

Appendix-41

AC dated 12.07.2024

APPENDIX FOR B.A. (PROG.)

UGCF for Courses of Study with more than One Core Discipline (Earlier B.A. Prog.):
Bachelors of Physical Education in the Field of Multidisciplinary Study (Hons.)

Semester	Discipline Specific Core (DSC)	Discipline Specific Elective (DSE)	Generic Elective (GE)	Ability Enhancement Course (AEC)	Skill Enhancement Course (SEC)	Internship/ Apprenticeship/Project (2)	Value addition course (VAC)	Total Credits
I	Discipline A1-(4) : History and Foundations of Physical Education (MINOR)		Choose one from a pool of GE Languages - Language- 1* GE-1 (4)	Choose one from a pool of AEC courses (2)	Choose one from a pool of courses (2): SEC: From the Common Pool of SEC		Choose one from a pool of courses (2): From the Common Pool of VAC	22 Credits
	DSC-1 (A/B) (4): Structure and Functions of Governing Bodies of Sports (MAJOR)							
	Discipline B1-(4)							
II	Discipline A2-(4): Anatomy and Physiology (MINOR)		Choose one from a pool of GE Languages - Language- 2* GE-2 (4)	Choose one from a pool of AEC courses (2)	Choose one from a pool of courses (2): SEC: From the Common Pool of SEC		Choose one from a pool of courses (2): From the Common Pool of VAC	22 Credits
	DSC-2 (A/B) (4) : Exercise Physiology (MAJOR)							
	Discipline B2-(4)							
Students on exit shall be awarded undergraduate Certificate (in the field of Multidisciplinary Study) after securing the requisite 44 credits in Semesters I and II								Total=44
III	Discipline A3-(4): Health Education (MINOR)		Choose one from a pool of GE Languages - Language- 3* GE-3 (4)	Choose one from a pool of AEC courses (2)	Choose one SEC or Internship/Apprenticeship/Project/Community Outreach (IAPC) (2): SEC: From the Common Pool of SEC		Choose one from a pool of courses (2): From the Common Pool of VAC	22 Credits
	DSC-3 (A/B) (4): Sports Nutrition and Ergogenic Aids (MAJOR)							
	Discipline B3-(4)							
IV	Discipline A4-(4): Athletic Care and Rehabilitation (MINOR)		Choose one from a pool of GE Languages - Language- 4* GE-4 (4)	Choose one from a pool of AEC courses (2)	Choose one SEC or Internship/Apprenticeship/Project/Community Outreach (IAPC) (2): SEC : From the Common Pool of SEC		Choose one from a pool of courses (2): From the Common Pool of VAC	22 Credits
	DSC-4 (A/B) (4): Correctives in Physical Education (MAJOR)							
	Discipline B4-(4)							
Students on exit shall be awarded undergraduate Diploma (in the field of Multidisciplinary Study) after securing the requisite 88 credits on completion of Semester IV								Total=88

V	Discipline A5-(4): Sports Psychology (MINOR) DSC-5 (A/B): (4): Sports Sociology (MAJOR) Discipline B5-(4)	Choose one from a pool of courses DSE-1 A/B- (4): <ul style="list-style-type: none"> • Fundamentals of Games/ Sports • Strength and Conditioning • Fitness for Senior Citizens 	Choose one from a pool of courses GE-5 (4):		Choose one SEC or Internship/Apprenticeship/ Project/Research/ Community Outreach (2); SEC: From the Common Pool of SEC	22 Credits
VI	Discipline A6-(4): Fundamentals of Sports Training (MINOR) DSC-6 (A/B) (4): Sports Biomechanics (MAJOR) Discipline B6-(4)	<ul style="list-style-type: none"> • Choose one from a pool of courses DSE-2 A/B- (4): • Research Methods in Physical Education and Sports • Publication Ethics in Physical Education and Sports Sciences • Thesis Writing in Physical Education and Sports 	Choose one from a pool of courses GE-6 (4): GE: Physical Education for Inclusiveness		Choose one SEC or Internship/Apprenticeship/ Project/Research/ Community Outreach (2); SEC: From the Common Pool of SEC	22 Credits
Students on exit shall be awarded Bachelor of (in the field of Multidisciplinary Study) after securing the requisite 132 credits on completion of Semester VI						Total=132
VII	DSC-7 (4): Organization and Administration in Physical Education	Choose three DSE (3X4) course OR Choose two DSE-(2X4) and one GE COURSE OR Choose one DSE (4) and two GE (2x4) courses (total=12): <u>DSE:</u> <ul style="list-style-type: none"> • Sports Management • Sports Journalism • Sports Pedagogy • Research Methods in Physical Education and Sports • Basics of Exercise Prescription <u>GE:</u> GE-7: Adventure Sports GE-8: Introduction to Injury Prevention and Rehabilitation			Dissertation on Major OR Dissertation on Minor OR Academic Project/ Entrepreneurship (6)	22 Credits
VIII	DSC-8(4): Test, Measurement and Evaluation in Physical Education	Choose three DSE (3X4) course OR Choose two DSE-(2X4) and one GE (4) COURSE OR Choose one DSE (4) and two GE (2x4) courses (total=12): <u>DSE:</u> <ul style="list-style-type: none"> • Introduction to Kinesiology • Professional Preparation and Curriculum Design • Sports Field Technology • Facility Planning and Management in Sports • Statistical Applications in Physical Education <u>GE:</u> GE-9: Sports for Leisure and Recreation GE-10: Management and Marketing in Physical Education			Dissertation on Major OR Dissertation on Minor OR Academic Project/ Entrepreneurship (6)	22 Credits
Student on exit shall be awarded Bachelor of (in the field of Multidisciplinary study) (Honours or Honours with Academic Project/ Entrepreneurship) after securing the requisite 176 credits on completion of Semester VIII						Total=176

SYLLABUS FOR PHYSICAL EDUCATION IN B.A. (PROG.)
UGCF for Courses of Study with more than One Core Discipline (Earlier B.A. Prog.)
Bachelors of Physical Education in the Field of Multidisciplinary Study (Hons.)

SEMESTER-I

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-1-(4)- HISTORY AND FOUNDATIONS OF PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-1-(4)-HISTORY AND FOUNDATIONS OF PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objectives: To provide knowledge of the historical development of physical education and sports to familiarize the students with the philosophical, biological, psychological, and sociological foundations of physical education.

