Total in this sub schedule will agree with the total in Schedule 5.

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

	Amount in ₹	
<b>SCHEDULE 6 - INVESTMENT -OTHERS</b>	<b>Current Year</b>	<b>Previous Year</b>
1. In Central Government Securities		
2. In State Government Securities	----	----
3. Other approved Securities	----	----
4. Shares	----	----
5. Debentures and Bonds	----	----
6. Other (to be specified)	----	----
<b>TOTAL</b>	----	----

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

		Amount in ₹
<b>SCHEDULE 7 - CURRENT ASSETS</b>	<b>Current Year</b>	<b>Previous Year</b>
<b>1. Stock</b>		
a) Stationery	12698055	11487987
b) Water supply material	-----	-----
c) Chemicals & Glassware	3317569	1207615
d) Drugs and Medicines	15346516	12269862
e) Answer Sheet	5017666	1171577
<b>2. Sundry Debtors :</b>		
a) Debtors outstanding for a period more than Six Months	8131582	
b) Others	1085264	16857427
<b>3. Cash and Bank Balance</b>		
a) With Scheduled Banks :		
-In Current Accounts	26499075	45063494
-In Term Deposit Accounts	18187179406	16583372774
-In Savings Accounts	1272820930	2109353820
b) With non-Scheduled Banks :		
-In Term Deposit Accounts	-----	-----
-In Savings Accounts	-----	-----
c) Permanent Advance	540000	1071500
<b>4. Post Office Savings Accounts</b>	-----	-----
<b>TOTAL</b>	<b>19532636063</b>	<b>18781856056</b>

Note : Annexure "A" shows the details of Bank Accounts

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

Annexure "A"

		Amount in ₹	
I	Current Account	Current Year	Previous Year
1	B R Amedkar Centre General Fund A/c	7	2870
2	SBI Law Centre II	----	132064
3	SBI MG II	----	1169991
4	SDC Examination A/c	4276456	9567538
5	SDC General Fund A/c	21415593	29460421
6	Sponsored Project Bank A/c	807019	869670
7	Plan-Current A/c	----	1192057
8	Current A/cs of Earmarked Fund	----	2668883
<b>TOTAL-I</b>		<b>26499075</b>	<b>45063494</b>
II	Savings Bank Accounts		
1	NCWEB A/c	----	617
2	SBI Departmental Receipt A/c	1842607	2629524
3	SBI General Fund A/c	12018122	27721318
4	SBI Medical Reimbursement A/c	----	2582074
5	Sponsored Project Bank A/c	371217940	853679454
6	Sponsored Fellowship and Scholarship	56768457	21813317
7	Plan Savings A/c	11929271	42962591
8	Savings A/cs of Earmarked Fund	148027839	324524994
9	CPF Account refundable to UGC	9920736	1147510
10	IDBI Bank A/c (Misc Fee)	4444954	2881377
11	Online Fees collected from Students on ICICI Bank	149894035	256456104
12	Recurring A/c-(38010936321)	168543063	190162155
13	ICICI Bank A/c-(Exam)-004318	1640548	15067659
14	Capital Assets- (38010936467)	409875	15420149
15	Delhi University Facilities & Services Bank A/c	2598773	----
16	Delhi University Student Welfare Fund-Bank A/c.	18246381	----
17	Salary Account-(38010911307)	315318329	352304977
<b>TOTAL-II</b>		<b>1272820930</b>	<b>2109353820</b>
III	Reserve Bank of India- TSA	<b>TOTAL-III</b>	----
IV	Term Deposit Accounts		
1	FDR from Earmarked Fund(including margin money)	10733606922	9772607720
2	FDR from UGC Refundable A/c	155275000	63875000
3	FDR from ACBR A/c	1305715	1102166
4	Sponsored Project Bank A/c(including margin money)	1355991769	1556849342
5	Sponsored Fellowship and Scholarship	45000000	85000000
6	FDR From Plan A/c (including margin money)	4582500000	4508881546
7	FDR From Capital Assets A/c	176000000	185057000
8	FDR From SBI General Fund Saving 50212	100000000	80000000
9	ICICI ONLINE FEE (FDRS)	480000000	----
10	FDR FROM DU FACILITY	57500000	----
11	FDR From Salary A/c 11307	500000000	330000000
<b>TOTAL-IV</b>		<b>18187179406</b>	<b>16583372774</b>
<b>GRAND TOTAL (I-IV)</b>		<b>19486499411</b>	<b>18737790088</b>



# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

	Amount in ₹	
	Current Year	Previous Year
<b>SCHEDULE 8 - LOANS, ADVANCES &amp; DEPOSITS</b>		
<b>1. Advances to employees (Non-interest bearing)</b>		
a) Leave Travel Concession	2564562	2359912
<b>2. Long Term Advances to employees (Interest bearing)</b>		
a) Vehicle Loan/Conveyance/Computer	395640	464850
b) Home Loan/HBA	6273160	7052200
<b>3. Advances and other amounts recoverable in cash or in kind or for value to be received</b>		
a) Delhi University Press	----	17395000
b) Sir Shankar Lal Chair in Chemistry Fund A/c	----	1100000
c) Other Advance out of Earmarked Funds	47609145	64823116
<b>d) Other Advance out of Maintenance Grant A/c</b>		
i) Advance for Examination	8696366	113473817
ii) Advance for Other Charges	39845608	154261173
<b>iii) Advances for Capital Assets:</b>		
Advance to C.P.W.D.	315324444	106974400
Advance to others	6596716	1424965
e) Other Advances out of Sponsored Projects	74881993	206984802
f) Advance to M/S Rites Ltd. for construction works and others	167159771	223479461
g) Others(TDS refundable)	167359111	103964145
<b>4. Prepaid Expenses</b>		
a) For General and Annual Maintenance Charges	7623495	42733473
<b>5. Deposits</b>		
a) Electricity	20805300	20805300
b) DESU (Security)	4795	4795
c) Others	202373	4922373
<b>6. Income Accrued:</b>		
a) On Investments from Earmarked/Endowment Funds	292191881	190191513
b) On Investments from ACBR/ UGC Refundable A/c	21199	152497
c) On Investments from UGC Refundable A/c	1730308	1581594
d) On Investments from Sponsored Projects	51373519	38890010
e) On Investments from Sponsored Fellowship and Scholarship	3001689	1276554
f) On Investments from Plan	138644961	122316296
g) On Investments from others fund	5524347	2075082
<b>7. Other - Current Assets receivable from UGC/sponsored projects</b>		
a) Other receivables	260589	327221
<b>8. Claims Receivable</b>		
a) GST Receivable	----	472973
<b>TOTAL</b>	<b>1358090972</b>	<b>1429507522</b>

**Note :**

1. If revolving funds have been created for House Building, Computer and Vehicle advances to employees, the advances will appear as part of Earmarked/Endowment Funds. The balances against these interest-bearing advances will not appear in this schedule.