Learning Outcomes:

1. The learners will be able to conceptualize about physical education and sports.
2. The learners will develop factual knowledge of existing various terminologies and information.
3. The learners will be able to comprehend historical perspectives and recent developments in the field of physical education and sports.
4. The learners will be able to understand the multi-disciplinary foundations of physical education and sports.

SYLLABUS

Credit: 4 - (3 Theory, 1 Practical)

Theory: 45 Hours

Practical: 30 Hours

PART-A: THEORY

Unit-1: Introduction to Physical Education and Sports and General Awareness (11 Hours)

1. Meaning and Definition of Physical Education
2. Aim and Objectives of Physical Education
3. Physical Education as an Art and Science
4. Significance of Physical Education in the Modern Society
5. Meaning and Definition of Sports, Types of Sports–Individual, Team, Combative, Recreational, etc.

Unit-2: Growth and Development of Physical Education and Sports (11 Hours)

1. History of Physical Education and Sports in the World: Greece, Rome, Sweden, Germany and Denmark
2. Growth and Development of Physical Education in India (Pre and post-Independence)
3. Various Schemes for the Promotion of Sports in India

Unit-3: Major Competitions at National and International Level (12 Hours)

1. Major Sports Competitions at International Level: Olympics Games (Summer, Winter, and Paralympics), Asian Games, Commonwealth Games, SAF Games, World Cups, World Universities
2. Major Sports Competitions at the National Level: National Games, Khelo India University Games (KIUG), Khelo India Youth Games (KIYG), Inter-University (All India & Zonal) Competitions, National Championships
3. Prominent Honors and Awards in Games and Sports in India, Different Cups and Trophies at National and International levels in different sports.

Unit-4: Foundations of Physical Education (11 Hours)

1. Philosophical Foundations of Physical Education: Idealism, Pragmatism, Naturalism, Realism
2. Biological Foundations of Physical Education: Growth and Development, Age and Gender Characteristics, Body Types, Anthropometric differences
3. Psychological Foundations of Physical Education: Learning types, Learning Curves, Laws of Learning.
4. Sociological Foundations of Physical Education: Society and Culture, Social Integration and Cohesiveness.

PART-B: PRACTICALS (30 Hours)

1. Prepare a report on sports facilities available in any one stadium/sports Complex.
2. Organize any intra-mural/ extra-mural competition.
3. Prepare a brief report on various schemes for sports promotion in India.
4. Prepare a presentation on major competitions, awards and trophies in sports.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Graham, G. (2001), Teaching Children Physical Education: Becoming a Master Teacher. Human Kinetics, Champaign, Illinois, USA.
2. Kamlesh, M.L. & Singh, M. K. (2006), Physical Education (Naveen Publications).
3. Lau, S.K. (1999), Great Indian players, New Delhi, Sports Publications
4. Lumpkin, A. (2007), Introduction to Physical Education, Exercise Science, and Sports Studies, McGraw Hill, New York, U.S.A.
5. Shaffer, D.R. (2002), Developmental Psychology: Childhood and Adolescence. Thomson, Sydney, Australia.
6. Sharma K. (2014), *Sharirik Shiksha Ka Itihas*, Friends Publications (India), New Delhi.
7. Siedentop, D. (2004), Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York, USA.
8. Singh, A. et.al. (2000), Essentials of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
9. Wuest, D.A. & C.A. Bucher (2006), Foundations of Physical Education, Exercise Science, and Sports. McGraw Hill Companies, Inc., New York, USA.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-II
B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-2-(4)-ANATOMY AND PHYSIOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-2-(4) ANATOMY AND PHYSIOLOGY	4	3	0	1	Class XII pass	NIL

Learning Objective: To provide learners with the basic knowledge and practices of anatomical structures and functions of the human body.

Learning Outcomes:

1. The learner will acquire the basic knowledge of the anatomy and physiology of the human body. They will develop an understanding of the functions of each system and body organs. Such core knowledge and skill will help to create a strong foundation to engage human subjects of all ages, sexes, and abilities in different games/ sports/ fitness programs.
2. The learner will develop the understanding and knowledge of the definition of anatomy & physiology, cell-microscopic structure & functions of its organelle, tissue classification & functions, organs, systems of the body, bone classification and structure, joints-classification, structure of synovial joints, movements at various joints. The learner will also learn to count the pulse rate. The learner will be able to compare (individual differences), and correlate (different systems/games for physical education) to analyze performance.
3. The learners will develop an understanding and knowledge of the muscular system -classification, structure, functions & properties of skeletal muscle, smooth muscle & cardiac muscle. types of muscular contractions, Names of various muscles acting on various joints, cardio-vascular system structure of heart, cardiac cycle, blood pressure, cardiac output, composition & function of blood, athlete's heart, respiratory system structure and function, second wind, oxygen debt. The learners will be able to learn the measurement of blood pressure and study of various bones of human body. The learner will also be able to compare (individual differences), and correlate (different systems/ games as per syllabus for physical education) to analyze performance.
4. The learner will be able to explain different body systems (as per the syllabus) with the help of models and various movements of the joints. The learner will also be able to compare (individual differences), and correlate (different systems/ games for physical education) to analyze performance.

SYLLABUS

Credit: 4 - (3 Theory, 1 Practical)

Theory: 45 Hours

Practical: 30 Hours

PART-A: THEORY

Unit-1: Introduction to Anatomy and Physiology (11 Hours)

1. Meaning and Definition of Anatomy and Physiology.
2. Importance of Anatomy and Physiology in Physical Education and Sports
3. Description of Cell and Tissues

Unit-2: Introduction to Various Systems-I (11 Hours)

1. Skeletal System: Structural and Functional Classification of Bones, Types of Joints, Functions of Skeleton System.
2. Muscular System: Structural and Functional Classification of Muscles, Properties of Muscles, Types of Muscular Contraction, Functions of Muscular System.

Unit-3: Introduction to Various Systems-II (12 Hours)

1. Cardiovascular System: Structure and Functions of Human Heart, Circulation of Blood, Functions of Blood, Functions of Cardiovascular System, Blood Pressure, Cardiac Output
2. Respiratory System: Structure and Functions of Respiratory System, Different types of Respiration, Second Wind, Oxygen Debt

Unit-4 Introduction to Various Systems-III (11 Hours)

1. Excretory System: Structure and Functions of Excretory System.
2. Digestive System: Structure and Functions of Excretory System.

PART-B: PRACTICALS (Any three) (30 Hours)

1. Microscopic structure of Cell/ Tissue.
2. Measurement of Resting Heart Rate.
3. Measurement of Blood Pressure.
4. Measurement of Respiratory/ Breathing Rate.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Jain, A.K. (2002), Anatomy & Physiology for Nurses. Arya Publishers, Delhi.
2. Moried, E.N. (2007), Essentials of Human Anatomy & Physiology. Ed.8th Dorling Kindersley, India.
3. Prives, M. and others (2004), Human Anatomy Vol. I & II Paragon, Delhi.
4. Seeley & others (2008), Anatomy & Physiology. McGraw Hill, Boston.
5. Tortora (2003), Principles of Anatomy & Physiology, New York: John Willy & Sons.
6. William, C.S. (2000), Essentials of Human Anatomy & Physiology, Benjamin.
7. Wilson and Waugh (1996), Anatomy & Physiology in Health & Illness. Churchill Livingstone.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-III

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-3-(4)-HEALTH EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-3-(4)-HEALTH EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective: To acquaint the students with basic aspects and practices with application to health, health education, and various health agencies.

Learning Outcomes:

1. The learners will learn the basic concepts of developing the practices of health along with the dimensions, spectrum, and determinants of health.
2. The learners will develop the ability to apply the scope and principles of health education in life.
3. The learners will be able to comprehend the role of personal and occupational hygiene in better health practices.
4. The learners will be able to understand and apply the causes and preventive measures of various communicable and non-communicable diseases.
5. The learners will gain knowledge and practices about the role and schemes of various health-promoting agencies like WHO, UNICEF, UNDP, MHFW, Red Cross etc.
6. The learners will be able to change their behavioral aspects related to personal health.
7. The learners will be able to create databases related to health and hygiene.

SYLLABUS

No. of Credits: 04 (Lecture-03, Practical-1)

Theory: 45 hours

Practical: 30 hours

PART A: THEORY

Unit-1: Introduction to Health (10 Hours)

1. Meaning, Definition & Importance of Health
2. Dimensions of Health
3. Spectrum of Health
4. Determinants of Health

Unit-2: Introduction to Health Education (11 Hours)

1. Meaning and Definition of Health Education
2. Aim and Objectives of Health Education
3. Importance and Scope of Health Education
4. Principles of Health Education

Unit-3: Hygiene and Health Issues (12 Hours)

1. Personal Hygiene
2. Occupational Hygiene
3. Communicable Diseases: Meaning, Spread and Prevention
4. Non-Communicable Diseases: Meaning, Spread and Prevention

Unit-4: Health Agencies (12 Hours)

1. Introduction to International Health Agencies: WHO (World Health Organization), UNICEF (United Nations International Children's Fund), UNDP (United Nations Development Program)
2. Introduction to National Health Agencies: Ministry of Health and Family Welfare; Indian Red Cross Society, Hind Kushth Nivaran Sangh, Indian Council for Child Welfare, Tuberculosis Association of India, Bharat Sevak Samaj, Central Social Welfare Board

PART B: PRACTICAL (30 Hours)

1. Practicing various personal hygiene Habits – A report.
2. Prepare a report on any one national health agency.
3. Conduct a Survey on Communicable Disease
4. Conduct a Survey on Non-Communicable Disease

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Anspaugh, D.J.; Ezell, G. and Goodman, K.N. (2006). Teaching Today's Health. Mosby Publishers. Chicago, USA.
2. Balayan, D. (2007). Swasthya Shiksha Evam Prathmik Chikitsa. Khel Sahitya. Delhi.
3. Chopra, D. and Simon, D. (2001). Grow Younger, Live Longer: 10 Steps to Reverse Aging. Three Rivers Press. New York. USA.
4. Dewan, A.P. (1996). School Health Manual. Nature Cure and Yoga Health Centre. New Delhi.
5. Dixit, S. (2006). Swasthya Shiksha. Sports Publication. Delhi.
6. Donatelle, R.J. (2005). Health the Basics. Sixth Edition. Oregon State University.
7. Floyd, P. M. and Yeilding, C. (2003). Personal Health: Perspectives and Lifestyles. Thomson Wads Worth. Belmont. California. USA.
8. Hales, D. (2005). An Invitation to Health. Thomson-Wadsworth, Belmont. California. USA.
9. Park, K. (2007). Park's Text Book of Preventive & Social Medicine. Banarsi Das Bhanot & Company. Delhi.
10. Snehlata (2006). Shareer, Vigyan Evam Swasthya Raksha. Discovery Pub. Houses. New Delhi.
11. Uppal, A.K. & Gautam, G.P. (2008). Health & Physical Education. Friends Publication. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-IV

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-4-(4)-ATHLETIC CARE AND REHABILITATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-4-(4)-ATHLETIC CARE AND REHABILITATION	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about Athletic Care and sports Injuries with their management and rehabilitation.

Learning Outcomes:

1. The learners will be able to understand the concept of Athletic Care and Sports Medicine.
2. The learners will be able to comprehend the prevention and safety measures to avoid injuries in sports.
3. The learners will be able to classify the types of injuries in sports with their causes.
4. The learners will be able to apply the skills of first aid and management of sports injuries.
5. The learners will be able to develop rehabilitation programs for overcoming injuries in sports and also in general.
6. The learners will be able to learn the application of various therapeutic modalities in sports rehabilitation with creativity.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-1: Introduction to Athletic Care

(11 hours)

- 1.1 Meaning, Definition, and Significance of Athletic Care and Sports Medicine
- 1.2 First-aid, Importance of First Aid
- 1.3 Principles of injury prevention, Concept of safety measures in games/ sports

Unit-2: Sports Injuries

(12 hours)

- 2.1 Meaning and Definition of Sports Injuries, Causes of Sports Injuries
- 2.2 Classification of Injuries in Sports
- 2.3 Basic concept of Sports Injuries and their Management- Sprain, Strain, Fracture, Dislocation, Frozen Shoulder, Tennis Elbow, Golfers Elbow, Shin Splint, Blister, Abrasion, Laceration, Haematoma

Unit-3 Therapeutic Modalities

(11 hours)

- 3.1 Concept and Significance of Physiotherapy and Therapeutic Modalities in Sports Rehabilitation
- 3.2 Introduction to various Therapeutic Modalities- Steam Bath, Contrast Bath, Wax Bath, Therapeutic Ultrasound, Infrared Lamp, Interferential Therapy Unit, T.E.N.S, Short Wave Diathermy, Hot Fomentation, Application of PRICED, DRABC, CPR
- 3.3 Sports Massage, Types of Massage, Physiological Effect of Massage

Unit-4: Rehabilitation

(11 hours)

- 4.1 Meaning and Definition of Rehabilitation
- 4.2 Importance of Rehabilitation in Sports
- 4.3 Rehabilitation Techniques- Active (Concentric, Eccentric, and Static) and Passive Exercises (Relaxed, Forced, Passive-stretching), Strengthening, and Conditioning Exercises.