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

Amount in ₹

SCHEDULE - 9 ACADEMIC RECEIPTS	Current Year	Previous Year
<b>FEES FROM STUDENTS</b>		
<b>Academic</b>		
1. Tuition fee	41894188	30376224
2. Admission Fee	2526486	10602674
3. Enrolment fee	48847277	113442658
4. Library Admission fee	3293820	3168689
5. Laboratory fee	42960	35595
6. Sports and Athletic Association Fee	7264305	12844549
7. Registration fee	205264369	86344760
8. Delhi University Students Welfare Fund	18328750	-----
9. Faculty/Deptt./Centre/Colleges Facilities & Services	90645852	-----
10. UG/PG ADMISSION CENCILATION FEE	65708000	3722000
10. Other Fees	34133098	29979789
<b>Total (A)</b>	<b>517949105</b>	<b>290516938</b>
<b>Examinations</b>		
1. Annual Examination Fee	970846412	1213238536
2. Marksheet, certificate fee	45943380	30295677
3. Entrance Examination Fee	420676	674752
<b>Total (B)</b>	<b>1017210468</b>	<b>1244208965</b>
<b>Other Fees</b>		
1. Identity card Fee	-----	-----
2. Fine/Miscellaneous Fee	-----	-----
3. Medical Fee	-----	-----
4. Transportation Fee	-----	-----
5. Hotel Fee	-----	-----
<b>Total (C)</b>	<b>-----</b>	<b>-----</b>
<b>Sale of Publications</b>		
1. Sale of Admission forms	-----	-----
2. Sale of syllabus and Question Paper, etc.	-----	-----
3. Sale of prospectus including admission forms	-----	-----
<b>Total (D)</b>	<b>-----</b>	<b>-----</b>
<b>Other Academic Receipts</b>		
1. Registration fee for workshops, programmes	-----	-----
2. Registration fees (Academic Staff College)	-----	-----
<b>Total (E)</b>	<b>-----</b>	<b>-----</b>
<b>GRAND TOTAL (A+B+C+D+E)</b>	<b>1535159573</b>	<b>1534725903</b>

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 10- GRANTS/SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

Amount in ₹

Particulars	University Grant Commission (UGC)					Current Year Total	Previous Year Total
	Govt. of India	OBC/Excellence/Plan	Others (SAP/FRP/CPDHE)	EWS (Capital/Recurring/ Salary)	Capital Assets	Recurring/Salary Grant	
Balance B/F			18175003	160860690	229035115		408070808
Unspent Excellence/Plan Grant		4719186134	27958727				5696647018
Add: Receipts during the year		264698390	22123716	250000000	85000000	7614081627	4747144861
<b>Total</b>		<b>4983884524</b>	<b>68257446</b>	<b>410860690</b>	<b>314035115</b>	<b>7614081627</b>	<b>6725138318</b>
Less: T/f to Sponsored Project & Capital Fund			1666880		20218199		12421785336
Less : Refund to UGC Balance			11476389				4781958313
Less : Utilized for Capital expenditure (A)		53431387	11102404	250000000	135534087		21885079
<b>Balance</b>		<b>4930453137</b>	<b>44011773</b>	<b>160860690</b>	<b>158282829</b>	<b>7614081627</b>	<b>11476389</b>
Less: utilized for Revenue Expenditure (B)		2417738	27572441	13707951	0	7614081627	450067878
Less: Grant released to Hostels for Capital Expenditure					3359043		258960490
<b>Total (B)</b>		<b>2417738</b>	<b>27572441</b>	<b>13707951</b>	<b>3359043</b>	<b>7614081627</b>	<b>7380866533</b>
<b>Balance C/F (C)</b>		<b>4928035399</b>	<b>16439332</b>	<b>147152739</b>	<b>154923786</b>	<b>---</b>	<b>6972795725</b>

Out of Rs. 492,80,35,399/-,Rs.1,39,25,09,000 as unspent grant (OBC Expansion/12th Plan and Excellence grant) and remaining balance of Rs. 353,55,26,399/-as interest earned.

A- Appears as addition to Capital Fund as well as additions to Fixed Assets during the year.

B- Appears as income in the Income & Expenditure Account.

C- (I) Appears under Current Liabilities in the Balance Sheet and will become the opening balance next



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

SCHEDULE 11- INCOME FROM INVESTMENTS	Earmarked/Endowment Funds		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
1. Interest				
a. On Government Securities	----	----	----	----
b. Other Bonds/Debentures	----	----	----	----
2. Interest on Term Deposits	635794851	732052345	22273788	16178940
3. Income accrued but not due on Term Deposits/Interest bearing advances to employees.	----	----	----	----
4. Interest on Saving Bank Accounts	5942865	8393639	----	----
5. Others (Specify)	----	----	----	----
<b>Total</b>	<b>641737716</b>	<b>740445984</b>	<b>22273788</b>	<b>16178940</b>
<b>Transferred to Earmarked/Endowment Funds</b>	<b>641737716</b>	<b>740445984</b>		
<b>Balance</b>	<b>Nil</b>	<b>Nil</b>		

Note: Interest accrued but not due on Term Deposits from HBA Fund, conveyance advance fund and Computer Advance fund and on interest bearing advances to employees will be included here (Item 3), only where Revolving funds (EMF) for such advances have been set up.



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

<b>SCHEDULE 12 - INTEREST EARNED</b>	<b>Amount in ₹</b>	
	<b>Current Year</b>	<b>Previous Year</b>
<b>1. On Savings Accounts with scheduled banks</b>	<b>15944141</b>	<b>19326702</b>
<b>2. On Loans</b>		
a. Employee/Staff	----	----
b. Others	----	----
<b>3. On Debtors and Other Receivables</b>	----	----
<b>Total</b>	<b>15944141</b>	<b>19326702</b>

# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### SCHEDULE 13 - OTHER INCOME

Amount in ₹

A. Income from Land & Building	Current Year	Previous Year
1. Rent from Building/Land etc.	10323870	11219741
2. License fee recovered from employees for Home Accommodation	17937515	22404057
3. Hire Charges of Auditorium/Play ground/Convention Centre, etc.	----	----
4. Electricity charges recovered	----	----
5. Water charges recovered	----	----
<b>Total (A)</b>	<b>28261385</b>	<b>33623798</b>
<b>B. Sale of Institute's publications</b>	----	----
<b>C. Income from holding events</b>		
1. Gross Receipts from annual function/sports carnival	----	----
Less : Direct expenditure incurred on the annual function/sports carnival		
2. Gross Receipts from fest	----	----
Less : Direct expenditure incurred on the fest		
3. Gross Receipts for educational tours	----	----
Less : Direct expenditure incurred on the tours		
4. Others (to be specified and separately disclosed)	----	----
<b>Total (C)</b>	----	----
<b>D. Others</b>		
1. RTI fee	11664	8630
2. Misc. receipts (Sale of tender form, waste paper, etc.)	1916437	1114971
3. Profit on Sale/disposal of Assets		
a) Owned assets	10233894	22547
b) Assets received free of cost	----	----
4. Health Centre Contribution	63503459	47988754
5. Others (Specify)	1870726	1077879
<b>Total (D)</b>	<b>77536180</b>	<b>50212781</b>
<b>GRAND TOTAL (A+B+C+D)</b>	<b>105797565</b>	<b>83836579</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

**SCHEDULE 14- PRIOR PERIOD INCOME**

Particulars	Current Year	Amount in ₹ Previous Year
1. Academic Receipts	10000000	-----
2. Income from Investments	-----	-----
3. Interest earned	-----	-----
4. Other Income	33015515	-----
<b>Total</b>	<b>43015515</b>	<b>0</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

**SCHEDULE - 15 STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)**

Amount in ₹

Particulars	Current Year			Previous Year		
	UGC/Other Schemes	Total	UGC/Other Schemes	Total	UGC/Other Schemes	Total
a) Salaries and Wages						
Teaching staff	16125712	2326312581	2342438293	3180368	2230736844	2233917212
Non-Teaching staff	6067871	938724615	944792486	-----	1006177945	1006177945
b) Retirement and Terminal Ben	24656	6796731208	6796755864	-----	4512947045	4512947045
c) LTC facility	-----	25262914	25262914	-----	20955539	20955539
d) Medical facility	48246	257892973	257941219	-----	235161228	235161228
e) Children Education Allowance	54000	17639850	17693850	-----	18703967	18703967
gf Honorarium	-----	8588062	8588062	-----	18113286	18113286
<b>Total</b>	<b>22320485</b>	<b>10371152203</b>	<b>10393472688</b>	<b>3180368</b>	<b>8042795854</b>	<b>8045976222</b>