PART-B: PRACTICALS:

(30 hours)

1. Demonstrate Warming Up and Cooling Down Exercises- 5 exercises each
2. Prepare a report on any Physiotherapy Center.
3. Make a First Aid Box.
4. Application of PRICE in different Sports situations

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Agarwal M., Arora S. (2018), Gupta B “**Posture; Athletic Care and First Aid**”, Vivechan Publications (INDIA) ISBN: 978-9-38391-490-6
2. Bhandari, P. (2021) “**Athletics Care and Rehabilitation**”. New Delhi: KSK Publishers.
3. “**Essentials of Strength Training and Conditioning**” (pp.73-90). Champaign, IL: Human Kinetics.
4. Karad, P.L, (2019) “**Prevention and Treatment of Sports Injuries**”. New Delhi: KSK Publishers.
5. Kumari, Sheela S.; Rana, Amita; & Kaushik, Seema (2008), “**Fitness, Aerobics and Gym Operations**” (New Delhi: Khel Sahitya Kendra).
6. Meena, T.R. (2022) “**Sports Medicine, Physiotherapy and Rehabilitation**”. New Delhi: KSK Publishers.
7. Pande, P.K. (1987), “**Outline of Sports Medicine**” (New Delhi: Jaypee Brothers)
8. Prentice, W. (2017). “**Principles of Athletic Training: A Competency-Based Approach**”. McGraw-Hill Education.
9. Sharma, Kavita et.al. (2014), “Fitness, Aerobics, and Gym Operations” (New Delhi: Jyoti Enterprises)
10. Singh, Ajmer et.al. (2006), “Essentials of Physical Education” (Ludhiana: Kalyani Publishers)
11. उप्पल, ए.के.; पदयाल, अंजुम और लाल, राजेंदर (2022), “**अंग-विन्यास तथा खिलाड़ी की देखभाल**” (नई दिल्ली: फ्रेंड्स पब्लिकेशन)
12. कुमारी, शीला एस.; राणा, अमिता; और कौशिक, सीमा (2012), “**फिटनेस, एरोबिक्स व जिम ऑपरेशंस**” (नईदिल्ली: खेल साहित्य केंद्र)।
13. Sharma. R., Handbook of “Exercise Therapy and Rehabilitation”, ISBN: 978-93-88269-54-4, Year 2019 published by Sports Publication, Daryaganj, New Delhi.
14. Shaw D. (2019) “**Kinesio Taping in Games and Sports**” Sports Publication, ISBN: 978-93-88269-33-9.
15. Shaw D. (2019) “**Sports Injuries: A Demographic Study on Indian Sports Person**” Khel Sahitya Khel Sahitya Kendra, ISBN: 978-93-88159-87-6.
16. Shaw D. (2021) “**Athletic Care and Rehabilitation**” Sports Publication, ISBN: 978-81-951044-9-9.
17. Shaw D. (2019) “**Encyclopedia of Sports Injury**” Khel Sahitya Kendra, ISBN: 978-93-88159-87-6.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-V

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-5-(4)- SPORTS PSYCHOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-5-(4)-SPORTS PSYCHOLOGY	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about psychology and sports psychology, growth and development, the concept of learning, personality, motivation, and psychological factors affecting sports performance.

Learning Outcomes:

1. The learners will be able to understand the concepts and practices of sports psychology and its significance for sports performance.
2. The learners will be able to manage various psychological factors like stress, aggression, etc.
3. The learners will be able to analyze the personality

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit – 1: Psychology and Sports Psychology (11 hours)

- 1.1 Meaning, Definition, and Dimensions of Psychology.
- 1.2 Meaning, Definition, and Importance of Sports Psychology, Scope of Sports Psychology
- 1.3 Concepts of Sports Psychology Intervention

Unit – 2: Growth and Development (12 hours)

- 2.1 Meaning and Definition of Growth and Development, Difference between Growth and Development
- 2.2 Principles and Factors Affecting Growth and Development
- 2.3 Stages of Growth and Development -Infancy, Childhood, Adolescence, Adulthood

Unit – 3: Learning and Motivation (12 hours)

- 3.1 Definition and Types of Learning
- 3.2 Theories of Learning (Trial and Error, Conditioned Response, and Learning by Insight)
- 3.3 Laws of Learning (Law of readiness, Exercise, Effect), Transfer of Training, Learning Curve and its application in the field of Sports.
- 3.4 Concept and Role of Motivation in Sports

Unit –4: Personality**(10 hours)**

- 4.1 Meaning and Types of Personality, Factors Affecting Personality
- 4.2. Dimensions and Characteristics of Personality
- 4.3. Role of Physical Activity in the Development of Personality
- 4.4 Psychological Factors Affecting Sports Performance — Stress, Anxiety, Aggression, Self-Esteem, Setting, Mental Imagery.

PART-B: PRACTICALS:**(30 hours)**

1. Rosenberg Self-Esteem scale
2. Sports Competitive Anxiety Test (SCAT)
3. Demonstrate the technique of Progressive Muscle Relaxation for stress management.
4. Practical Application of Visualization/Mental Imagery in Games/ Sports.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Arora S., Agarwal M., “**Sports Psychology**”, Khel Sahitya Kendra ISBN: 978-81-947808-8-5, (2020)
2. Cohen RJ and Swerdlik ME (2002). **Psychological Testing and Assessment: An Introduction to Tests and Measurement**. McGraw Hill. New York. U.S.A.
3. Cox RH (2002). **Sport Psychology**. McGraw Hill. London.
4. Liukkonen JED (2007). **Psychology for Physical Educators**. Human Kinetics. U.S.A. Martin GL (2003). Sports Psychology, Sports Science. Press. USA.
5. Sahni SP (2005). **Psychology and Its Application in Sports**. D.V.S. Delhi. Shaw D and Other (2005). Sport & Exercise Psychology. Bios. U.K.
6. Verma V (1999). **Sport Psychology & All Round Development**. Sports Pub. New Delhi.
7. Wann DL (1997). **Sport Psychology**. Prentice Hall. New Jersey.
8. Saini, N. (2020). “**Yoga & Stress Management**”, Friends Publications. New Delhi.
9. Saini, N., Suri M., (2020). “**Sports Psycho-Physiology**”, Friends Publications. New Delhi.
10. Luthra, A., Sharma, P., and Padyal, A. (2019), **Yoga and Stress Management**. Pinnacle Learning, New Delhi. ISBN: 978-93-83848-57-7
11. Sethi, P.K (2016) "**Yoga for stress Release**" Shree Publication, Darya Ganj, New Delhi. ISSN 978-81-8329-776-9.
12. Shaw D. (2020) “**Physical Education Practical Manual for Class XI**” Prachi Publication, ISBN: 978-8193-7698-0-5.
13. Shaw D. (2020) “**Physical Education for Class XII**” Prachi Publication, ISBN: 978-81-7730-848-8.
14. Shaw D. (2020) “**Physical Education for Class XI**” Prachi Publication, ISBN: 978-81-7730-847-1.
15. Shaw D. (2020) “**Physical Education Practical Manual for Class XII**” Prachi Publication, ISBN: 978-81-937698-1-2.
16. Shaw D. (2020) “**Parable Global English Hindi Dictionary of Physical Education & Sports Sciences**” Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-VI

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-6-(4)- FUNDAMENTALS OF SPORTS TRAINING

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-6-(4)- FUNDAMENTALS OF SPORTS TRAINING	4	3	0	1	Class XII pass	NIL

Learning Objective: This course aims to provide understanding through practical knowledge, skills, and practices with enough scope for creativity/Innovations.

Learning Outcomes:

- The learner will be able to apply the concept of sports training for the improvement of sports performance.
- The learner will be able to develop strength, endurance, speed, flexibility, and coordination through various scientific methods and programs.
- The learner will be able to draw and prepare phases of technical and tactical training of sportspersons.
- The learner will be able to analyze the adjustment of load and intensity in different phases of training.
- The learner will be able to create a sports training plan and develop methods for Talent Identification & Development.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-I Introduction to Sports Training

(10 Hours)

- 1.1 Meaning & Definition of Sports Training
- 1.2 Aim & Objective of Sports Training
- 1.3 Principles of Sports Training

Unit- II Fitness Components-I

(11 Hours)

- 2.1 Strength-Definition, types, and methods of improving strength- Isometric, Isotonic, and Isokinetic; Weight training

2.2 Endurance-Definition, Types, and Methods to Develop Endurance- Continuous Training, Interval Training, Fartlek, and Circuit Training

Unit – III Fitness Components-II (12 Hours)

- 3.1 Speed-Definition, types, and methods to develop different speed abilities.
- 3.2 Flexibility- Definition, Types, and Methods to improve Flexibility (static and dynamic)
- 3.3 Coordinative Abilities-Definition, Types, and methods of improvement of coordinative abilities.

Unit - IV Load Adaptation and Planning (12 Hours)

- 4.1 Training Load and Recovery - Definition and Process
- 4.2 Principles of Intensity and Volume of Stimulus
- 4.3 Planning-Training Session, Different types of the training cycle (macrocycle, mesocycle, micro cycle, yearly cycle, and Olympic Cycle)

PART B- PRACTICALS (30 Hours)

1. Develop a program of General and Specific warming up.
2. Develop a program of Cooling Down.
3. Develop a strength training program.
4. Develop a circuit training station for physical fitness.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Dick, W. F. (1980) **Sports Training Principles** London: Lepus Books.
2. Harre, D. (1982) **Principles of Sports Training** Berlin: Sporulated.
3. Jensen, R. C.& Fisher, A.G. (1979) **Scientific Basis of Athletic Conditioning**. Philadelphia: Lea and Fibiger, 2nd Edn.
4. Matvyew, L.P. (1981) **Fundamental of Sports Training**. Moscow: Progress Publishers.
5. Shaw, D. (2020) **Sports Training** Sports Publication.
6. Shaw, D. (2021) **Athletic Care and Rehabilitation** Sports Publications.
7. Singh, H. (1984) **Sports Training, General Theory and Methods**. Patiala: NSNIS.
8. Uppal, A.K., (1999) **Sports Training** New Delhi: Friends Publication.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-VII

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-7-(4)- ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-7-(4)- ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about the organization, administration, planning, and management of facilities, equipment, and tournaments, and the role of technology and media in physical education.

Learning Outcomes:

1. The learners will be able to understand the elements and principles of administration and management.
2. The learners will be able to organize physical education and sports programs.
3. The learners will be able to perform different managerial functions.
4. The learners will be able to prepare a budget for different activities.
5. The learners will be able to adopt modern technologies for effective teaching and sports promotions.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory- 45 hours

Practical-30 hours

PART-A: THEORY

Unit-I: Introduction to Planning, Organization, Administration Supervision and Management (10 Hours)

- 1.1 Concept and significance of Planning, Organization, Administration, and Supervision in Physical education and sports
- 1.2 Use of Technology in Physical Education and Sports
- 1.3 Role of Media and Public Relations in Physical Education

Unit-II: Planning and Organization of Events in Physical Education and Sports (12 Hours)

- 2.1 Program planning: Meaning, Importance, and Principles of program planning in physical education
- 2.2 Functions of Planning, organizing, staffing, directing, communicating, co-ordination, controlling, evaluating and innovating
- 2.3 Organization of events in physical education and sports (Seminars/Workshop/ Lectures/Clinics)

Unit-III: Sports Office Management (11 Hours)

- 3.1 Meaning, definition, functions, and kinds of office management
- 3.2 Records and Registers - Maintenance of attendance register, stock register, cash register, Physical efficiency record, and Medical examination record.
- 3.3 Meaning, Importance of budget making, Criteria of a good budget, Preparation of budget

Unit-IV: Facilities, Equipment and Tournaments (12 Hours)