# UNIVERSITY OF DELHI

## SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023

### **SCHEDULE 15 A - EMPLOYEES RETIREMENT AND TERMINAL BENEFIT**

	Amount in ₹				
	Pension	Gratuity	Leave Encashment	Total	Previous year
Opening Balance as on 01.04.22	25525982894	1370980441	1620850862	28517814197	26434747655
Addition : Capitalized value of Contributions Received from other Organizations	10975508	2335930	1170264	14481702	11391621
<b>Total (a)</b>	<b>25536958402</b>	<b>1373316371</b>	<b>1622021126</b>	<b>28532295899</b>	<b>26446139276</b>
Less: Actual Payment during the Year (b)	2421571462	188502677	154323221	2764397360	2440132124
Balance Available on 31.03.23 c (a-b)	23115386940	1184813694	1467697905	25767898539	24006007152
Provision required on 31.03.23 as per Actuarial Valuation (d)	29416399413	1322713538	1825366796	32564479747	28517814197
A. Provision to be made in the Current year (d-c)	6301012473	137899844	357668891	6796581208	4511807045
B. Contribution to New Pension Scheme	----	----	----	----	----
C. Medical Reimbursement to Retired Employees	----	----	----	----	----
D. Travel to Hometown Retirement	----	----	----	----	----
E. Deposit Linked Insurance Payment	----	----	----	150000	1140000
<b>TOTAL (A+B+C+D+E)</b>	<b>6301012473</b>	<b>137899844</b>	<b>357668891</b>	<b>6796731208</b>	<b>4512947045</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

Amount in ₹						
<b>SCHEDULE 16 - ACADEMIC EXPENSES</b>		<b>Current Year</b>			<b>Previous Year</b>	
	<b>UGC/Other Schemes</b>		<b>Total</b>	<b>UGC/Other Schemes</b>		<b>Total</b>
a) Chemicals & Glassware	171004	17084869	17255873	517295	13688816	14206111
b) Repair & Maintenance of Laboratory Equipments	-----	372409	372409	-----	231263	231263
c) Seminars/Workshops/Conference Expenses	-----	1650724	1650724	-----	729278	729278
d) Award and Scholarships	-----	89107507	89107507	-----	85465008	85465008
e) Examination	-----	369598047	369598047	-----	180151244	180151244
f) Refund of Fees	-----	-----	0	-----	1777945	1777945
g) Admission Expenses	-----	5387086	5387086	-----	9629352	9629352
h) Publications	-----	643716	643716	-----	30000	30000
h) Magazines & Journals	-----	73842348	73842348	-----	107728793	107728793
i) Salary of Teaching Staff (Adhoc/Guest Faculty)	-----	358887243	358887243	-----	365388477	365388477
<b>TOTAL</b>	<b>171004</b>	<b>916573949</b>	<b>916744953</b>	<b>517295</b>	<b>764820176</b>	<b>765337471</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

						Amount in ₹
		Current Year		Previous Year		
<b>SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES</b>	<b>UGC/Other Schemes</b>		<b>Total</b>	<b>UGC/Other Schemes</b>		<b>Total</b>
<b>A Infrastructure</b>						
a) Electricity and Power	----	290127339	290127339	----	225446070	225446070
b) Water charges	----	12088127	12088127	----	4881252	4881252
c) Rent, Rates and Taxes (including property tax)	----	63359421	63359421	----	69383968	69383968
<b>B) Communication</b>						
d) Postage and Telephone	----	3658468	3658468	----	4506405	4506405
e) Connectivity Expenses	----	36707678	36707678	----	45349261	45349261
<b>C) Others</b>						
f) Printing and Stationery (consumption)	34754	20520539	20555293	80789	17281846	17362635
g) Legal & Professional Charges	----	20006983	20006983	----	12512936	12512936
h) Advertisement and Publicity			0	----	131439	131439
i) Watch & Ward Expenses	----	166834619	166834619	----	146028521	146028521
j) House Keeping Expenses	----	115686882	115686882	----	110342704	110342704
k) Games & Sports	----	8025380	8025380	----	3343891	3343891
l) Medical Expenses	----	59303832	59303832	----	61001594	61001594
m) Others/Contingency	4432599	65989003	70421602	271161	41425894	41697055
<b>D) Contractual/Adhoc Staff Salaries</b>						
n) Non-Teaching Staff	----	357705754	357705754	----	280342043	280342043
o) Contribution to Provident Fund	----	3605734	3605734	----	4282441	4282441
p) Contribution to New Pension Scheme	469023	200370633	200839656	----	160804975	160804975
<b>TOTAL</b>	<b>4936376</b>	<b>1423990392</b>	<b>1428926768</b>	<b>351950</b>	<b>1187065240</b>	<b>1187417190</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

Amount in ₹					
SCHEDULE - 18 TRANSPORTATION EXPENSES	Current Year			Previous Year	
	UGC/Other Schemes	Total	UGC/Other Schemes	Total	
1 Vehicles (owned by institution)					
a) Running expenses	-----	1275102	1275102	-----	1087105
b) Repairs & maintenance	-----	818905	818905	-----	471586
c) Insurance expenses	-----	90853	90853	-----	170936
2 Vehicles taken on rent/lease					
a) Rent/lease expenses	-----	-----	-----	-----	-----
3 Vehicle (Taxi) hiring expenses	-----	1527617	1527617	-----	760959
4 Travelling & Transportation Expenses	-----	9837426	9837426	-----	3077462
<b>Total</b>	-----	<b>13549903</b>	<b>13549903</b>	-----	<b>5568048</b>



**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

Amount in ₹						
SCHEDULE - 19 REPAIRS & MAINTENANCE	Current Year			Previous Year		
	UGC/Other Schemes		Total	UGC/Other Schemes		Total
a) Buildings	-----	317737091	317737091	-----	151753739	151753739
b) Furniture & Fixtures	-----	8005406	8005406	5357	6675169	6680526
c) Plant & Machinery	6325	16928976	16935301	-----	15571245	15571245
d) Office Equipment	11800	103678	115478	48823	21660	70483
e) Computers	-----	18100	18100	8665	-----	8665
f) Gardening	-----	3281665	3281665	-----	2445641	2445641 →
<b>Total</b>	<b>18125</b>	<b>346074916</b>	<b>346093041</b>	<b>62845</b>	<b>176467454</b>	<b>176530299</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

Amount in ₹						
SCHEDULE - 20 FINANCE COSTS	Current Year			Previous Year		
	UGC/Other Schemes		Total	UGC/Other Schemes		Total
a) Bank charges	26473	56620	83093	-----	69473	69473
b) Others (specify)	-----	-----	-----	-----	-----	-----
<b>Total</b>	<b>26473</b>	<b>56620</b>	<b>83093</b>	<b>-----</b>	<b>69473</b>	<b>69473</b>

Note: If the amount is not material, the head Bank charges could be omitted and these could be accounted as Administrative expenses in Schedule 17.

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

Amount in ₹						
SCHEDULE - 21 Expenditure on Grants, Subsidies etc.	Current Year			Previous Year		
	UGC/Other Schemes		Total	UGC/Other Schemes		Total
a) Provision for Bad and Doubtful Debts/Advances	----	----	----	----	----	----
b) Irrecoverable Balances Written- off	----	----	----	----	----	----
c) Grants/Subsidies to other institutions/organizations	----	169301972	169301972	----	138117277	138117277
d) Others (specify)			----		----	----
<b>Total</b>	----	<b>169301972</b>	<b>169301972</b>	----	<b>138117277</b>	<b>138117277</b>

Note:- Other expenses shall be classified as writes - off, provisions, miscellaneous expenses, loss on sale of investments, and loss on sale of fixed assets etc. and disclosed accordingly.