- 4.1 Facilities and equipment management: Types of facilities - Infrastructure-indoor, outdoor, Gymnasium, Swimming pool, Play fields; Location, Preparation, Layout, and maintenance of facilities
- 4.2 Need and importance of equipment: - Purchase, care and maintenance of equipment, Maintenance of equipment. Process of write-off and condemnation of stock.
- 4.3 Types of tournaments- Knock-out, league or round robin, combination, Organization of Intramural & Extramural sports competitions

PART-B: PRACTICALS: (30 Hours)

1. Plan and organize an intramural/ extramural tournament in your college
2. Plan and organize a Seminars/Workshops/ Lectures/ Webinar in your college
3. Prepare a budget to organize any event in your college/ department
4. Presentation on any topic from physical education using modern technology.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Broyles, F. I. & Rober, H. D. (1979). **Administration of Sports, Athletic programme: A Managerial Approach.** New York: Prentice Hall Inc.
2. Bucher, C. A. (1983). **Administration of Physical Education and Athletic Programme.** St. Louis: The C.V. Mosby Co.
3. Chakraborty, Samiram (1988), **Sports Management**, Sports publications, New Delhi.
4. Hughes, L.W. and French, E. (1990) **The Administration of Physical Education**, Ronald Press Co.
5. Kamlesh, M.L., **Management concepts of physical education and sport**, New Delhi: Metropolitan Book Co., Pvt., Ltd.
6. Kozman, H.C. Cassidy, R. & Jackson, C. (1960). **Methods in Physical Education.** London: W.8. Saunders Co.
7. Pandey, L.K. (1977). **Methods in Physical Education.** Delhi: Metropolitan Book Depo.
8. Sharma, V.M. & Tiwari, R.H.: (1979). **Teaching Methods in Physical Education.** Amaravati: Shakti Publication.
9. Thomas, J. P. (1967). **Organization & Administration of Physical Education.** Madras: Gyanodayal Press.
10. Tirunarayanan, C. & Haiharan.S (1969), **Methods in Physical Education.** Karaikudi: South India Press
11. Voltmer, E. F. & Esslinger, A. A. (1979). **The Organization and Administration of Physical Education.** New York: Prentice Hall Inc.

12. Shaw D. (2018) “**Fundamental Statistics in Physical Education and Sports Sciences**” Sports Publication, ISBN: 81-86190-57-0.
13. Shaw D. (2020) “**Physical Education Practical Manual for Class XI**” Prachi Publication, ISBN: 978-8193-7698-0-5.
14. Shaw D. (2020) “**Physical Education for Class XII**” Prachi Publication, ISBN: 978-81-7730-848-8.
15. Shaw D. (2020) “**Physical Education for Class XI**” Prachi Publication, ISBN: 978-81-7730-847-1.
16. Shaw D. (2020) “**Physical Education Practical Manual for Class XII**” Prachi Publication, ISBN: 978-81-937698-1-2.
17. Shaw D. (2020) “**Parable Global English Hindi Dictionary of Physical Education & Sports Sciences**” Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.

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SEMESTER-VIII

B.A. (Prog.) with Physical Education as a Minor

B.A.-PE-DSC-8-(4)- TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-PE-DSC-8-(4)-TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learner about test, measurement, and evaluation as applicable to Physical Education and Sports Performance, criteria and administration of tests, physical fitness tests, and sports-specific skill tests.

Learning Outcomes:

1. The learners will be able to develop concepts and applications of tests, measurement, evaluation, and relationships with physical education and sports performance.
2. The learners will be able to understand and apply different types of tests for evaluating the performance of participants.
3. The learners will be able to apply the knowledge of criteria, classification and administration of tests in physical fitness testing and sports specific skill testing.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-1: Test, Measurement, and Evaluation (11 Hours)

- 1.1 Meaning and Definition of Test, Measurement, and Evaluation.
- 1.2 Need and Importance of Test and Measurement in Physical Education and Sports

Unit-II: Criteria and Administration of Test (12 Hours)

- 2.1 Classification of tests – Standardized and teacher-made tests – Objective and Subjective tests – Knowledge test- Fitness test- Sports skill test
- 2.2 Criteria of Test (Scientific Authenticity) – Reliability, Objectivity, Validity
- 2.3 Administration of Test: Preplanning, testing operation, and post-test functions

Unit- III: Measurement of Fitness Components (12 Hours)

- 3.1 Muscular endurance (sit-ups)
- 3.2 Muscular Strength (Kraus-Weber Test)
- 3.3 Cardio-respiratory endurance (Cooper's 12 min. run/walk test)
- 3.4 Agility (Shuttle run)
- 3.5 Speed (50m. dash)
- 3.6 Flexibility (Sit and reach)

Unit-IV: Physical Fitness Tests (10 Hours)

- 4.1 Test for Physical Fitness- AAPHERD Youth Physical Fitness Test and Roger's Physical Fitness Index
- 4.2 Test for Motor Fitness- Indiana Motor Fitness Test and JCR Test

PART-B: PRACTICALS: (Any Three) (30 Hours)

1. Measurement of Fitness Components (Muscular Endurance/Muscular Strength/ Cardiorespiratory endurance)
2. Measurement of Fitness Components (Agility/Speed/ flexibility)
3. Administration of Physical Fitness Test: AAPHERD Youth Physical Fitness Test or Roger's Physical Fitness Index
4. Administration of Motor Fitness Test: Indiana Motor Fitness Test or JCR Test

Marking Scheme:

Theory Written Exam : 90 Marks

Internal Assessment : 30 Marks

Practical : 40 Marks

Suggested Readings:

1. Allen D., Phillips & James E. Hornork (1979) **Measurement and Evaluation in Physical Education**. John Willey & Sons, New York
2. Balyan, Sunita (2006). **Sharirk Shiksha main Parikshan evm maapan**, Khel Sahitya. Delhi.
3. Barrow, H.M.. and McGee, R.,A (1964) **Practical Approach to Measurement in Physical Education**, Lea and Febiger, Philadelphia.
4. Barry L. Johnson, Jack K. Nelson. **Measurements for Evaluation in Physical Education**. Surjeet Publications.