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

**SCHEDULE 22: PRIOR PERIOD EXPENSES**

Amount in ₹

Particulars	Current Year			Previous Year		
	UGC/Other Schemes		Total	UGC/Other Schemes		Total
1 Establishment expenses	-----	-----	0	-----	-----	0
2 Academic expenses	-----	279289534	279289534	-----	110692222	110692222
3 Administrative expenses	-----	-----	-----	-----	2387518	2387518
4 Hon. To Non-Teaching (NCWEB)	-----	4284755	4284755	-----	-----	-----
5 Repairs & Maintenance	2517716	5233341	7751057	-----	-----	-----
6. Depreciation related to prior period	-----	81482203	81482203	-----	1791728	1791728
<b>Total</b>	<b>2517716</b>	<b>370289833</b>	<b>372807549</b>	<b>-----</b>	<b>114871468</b>	<b>114871468</b>

**UNIVERSITY OF DELHI**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2023**

	Amount in ₹	
Increase/Decrease in Stock	Current year	Previous year
<b>a.) Closing Stock</b>		
Stationery	12698055	11487987
Drugs and Medicines	15346516	12269862
Chemicals & Glassware	3317569	1207615
Answer Sheet	5017666	1171577
<b>Total (A)</b>	<b>36379806</b>	<b>26137041</b>
<b>b.) Less :Opening Stock</b>	<b>26137041</b>	<b>18475299</b>
<b>Total (B)</b>	<b>26137041</b>	<b>18475299</b>
<b>Net Increase/(Decrease) (A-B)</b>	<b>10242765</b>	<b>7661742</b>



# University of Delhi

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## **SCHEDULES FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2023**

### **SCHEDULE: 23 SIGNIFICANT ACCOUNTING POLICIES**

#### **1 BASIS FOR PREPARATION OF ACCOUNTS:**

- a. The financial statements are prepared on the basis of Historical Cost Convention and generally on the Accrual Method of accounting unless otherwise stated.

#### **2 REVENUE RECOGNITION:**

- 2.1 Fees from Students, Sale of Admission Forms and Tuition Fees for each semester and Interest on Savings Bank Accounts are accounted for on a cash basis.
- 2.2 Income from Land, Buildings and other Property and Interest on Investments are accounted for on accrual basis.
- 2.3 Interest on Interest Bearing Advances to staff for House Building, Purchase of Vehicles and Computers are accounted for on accrual basis every year, though the actual recovery of interest starts after the full repayment of the principal amount.

#### **3 FIXED ASSETS AND DEPRECIATION:**

- 3.1 Fixed assets are valued at cost of acquisition including inward freight, duties, taxes, incidental direct expenses related to acquisition, installation and commissioning less depreciation. Fixed assets received by the University without any consideration are capitalized in the financial statement at a nominal value i.e. at Re. 1 (one) per asset.
- 3.2 Gifted / Donated Assets are valued at a nominal value at Re.1/- (one) per asset.
- 3.3 Books received as gifts are valued at a nominal value at Re.1/- (one) per asset.
- 3.4 The University has adopted Straight Line method of depreciation from the Financial Year 2020-21. Depreciation on Fixed Assets is provided on Straight line method at the following rates :-

# University of Delhi

## Tangible Assets:

<u>S.No.</u>	<u>Type of Assets</u>	<u>Rate as Per S.L.M.</u>
1	Land	0%
2	Site Development	0%
3	Buildings	2%
4	Roads & Bridges	2%
5	Tube wells & Water Supply	2%
6	Sewerage & Drainage	2%
7	Electrical Installation and equipment	5%
8	Plant & Machinery	5%
9	Scientific & Laboratory Equipment	8%
10	Office Equipment	7.5%
11	Audio Visual Equipment	7.5%
12	Computers & Peripherals	20%
13	Furniture, Fixtures & Fittings	7.5%
14	Sports Equipment	10%
15	Vehicles	10%
16	Library Books & Scientific Journals	10%
17	Work of Art	7.5%

## Intangible Assets (amortization):

1	E-Journals (Perpetual)	40%
2	Computer Software	40%
3	Patents and Copyrights	9 Years



# University of Delhi

- 3.5 In respect of additions to fixed assets during the year, depreciation is provided for the full year. In respect of sale/deductions from fixed assets, no depreciation is charged. The asset which has been disposed of has been shown as deduction during the year. Against the outstanding advances, the assets which has been acquired in the previous financial year their depreciation has been taken as prior period depreciation. After the settlement of advances, the expenditure of the previous financial year has also been taken as prior period expenditure.
- 3.6 Assets created out of Earmarked Funds where the ownership of such assets vest in the university, are set up by credit to Capital Fund and merged with the Fixed Assets of the University. Depreciation is charged at the rates applicable to respective assets as prescribed in the revised format of Ministry of Education (MOE). Assets purchased out of Projects funded by outside agencies remain the property of the concerned funding agency till the project is closed. After closure of the project, the project assets are merged with the Fixed Assets of the University after charging depreciation at the rates applicable to the respective assets by debiting respective Fixed Assets account and crediting Capital Fund Account.
- 3.7 Assets, the individual value of each of which is Rs. 2,000 or less (except Library Books), are treated as Small Value Assets and 100% depreciation is provided in the year in which these are purchased. However physical accounting and controls are continued by the holders of such assets.

## 4 Intangible Assets:

Patents and Copyrights, E-Journals and Computer Software are grouped under intangible Assets.

- 4.1 **Patents:** The expenditure incurred from time to time (application fees, legal expenses etc.) for obtaining Patent is capitalized and shown as part of Intangible assets in the Balance Sheet. If applications for Patents are rejected, the cumulative expenditure incurred on the particular Patent is written off to the Income & Expenditure in the year of application is rejected.

The expenditure on Patents granted is written off over a life of 9 years on a conservative basis.

### 4.2 Electronic Journals

- (a) **Perpetual:-**Electronic Journal (E-Journals) are not in a tangible form, but temporarily capitalized and in view of the magnitude of expenditure and the benefit derived in terms of perpetual knowledge acquired by the academic and research staff, Depreciation is provided in respect of E-Journals at a higher rate of 40% as against depreciation of 10% provided in respect of Library Books.



# University of Delhi

(b) **Non-perpetual:** The amount spent on E- Journals/ periodicals are treated as revenue expenditure to the extent of the benefits utilized in the current year and rest of the amount is accounted for in books of account on accrual basis as prepaid expenses

4.3 Expenditure on acquisition of software has been separated from Computers and Peripherals, as apart from being intangible assets, the rate of obsolescence in respect of software is very high. Depreciation in respect of software is being charged @ 40% on Straight Line Method as against the Depreciation of 20% provided in respect of Computers & Peripherals.

**5 Stocks:**

The stocks at the end of the year are valued at cost.

**6 Retirement Benefits:**

Retirements Benefits i.e., Pension, Gratuity and Leave Encashment are provided on the basis of actuarial valuation as per Accounting Standard -15. Capitalized value of Pension, Gratuity and Earned Leave received from previous employers of Universities employees, who have been absorbed in the university is credited to the respective Provision Accounts. Pension and leave salary contribution received in respect of employees on deputation is also credited to the respective Provision accounts.

**7 Investments:**

Keeping in view the requirements of funds the surplus funds are kept as fixed deposit in bank accounts from time to time. Other investments which are made in earlier previous years have been incorporated at their cost/face value.

**8 Earmarked/ Endowment Funds:**

The Earmarked Fund consisting of Housing Building Fund, Conveyance Fund, Library Development Fund (including Computer Advances and other such funds) are long term funds and earmarked for specific purposes. Each of the Funds has a separate bank account. Those with large balances also have investment in Government Securities, Bonds, and Term Deposit with Banks. The income from investment/ advances (House Building, Conveyance, Computers, Library Development Fund) is accounted on accrual basis and interest on savings bank accounts are credited to the respective fund on cash basis. The expenditure and advances (in the case of Housing Building& Conveyance/Computers, Library Development Fund) are debited to the respective funds.

8.1 The balance of respective funds is carried forward on the liability side of the Balance Sheet and is represented by Bank Balance, Advances, Fixed Deposit and Investments on the asset side of the Balance Sheet.

# University of Delhi

8.2 Assets purchased/created out of Earmarked Funds where the ownership of the assets vests in the University, are merged with the Fixed Assets of the University by debiting respective fixed asset account and crediting Capital Fund account. Depreciation is charged at the rates applicable to the respective assets.

8.3 **Endowment Funds:** Endowment Funds are received from various individual donors, Trust and other Organization, for establishing Chairs and for Medals, Prizes and scholarships, as specified by the donors.

The Income from investment of each Endowment Fund is added to the Fund. The expenditure on Medals & Prizes is met from the interest earned on investment of the respective Endowment Funds and the balance is carried forward to next year.

The balances are represented by Investment in RBI Bonds and Fixed Deposits and balance in Savings Bank Account common for all Endowments, and Accrued Interest on Investments.

## 9 Government and University Grants Commission Grants:

9.1 During the Financial Year 2022-23, total Grant of Rs.777,43,00,000/- has been assigned for University of Delhi in TSA Account with Reserve Bank of India comprising Recurring Grant of Rs. 3,22,25,00,000/-, Salary Grant of Rs. 4,46,68,00,000/- and Capital Grant of Rs. 8,50,00,000/-. Out of total grant of Rs.777,43,00,000, University has utilized Rs. 769,90,81,627/- during the F.Y. 2022-23. Out of the assigned salary Grant of Rs. 4,46,68,00,000/-, a sum of Rs. 7,52,18,373/- was return back to the Government on 31.03.2023.

9.2 To the extent, utilized towards capital expenditure grant from UGC are transferred to the Capital Fund.

9.3 UGC grant to the extent, utilized for meeting Revenue Expenditure are treated as income of the year in which they are realized.

9.4 Unutilized Grants received by the University in Commercial Bank shown as liability in the Schedule-3 (Current Liabilities & Provisions) in the Balance Sheet.

## 10 Investments of Earmarked Fund and Interest Income Accrued on such Investments:

To the extent not immediately required for expenditure the amounts available against such funds are invested in approved Securities and Bonds or deposited for fixed term with Banks, leaving the balance in Savings Bank Account.



# University of Delhi

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Interest received, interest accrued and due and interest accrued but not due on such investment are added to the respective funds and not treated as income of the Institution.

## 11 Sponsored Projects:

- 11.1 In respect of ongoing sponsored Projects, the amounts received from sponsors are credited to the head 'Current Liabilities and Provisions- Current Liabilities – "Receipt against Sponsored Projects". As and when expenditure incurred/advances are paid against such project, or the concerned project account, is debited with allocated overhead charges, the liability account is debited. Unutilized grant as on 31.3.2023 is shown as liability in schedule – 3 of the Balance Sheet.
- 11.2 In addition to funds for Fellowships released by the UGC, Fellowship and Scholarship are also sponsored by various organizations. These are accounted in the same way as Sponsored Projects except that the expenditure generally is only on distribution of Fellowships and Scholarship, which may include allowances for contingent expenditure by Fellows and Scholars.
- 11.3 The Institution itself also awards Fellowships and Scholarships, which are accounted as Academic Expenses.
- 11.4 Assets purchased out of Project funded by outside agencies remain the property of the concerned funding agency till the project is closed. After closure of the project, the project assets are merged with the Fixed Assets of the University after deprecation charged at the rates applicable to the respective assets by debiting respective Fixed Assets account and crediting Capital Fund Account.

## 12 Income Tax:

The Income of the institution is exempt from Income Tax under section 10(23C) (iiiab) of the Income Tax Act. No provision for tax is therefore made in the accounts.

Dated: 7<sup>th</sup> August 2023

# University of Delhi

## SCHEDULES FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2023

### SCHEDULE 24: CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

#### 1 Contingent Liabilities:

- (a) Various claims filed by present/former employees of the University are pending before Industrial Tribunals and the Hon'ble High Court of Delhi. The quantum of claims is not ascertainable.
- (b) An Amount of Rs 14.25 Crore is payable to ECIL as balance payment for supplying and commissioning of security equipment related to various venues of DU areas during Commonwealth Games 2010 (against bill amount of Rs 28.23 Crore). The balance payment was stopped by the Ministry of Home Affairs as the matter is sub-judice in the Hon'ble Court.

#### 2 Contingent Assets:

- (a) An amount of Rs. 1.21 Crores is payable by India Electronics and Semiconductor Association as pending license fee for use of space in South Campus. The amount has not been shown as recoverable in the Accounts as the matter is sub-judice in the Hon'ble High Court.

#### 3 Capital Commitments

- (a) A sum of Rs. 25.00 Crores has been received under EWS Scheme from MOE for construction of two Buildings Projects during the Year. The amount has been released to CPWD for execution of works on deposit basis on following works: -
- (b) Capital Works in Progress: Capital Works in Progress represents the cost of work completed till 31<sup>st</sup> March 2023 towards construction of the following projects:

a. Vertical Extension of the existing building of Multi-Storied science block at North Campus, Delhi: Rs. 3,00,03,662/-

University of Delhi, 100 of Building Rep Delhi Unv  
University Computer Centre:

Rs. 46,71,894/-



# University of Delhi

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## 4 Fixed Assets:

4.1 Addition in the year to Fixed Assets in Schedule 4, Capital Assets Rs. 13,55,34,087/- and Earmarked/Endowment Fund of Rs. 16,40,33,606 which includes assets purchased out of Special scheme FRP/CPDHE of Rs. 1,11,02,404, Sponsored Projects closed Rs. 2,69,60,513, Library Books & other assets of the value Rs. 742 and Library Books & other assets gifted to the University of Delhi has been shown at nominal value Rs. 1/-. The assets have been set up by credit to the Capital Fund.

4.2 Fixed Assets set out in Schedule 4 do not include Assets purchased out of funds of sponsored Project, held & used by the university, as Project contracts includes stipulations that all such Assets purchased out of Project funds will remain the property of Sponsors till the project is closed.

5 The long outstanding advances with M/s, Rites Ltd and Engineering India Limited (E.I.L.) has been adjusted on the basis of utilization certificate/expenditure details as submitted by the respective agencies and duly verified by the Engineering Department. The Remaining advance amount is with RITES Limited for ongoing construction of other building projects.

## 6 Investment from Earmarked/ Endowment Funds

The University has created two Companies (Section -8) namely Udhmodya Foundation and Friends of DU Foundation with 100% Equity in the name of University of Delhi and subscribed 1,50,000 equity shares of each company.

## 7 Deposit Liabilities:

No earnest money/security deposit has been transferred to Revenue Account.

## 8 Expenditure in Foreign Currency:

Transaction denominated in Foreign Currency is accounted for at the prevailing exchange rate at the date of payment/realization.