5. Bovard, J.F., Cozens, F., W. and Hagman, P.E. (1949) **Test and Measurements in Physical Education**, W.B. Saunders Company, Philadelphia.
6. Cureton, T.K. (1947) **Physical Fitness Appraisal and Guidance**, The C.Mosby Company, St.Louis .
7. Harrison H. Clarke.(1976-1987) **Application of Measurement to Health & Physical Education**, Prentice Hall Inc. Englewood Cliffs N. J.
8. Hunsicker, P.A. and Montoye, H.J. (1953) **Applied Test and Measurements in Physical Education**, Prentice Hall Inc., New York.
9. Kansal D.K. (2012). **A Practical approach to Measurement, Evaluation & Sports Selection**. Sports & Spiritual Science Publications, New Delhi.
10. Kumari, Sheela S.; Rana, Amita; & Kaushik, Seema (2008), **Fitness, Aerobics and Gym Operations** (New Delhi: Khel Sahitya Kendra).
11. Mathews K. Donald. (1973) **Measurement in Physical Education**, London W.S. Saunders Company,
12. Meyers, C.R. and Belsh, E.T. (1962) **Measurement in Physical Education**, The Ronald press Company. New York. Sports, New Delhi: Friends Publications.
13. Safrit Margarat J. (1986) **Measurement in Physical Education and Exercise Science**. St. Louis, Times Mirror Mosby College publishing.
14. Srivastava AK (2006). **Sharirik Shiksha Evam Khel Mein Maapan Evam Mullyankan**. Sport Publications, Delhi.
15. Wilgoose, C.E (1967) **Evaluation in Health Education and physical Education**, McGraw Hill Book Company, Inc, New York.
16. Yobu,A (2010), **Test, Measurement and Evaluation in Physical Education**, Friends Publication, New Delhi
17. Shaw D. (2018) **“Fundamental Statistics in Physical Education and Sports Sciences”** Sports Publication, ISBN: 81-86190-57-0.
18. Shaw D. (2020) **“Physical Education Practical Manual for Class XI”** Prachi Publication, ISBN : 978-8193-7698-0-5.
19. Shaw D. (2020) **“Physical Education for Class XII”** Prachi Publication, ISBN : 978-81-7730-848-8.
20. Shaw D. (2020) **“Physical Education for Class XI”** Prachi Publication, ISBN : 978-81-7730-847-1.
21. Shaw D. (2020) **“Physical Education Practical Manual for Class XII”** Prachi Publication, ISBN : 978-81-937698-1-2.
22. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN : 978-93-90461-18-9.

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SEMESTER-I
B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B1-(4):B.A.-PE-DSC-1-(4)-STRUCTURE AND FUNCTIONS OF GOVERNING BODIES OF SPORTS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B1-(4): B.A.-PE-DSC-1(4)-STRUCTURE AND FUNCTION OF GOVERNING BODIES OF SPORTS	4	3	0	1	Class XII pass	NIL

Learning Objective: To familiarize the students with the major sports competitions, and professional training institutions in India along with the structure and functions of various sports bodies/ organizations.

Learning Outcomes:

1. The learners will know about the existing sports competitions in India and the world, so that they can explore the best possibilities.
2. The learners will develop factual knowledge and develop applications of professional preparation in the field of physical education and sports in India, so that they can explore the best possibilities.
3. The learners will be acquainted with the organizational structure and functions of various sports bodies for different applications, so that they can explore the best possibilities.
4. The learners will be able to develop an understanding of the functioning of various sports bodies/ organizations at national and international levels and apply the same for different professional purposes so that they can explore the best possibilities.

SYLLABUS

Credit: 4 - (3 Theory, 1 Practical)

Theory: 45 Hours

Practical: 30 Hours

PART-A: THEORY

Unit-1: Major Sports Competitions at International and National Level (11 Hours)

1. Olympic Games (Summer, Winter and Paralympics)
2. Asian Games, Commonwealth Games, SAF Games,
3. World Cups, World Universities, World Championships

4. National Games, National Championships
5. Khelo India University Games (KIUG), Inter-University (All India & Zonal) Competitions
6. Major International and National League Tournaments

Unit-2: Institutes for Professional Preparation of Physical Education and Sports in India (11 Hours)

1. Young Men Christian Association (YMCA)
2. Lakshmbai National Institute of Physical Education (LNIPE)
3. Indira Gandhi Institute of Physical Education and Sports Sciences (IGIPES)
4. Hanuman Vyayam Prasarak Madal, Amravati (HVPM)
5. Netaji Subhash National Institute of Sports (NSNIS)

Unit-3: Structure and Functions of International Sports Bodies/Organizations (12 Hours)

1. International Olympic Committee (IOC)
2. International Paralympic Committee (IPC)
3. Olympic Council of Asia (OCA)
4. Commonwealth Games Federation (CGF)
5. South Asian Federation Games (SAFG)
6. International Sports Federations (ISFs)
7. International University Sports Federation (FISU)
8. World Anti-Doping Agency (WADA)

Unit-4: Structure and Functions of National Sports Bodies/ Organizations (11 Hours)

1. Indian Olympic Association (IOA)
2. Ministry of Youth Affairs and Sports (MYAS)
3. Sports Authority of India (SAI)
4. Association of Indian Universities (AIU)
5. National Sports Federations (NSFs)
6. National Anti-Doping Agency (NADA)

PART-B: PRACTICALS

(30 Hours)

1. Prepare a report on any one National Sports Federation.
2. Prepare a report on the National Anti-Doping Agency laboratory.
3. Prepare a report on any Physical Education Institute of India.
4. Organize any intra-mural/ extra-mural competition in the National/ International League/ Knockout tournament format and prepare a report.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Graham, G. (2001), Teaching Children Physical Education: Becoming a Master Teacher. Human Kinetics, Champaign, Illinois, USA.
2. Kamlesh, M.L. & Singh, M. K. (2006), Physical Education (Naveen Publications).
3. Lau, S.K. (1999), Great Indian players, New Delhi, Sports Publications
4. Lumpkin, A. (2007), Introduction to Physical Education, Exercise Science and Sports Studies, McGraw Hill, New York, U.S.A.
5. Shaffer, D.R. (2002), Developmental Psychology: Childhood and Adolescence. Thomson, Sydney, Australia.
6. Sharma K. (2014), *Sharirik Shiksha Ka Itihas*, Friends Publications (India), New Delhi.
7. Siedentop, D. (2004), Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York, USA.
8. Singh, A. et.al. (2000), Essentials of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
9. Wuest, D.A. & C.A. Bucher (2006), Foundations of Physical Education, Exercise Science, and Sports. McGraw Hill Companies, Inc., New York, USA.
10. Websites of concerned organizations:
 - 1) <https://olympics.com>
 - 2) <https://ocasia.org>
 - 3) <https://www.fisu.net>
 - 4) <https://thecgf.com>
 - 5) <https://uia.org>
 - 6) <https://www.wada-ama.org>
 - 7) <https://olympic.ind.in>
 - 8) <https://yas.nic.in>
 - 9) <https://sportsauthorityofindia.nic.in>
 - 10) <https://evaluation.aiu.ac.in>
 - 11) <https://www.nadaindia.org>
 - 12) <https://schooltimesindia.com>
 - 13) <https://sportsCouncil.in>