## 9 Current Assets, Loans & Advances and Deposits:

In the opinion of the management, the Current Assets, Loans and Advances have the value on realization in the ordinary course, equal at least to the aggregate amounts shown in the Balance Sheet. Since there were long outstanding advances for more than 10-15 previous years; most of the advances have been settled on the basis of available records/documents.

# University of Delhi

Out of the grant of Rs.35,00,00,000/- (Rs.10,00,00,000/- in Financial Year 2021-22 and Rs.25,00,00,000 in Financial year 2022-23) sanctioned under EWS for two building projects to be constructed by the CPWD, a sum of Rs. 3,46,75,556/- has been shown as Capital work-in-progress leaving remaining balance of Rs. 31,53,24,444/- for ongoing construction work.

## 10 Bank Balances:

The details of balances in Savings Bank Accounts, Currents Accounts & Fixed Deposit Accounts with Banks are enclosed as attachment "A" to the schedule of Current Assets

- All Savings Bank Accounts except Salary A/c, Capital A/c and Recurring A/c with auto sweep facility (Flexi Deposit), generate interest at the rate applicable to the Fixed Deposit for the duration for which the funds are kept in the "Flexi Deposit Account". The interest income in such savings bank accounts is accounted for on accrual basis.

11 Previous year figures have been regrouped/rearranged where-ever necessary.

12 Figures in the final accounts have been rounded off to the nearest rupee.

13 Schedule 1 to 24 is annexed to & form an integral part of the Balance Sheet as at 31<sup>st</sup> March 2023 and the Income & Expenditure Account for the year ended 31<sup>st</sup> March 2023.

## 14 Provident Fund Accounts

As the Provident Funds are owned by the members of those funds and not by the University, Provident Fund accounts were separated from the University Accounts. However, Receipts & Payments Accounts, Income & Expenditure Account (on Accrual basis) and Balance Sheet of the Provident Fund Accounts as well as the National Pension Scheme (NPS) for the year 2022-23 have been attached to the University's Accounts.

## 15 Salaries:

The expenditure on salary for the year includes provision of salary for the month of March 2023.

## 16 Prior Period Income and Expenses:

Prior Period Expenditure of Rs.37,28,07,550 /- includes Academic Expenditure of Rs. 27,92,89,534/-, Honorarium to Non-Teaching Staff Rs. 42,84,755/-, Repairs and Maintenance Rs. 77,51,057/-, and Depreciation Rs. 8,14,82,203/- (refer to Schedule 22: Prior Period Expenses).



# University of Delhi

## 17 Halls & Hostel:

As the Hall & Hostels are separate reporting entities, their accounts are prepared separately from the University of Delhi Accounts. However, a Consolidated Receipts & Payments Account, Consolidated Income & Expenditure Account and a Consolidated Balance Sheet of all the Halls & Hostels and Guest Houses have been attached to the University of Delhi Account.

## 18 Delhi University Press:

The University Press has already been closed as per direction of Ministry of Education (MHRD) and in accordance with Executive Council resolution no 79 (79-17) dated 15.03.2020.

All Assets and Liabilities of the University Press has been taken over by the University at book value as on 31.03.2022 and merged in the Annual Accounts of University of Delhi in the Financial Year 2022-23. The matter of closure of the University Press and merger of all Assets and Liabilities of the University Press with the University has been considered and approved by the Finance Committee in its meeting held on 06.12.2022 and the same was approved by the Executive Council in its meeting held on 08.12.2022 vide E.C. Resolution No. 43. Accordingly, University Press ceases to exist.

## 19 Institution of Eminence: -

The Central Government, on the recommendations of Empowered Expert Committee (EEC) and University Grants Commission (UGC) declared University of Delhi as an "Institution of Eminence Deemed to be University" with effect from the issuance of the Notification No. F.11/9/2019-U3(A) dated 2<sup>nd</sup> March, 2020. The Account of Institution of Eminence is incorporated as Project Account in the annual accounts of University of Delhi in Schedule-3(a) Sponsored Projects. During the Financial Year 2022-23, carried over opening balance of Rs.82.51 crore and grant received during the year i.e. Rs. 65.00 Crores and interest/other income of Rs.1.77 crore, a sum of Rs. 130.06 Crores utilized towards expenditure during the F.Y. 2022-23, as per the accounts submitted by the IOE.

## 20 International Guest House: -

Against the embezzlement amount of Rs. 9,67,325/- by one of the employees of the International Guest House, a sum of Rs. 2,88,383/- has already been recovered and balance of Rs. 6,78,942/- will be recovered from the arrears of salary payable to the terminated employee, which is under consideration and will be adjusted with the approval of appropriate authorities.

# University of Delhi

## 21 Income Tax Refund Status

Assessment Year	Refund Due as per Return (A)	CPC Intimation Number and Date	Total Refund as per CPC Intimation	Principal Amount of Refund as per CPC Intimation (B)	Interest	Shortfall in Income Tax Refund as per Claim (A-B)	Status/ Remarks
2019-20	47048540	CPC/2021/A7/2 01852207 25-12-2021	40688732	36822390	3866342	10226150	Refund pertaining to TDS deducted in FY 2019-20 of Rs. 3,68,22,390 received in full (along with interest) on 27-12-2021. However, TDS brought forward from FY 2018-219 not considered by ITD. Grievance raised on 29-12-2021 and 14-01-2022 for shortfall of refund amount of Rs. 1.02 Crores, but as per CPC resolution, rectification u/s 154 needs to be filed. Rectification u/s 154 to be filed, but ITD portal is not accepting Rectification. Manual rectification u/s 154 filed VIDE Letter on 24-03-2023
2021-22	30690425	143(1) = CPC/2122/A7/2 43802408 04-07-2022  154 = CPC/2122/U7/3 16926910 08-12-2022	80292	74348	5944	30616077	Partial Refund of Rs. 74,348 received on 06-July-2022. Rectification filed on 17-11-2022 for claim of balance refund of Rs. 3.06 Crores, but as per Rectification Order u/s 154 dated 08-12-2022, claim has again been denied. Form 26AS contains correct amount of TDS claimed in ITR.  Since CPC has not considered our contentions as per Rectification filed u/s 154, hence Appeal u/s 246A against Intimation Order u/s 143 (1)/ Rectification filed on 08-02-2023
2022-23	52569750	CPC/2223/A7/3 25877566 dated 18/07/2023	56775328	52569750	4205578	-	Income Tax Return has been processed vide Intimation u/s 143(1) DIN CPC/2223/A7/325877566 dated 18/07/2023 and the ITD has accepted the refund as per ITR of Rs. 5.25 Crores and also given interest of Rs. 42.06-lacs. (Total refund of Rs. 5.68 Crores as per Intimation). However, Refund sequence number is missing in the intimation (mentioned as Zero), hence the ITD may issue refund after finalisation of Scrutiny Assessment case only.  Case has been selected for Faceless Scrutiny Assessment vide DIN: ITBA/AST/S/143(2)/2023-24/1053502993(1) dated 02.06.2023. Refund will be issued after closure of proceedings now.

Dated: -7<sup>th</sup> August 2023



**UNIVERSITY OF DELHI**  
**RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2023**

RECEIPTS		Current Year	Previous Year	PAYMENTS		Amount in ₹	Previous Year
<b>I. Opening Balances</b>				<b>I. Expenses</b>			
a) Cash Balances		----	----	a) Establishment Expenses	6298389856	5920421514	
b) Bank Balances				b) Academic Expenses	772915205	748306145	
i. In Current Accounts		45063494	82265824	c) Administrative Expenses	1339025861	1195114601	
ii. In Saving Accounts		2109353820	2765513691	d) Transportation Expenses	12875496	4996360	
iii. In Deposit Accounts		16583372774	13779817209	e) Repairs & Maintenance	288595715	175769909	
c) Permanent Advance		1071500	897600	f) Finance costs	83093	69473	
				g) Expenditure on Grant	169301972	138117277	
				h) Prior Period Items	298586890	----	
<b>II. Grants Received</b>				<b>II. Payments against Earmarked/Endowment Funds</b>	639125161	274560877	
a) From Government of India		----	----				
b) From State Government		----	----	<b>III. Payments against Sponsored Projects/Schemes</b>	1926083451	675247521	
c) From UGC							
i) Grant for Capital Assets	85000000			<b>IV. Payments against Sponsored /fellowship Fellowships/Scholarships</b>	34272879	46386678	
ii) Grant for Salary/ recurring	7614081627						
iii) Grants for EWS	250000000			<b>VI. Investments and Deposits made</b>			
d) From UGC Specific Schemes	22123716	7971205343	6725138318	a) Out of Earmarked/Endowment Funds	3000000	----	
<b>III. Academic Receipts</b>				b) Out of own funds (Investments - Others)	----	----	
a) Fees and Subscriptions		1535159573	1534845903				
				<b>VII. Term Deposits with Scheduled Banks</b>	----	----	
<b>IV. Receipts against Earmarked/Endowment Funds</b>		874047575	1315326551				
<b>V. Receipts against Sponsored Projects/Schemes</b>		1116034254	1139436740	<b>VIII. Expenditure on Fixed Assets and Capital Work - In - Progress</b>			
				Expenditure towards capital nature (Fixed Assets)	527127310	213326461	
<b>VI. Unutilized OBC grant refunded by Colleges</b>		5243407	----	a) Capital Works - In - Progress	----	----	
<b>VII. Receipts against Sponsored Fellowships and Scholarships</b>		26132579	44147612	<b>IX. Other Payments including statutory payments</b>			
				Credit Balance of University Accounts	9120611	53884919	

UNIVERSITY OF DELHI  
RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2023

<b>VIII. Income on Investments From</b>			<b>X. Refunds of Grants</b>		
a) Earmarked/Endowment Funds	498953242	702550022		11476389	----
b) Plan Accounts	225524218	----	<b>XI. Deposits and Advances</b>		
c) Sponsored Projects	106667459	91859021	a) LTC Advance	----	2859495
d) Sponsored Fellowship & Scholarship	3095440	5191805	b) Advance	9736581	135566198
<b>IX. Interest received on</b>			d) Advance out of Sponsored Projects, Plan, & Earmarked Fund	----	1229151
a) Bank Deposits	16771335	13582367	<b>XII. Other Payments</b>		
b) Loans and Advances	----	----		9247910	293231882
c) Savings Bank Accounts	15944141	19326702	<b>XIII. Closing Balances</b>		
<b>X. Investments encashed</b>			a) Cash in hand	----	----
	30083000	217900000	b) Bank Balances		
<b>XI. Term Deposits with Scheduled Banks encashed</b>			- In Current Accounts	26499075	45063494
	----	----	- In Savings Accounts	1272820930	2109353820
<b>XII. Other Income (including Prior Period Items)</b>			- In Deposits Accounts	18187179406	16583372774
	155553377	78465149	c) Permanent Advance	540000	1071500
<b>XIII. Deposits and Advances</b>					
a) LTC Advance	----	393277			
b) Advances	----	24070956			
Advance out of Sponsored					
d) Projects, Plan, & Earmarked Fund	----	9146470			
Miscellaneous Receipts					
<b>XIV. including Statutory Receipts</b>					
	8273063	54646603			
<b>XV. Any Other Receipts</b>					
	508454197	13428229			
<b>TOTAL</b>	<b>31836003791</b>	<b>28617950049</b>	<b>TOTAL</b>	<b>31836003791</b>	<b>28617950049</b>

**UNIVERSITY OF DELHI**  
**PROVIDENT FUND ACCOUNT**  
**BALANCE SHEET AS ON 31st MARCH 2023**

						(Amount/Rs.)
Previous Year 31.03.2022	Liabilities		Current Year 31.03.2023	Previous Year 31.03.2022	Assets	Current Year 31.03.2023
	<b>GPF</b>					
4472248899	Opening Balance	4604383984		1717190000	Investment (Bonds)	272000000
590166494	Add: Subscriptions/repayment of advance in the year	701409299				
307012927	Add: Interest Credited	313304533		3470600000	Fixed Deposit with scheduled bank	4559600000
(764951172)	Less: Advance/Withdrawal/Final settlement	(951800289)				
(93164)	Less: Adjustment relating to Previous yr.	(8656)		99316443	Interest Accrued as on 31.03.2023	136238056
504383984	Closing Balance		4667288871			
	<b>CPF</b>					
554122893	Opening Balance	482830956			TDS receivable :	
	Add: Subscriptions & Contribution/repayment of advance in the year	23214660		3595270	-- CPF	1334094
35820376	Add: Interest Credited	21310603			-- GPF	2315366
28041344	Less: Advance/Withdrawal/Final settlement	(415563757)			Balances with State Bank of India in Saving Accounts :-	
(35153657)	Closing Balance		111792462	185227173	--GPF	242130276
82830956				69529914	--CPF	33384374
	<b>Interest Reserve</b>					
488243666	Opening Balance	458243860				
-	Add: Excess of Income over Expenditure	9676974				
(29999806)	Less: (Excess of Expenditure over income)	-				
458243860	Closing Balance		467920834			
	Provision for Subs. & Cont. for the M/o March'23				Sub. & Cont. receivable for the M/o March'23	
-	--GPF	41544963		-	--GPF	41544963
-	--CPF	591210	42136173	-	--CPF	591210
<b>545458800</b>	<b>TOTAL</b>		<b>5289138340</b>	<b>5545458800</b>		<b>5289138340</b>



**UNIVERSITY OF DELHI**  
**PROVIDENT FUND ACCOUNT**

**INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2023**

(Amount / Rs.)					
Previous Year 31.03.2022	Expenditure	Current Year 31.03.2023	Previous Year 31.03.2022	Income	Current Year 31.03.2023
	Interest Credited to:		330803040	Interest received on Investment & SB A/c	307363507
307012927	GPF Account	313304533	99316443	Interest accrued for the year	136238056
28041344	CPF Account	21310603	93164	Adjustment related to previous year (interest)	8656
3776	Bank Charges	1666	(125154406)	Interest accrued for previous years	(99316443)
-	Excess of Income over Expenditure	9676974	29999806	Excess of Expenditure over income	-
<b>335058047</b>	<b>Total</b>	<b>344293776</b>	<b>335058047</b>	<b>Total</b>	<b>344293776</b>

**UNIVERSITY OF DELHI**  
**PROVIDENT FUND ACCOUNT**

**RECEIPTS AND PAYMENTS ACCOUNTS FOR THE FINANCIAL YEAR 2022-23**

Receipts	(Amount / Rs.)	Payments	(Amount / Rs.)
Opening Balance as on 01/04/2022			
GPF A/c No.10851298435	185227173	GPF Adv./Withdrawal/Final Settlement	951800289
CPF A/c No.10851298457	69529914	CPF Adv./Withdrawal/Final Settlement	415563757
GPF Subscription	701409299	Investment during the year	4842700000
CPF Subscription & University Contribution	23214660	Bank Charges	1666
		Closing Balances:	
Investment Encashed	5198890000	GPF A/c No.10851298435	242130276
Interest Received	307309317	CPF A/c No.10851298457	33384374
<b>TOTAL</b>	<b>6485580363</b>	<b>TOTAL</b>	<b>6485580363</b>

**NPS TIER-I ACCOUNT**  
**BALANCE SHEET AS AT 31st MARCH 2023**

(Amount / Rs.)							
	Amount 31.03.22	Liabilities		Amount 31.03.23	Amount 31.03.22	Assets	Amount 31.03.23
		<b><u>NPS Tier-I Account :-</u></b>				<b><u>NPS Tier-I Account :-</u></b>	
2585462		Opening Balance	2119680		3603000	Investment	3443000
		Add: Adjustment pertaining to prev. year	647019				
270837777		Add: Subscription + Univ. Contribution received during the year	329361550		233344	Interest accrued but not due	487729
			332128249				
(271303559)	2119680	Less: Subscription & Univ. Contribution transferred to NSDL	(329361550)	2766699	28058	TDS deducted on Flexi FD & FD	28058
		- Provision for Subs. & Cont. for the m/o March '23		26324126		- Subs. & Cont. receivable for the m/o March '23	26324126
		<b><u>Interest Reserve :-</u></b>					
4379911		Opening Balance	5016945		3272223	Balance at Bank Saving A/cs	4691666
637034	5016945	Add: Excess of Income over Exp.	866809	5883754			
	7136625	<b>TOTAL</b>		34974579	7136625	<b>TOTAL</b>	34974579

**UNIVERSITY OF DELHI**

**NPS TIER-I ACCOUNT**

**INCOME & EXPENDITURE ACCOUNT FOR THE FINANCIAL YEAR 2022-23**

(Amount / Rs.)					
Amount 31.03.22	Expenditure	Amount 31.03.23	Amount 31.03.22	Income	Amount 31.03.23
578	Bank Charges	876	531905	Interest received on investment	613300
			(127637)	Interest accrued for the year 2021-22 but realized during 2022-23	(132323)
			233344	Interest accrued but not due	386708
637034	Excess of Income over Expenditure	866809			
<b>637612</b>	<b>TOTAL</b>	<b>867685</b>	<b>637612</b>	<b>TOTAL</b>	<b>867685</b>



**UNIVERSITY OF DELHI**

**NPS TIER-I ACCOUNT**

**RECEIPTS AND PAYMENTS ACCOUNTS FOR THE FINANCIAL YEAR 2022-23**

(Amount / Rs.)					
Amount 31.03.22	Receipts	Amount 31.03.23	Amount 31.03.22	Payments	Amount 31.03.23
3308300	Opening Balance as on 01/04/2022	3272223	1736000	Investment	1576000
270837777	Subscription & Univ. Contribution received during the year	329361550	271303559	Subscription & Univ. Contribution transferred to NSDL	329361550
	- Adjustment pertaining to previous year	791238		- Adjustment pertaining to previous year	144219
366943	Interest Received on investment	453328	578	Bank Charges	876
153340	Interest on Saving Bank A/c	159972			
1646000	Investment Encashed (F.D.)	1736000	3272223	Closing balance as on 31.03.2023	4691666
<b>276312360</b>	<b>TOTAL</b>	<b>335774311</b>	<b>276312360</b>	<b>TOTAL</b>	<b>335774311</b>



**UNIVERSITY OF DELHI**  
**HALLS AND HOSTELS**  
**BALANCE SHEET AS AT 31st MARCH, 2023**

SOURCE OF FUNDS	Amount in ₹	
	Current Year	Previous Year
COURPUS/CAPITAL FUND	376976071	341842416
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	59136999	49932568
CURRENT LIABILITIES & PROVISIONS	64840370	51118268
<b>TOTAL</b>	<b>500953440</b>	<b>442893252</b>
<b>APPLICATION OF FUNDS</b>		
<b>Fixed Assets</b>		
Tangible Assets	33024754	30229767
Intangible Assets	14	6041
Capital Works-In-Progress	-----	-----
<b>INVESTMENT FROM EARMARKED/ENDOWMENT FUNDS</b>		
Long Term	-----	-----
Short Term	14923466	14108114
<b>INVESTMENTS- OTHERS</b>	86267512	86020895
<b>CURRENT ASSETS</b>	355677383	300506405
<b>LOANS, ADVANCES &amp; DEPOSITS</b>	11114536	12076254
<b>MISCELLANEOUS EXPENDITURE</b>	(54224)	(54224)
<b>TOTAL</b>	<b>500953440</b>	<b>442893252</b>

**UNIVERSITY OF DELHI**  
**HALLS AND HOSTELS**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2023**

Particulars	Amount in ₹	
	Current Year	Previous Year
<b>(A) INCOME</b>		
Academic Receipts	84089766	33041975
Grants/Subsidies	162401950	138299309
Income From Investment	16341725	16023742
Interest Earned	1339458	1289901
Other Income	43948682	16463834
Prior Period Income	1943391	-----
<b>Total (A)</b>	<b>310064972</b>	<b>205118761</b>
<b>(B) EXPENDITURE</b>		
Staff Payments & Benefits (Establishment Expenses)	109772076	107844719
Academic Expenses	-----	-----
Administrative and General Expenses	151794170	105732604
Transportation Expenses	660938	343878
Repair & Maintenance	12377538	9142141
Finance Costs	77641	72828
Depreciation	4404859	3841821
Other Expenses	-----	0
Prior Period Expenses	3057092	10618128
<b>Total (B)</b>	<b>282144314</b>	<b>237596119</b>
<b>Excess of Income over Expenditure/ (Expenditure over Income) (A-B)</b>	<b>27920658</b>	<b>(32477358)</b>
<b>Balance being Surplus/(Deficit) carried to Capital Fund</b>	<b>27920658</b>	<b>(32477358)</b>

**UNIVERSITY OF DELHI**  
**HALLS AND HOSTELS**  
**RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31st MARCH 2023**

Amount in ₹					
Receipt	Current Year	Previous Year	Payment	Current Year	Previous year
<b>I. Opening Balance</b>			<b>I. Expenses</b>		
- Cash in Hand	18344	61838	(a) Establishment Expenses	114216489	105221303
- Bank Balance	75547864	85903695	(b) Academic Expenses	-----	-----
- Imprest	106262	164680	(c) Administrative Expenses	135298047	94035753
- Deposit Account	283203997	278965197	(d) Transportation Expenses	660938	343878
- TDS on FDR's Interest	0	51614	(e) Repairs & Maintenance Expenses	12169126	8996344
			(f) Prior Period Expenses	2664150	5640877
II. Other Bank Balances/FDRs	0	203046	II. (a) Payments against Earmarked Fund	10541713	7911952
III. Grants Received	164929452	136071320	(b) Payment against Projects	285173	5197
IV. Academic Receipts	78514755	29448526	III. Investments and Deposits made	328765	6579808
V. Receipts against Earmarked/Endowment Funds	19028517	8174647	IV. Expenditure on Fixed Assets & Capital work-in-Progress	4096884	2441136
VI. Interest Received	3763500	9143510	V. Finance Charges	76290	75686
VII. Income from Investments	12132906	12683413	VI. Deposits and Advances	9118632	454459
VIII. Other Income	46432109	18330094	VII. Other Payments	8148434	2700809
IX. Deposits and Advances	12122865	9857539	<b>VIII. Closing Balances</b>		
X. Any Other Receipts	12149287	4224551	- Cash in Hand	21085	18344
			- Bank Balance	90225949	75547864
			- Imprest	139694	106262
			- Deposit Account	319958491	283203997
<b>Total</b>	<b>707949860</b>	<b>593283670</b>	<b>Total</b>	<b>707949860</b>	<b>593283670</b>