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-II

B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B2-(4): B.A.-PE-DSC-2-(4)-EXERCISE PHYSIOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B2-(4): B.A.-PE-DSC-2(4)- EXERCISE PHYSIOLOGY	4	3	0	1	Class XII pass	NIL

Learning Objective: The learner will acquire knowledge and understanding with applications and skills (field and laboratory) in exercise physiology.

Learning Outcomes:

1. The learners will be able to understand the physiological basis of physical activities and functioning. The learners will attain knowledge, understanding, ability of interpreting the concepts and practices in exercise physiology.
2. The learners will learn the changes/adaptations in body systems in response to exercise & training. Such core knowledge and skill will help to create a strong foundation to engage human subject of all ages, sex for exercise, health, fitness, sports performance. The learner will be able to correlate, compare and analyze the cause (exercise) and effect (physiological changes) for best practices.
3. The learners will be able to understand the concept of exercise physiology and its significance in the field of Physical Education & Sports, acute physiological response, and chronic physiological adaptation.
4. The learners will also be able to correlate, compare and analyze the cause (exercise) and effect (physiological changes) for best practices in regard to above.

SYLLABUS

Credit: 4 (3 Theory, 1 Practical)

Theory: 45 Hours

Practical: 30 Hours

PART-A: THEORY

Unit-1: Exercise Physiology and Skeletal System (11 Hours)

1. Meaning and Importance of Exercise Physiology.
2. Effect of Exercise on Skeletal System and Different Types of Movement around the Joints.

Unit-2: Cardiovascular and Respiratory System (11 Hours)

1. Effect of Exercise on Cardiovascular System.: Stroke volume, Blood Volume, Blood Pressure, Its Maintenance and Regulation; Cardiac Output, Cardiac Hypertrophy, Redistribution of Blood during Exercise, Heart Rate.
2. Effect of Exercise on Respiratory System: Pulmonary Ventilation, Vital Capacity, Tidal Volume, Minute Volume, Residual Volume, Breathing Rate, Lung Capacity, oxygen uptake, VO₂max, Respiratory volume Aerobic and Anaerobic Threshold

Unit-3: Muscular, Digestive and Excretory System (12 Hours)

1. Effects of Exercise on Muscular System, Types of Muscular Contraction, Sliding Filament Theory (Physical)
2. Effect of Exercise on Digestive System: Secretion and Function of the Digestive Juices; Functions of Liver; Absorption of Food; Metabolism, Metabolism of Carbohydrates, Fats, and Proteins
3. Effect of Exercise on Excretory System: Urinary System

Unit-4: Nervous and Endocrine Systems (11 Hours)

1. Effect of Exercise on Nervous System: Central Nervous System, Sensory Nervous System, Autonomic Nervous System
2. Effect of Exercise on Endocrine System: Secretion of Endocrine Glands (Pituitary, Thyroid, Adrenal & Pancreas); Role of their secretion in Growth, Development and Body Functions.

PART-B: PRACTICALS (30 Hours)

1. Measurement of exercise Respiratory/breathing Rate
2. Measurement of exercise heart rate/pulse rate
3. Measurement of exercise blood pressure.
4. Demonstration of different movements at different joints.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Jain, A.K. (2002), Anatomy & Physiology for Nurses. Arya Publishers, Delhi.
2. Koley, Shyamal (2007), Exercise Physiology – A Basic Approach. New Delhi: Friends Publications.
3. Kumari, Sheela, S.; Rana, Amita; and Kaushik, Seema (2008), Fitness, Aerobics and Gym Operations. New Delhi: Khel Sahitya Kendra.
4. Moried, E.N.(2007), Essentials of Human Anatomy & Physiology. Ed.8th Dorling Kindersley, India.
5. Prives, M. and others (2004), Human Anatomy Vol. I & II Paragon, Delhi.
6. Seeley & others (2008), Anatomy & Physiology. McGraw Hill, Boston.
7. Tortora (2003), Principles of Anatomy & Physiology, NewYork: John Willy & Sons.
8. William, C.S. (2000), Essentials of Human Anatomy & Physiology, Benjamin.
9. Wilson and Waugh (1996), Anatomy & Physiology in Health & Illness. Churchill Livingstone.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-III

B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B3-(4): B.A.-PE-DSC-3-(4)-SPORTS NUTRITION AND ERGOGENIC AIDS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B3-(4): B.A.-PE-DSC-3-(4)- SPORTS NUTRITION AND ERGOGENIC AIDS	4	3	0	1	Class XII pass	NIL

Learning Objective: To acquaint the students with basic concepts, applications, and creativity related to sports nutrition and ergogenic aids.

Learning Outcomes:

1. The learners will understand the basic concept and practices of Nutrition and its importance in the field of Sports.
2. The learners will be able to describe the functions of different types of Nutrients and their sources.
3. The learners will gain knowledge of the application of nutrient supplementation and nutrition guidelines.
4. The learners will understand the concept of Ergogenic Aids and their role in sports.
5. The learners will identify the list of prohibited substances to control doping.
6. The learners will be able to create/construct the diet chart/ plan as per individual needs.
7. The learners will be acquainted with the role of the World Anti-Doping Agency (WADA) and National Anti-Doping Agency.

SYLLABUS

No. of Credits: 04 (Lecture-03, Practical-1)

Theory: 45 hours

Practical: 30 hours

PART A: THEORY

Unit-1: Nutrition

(11 Hours)

1. Meaning, Definition & Importance of Nutrition
2. Nutrients: Classification, Function, Source
3. Balanced Diet, Dietary Aids, Dietary Gimmicks

Unit-2: Sports Nutrition (11 Hours)

1. Role of Nutrition in Sports
2. Basic Nutrition Guidelines
3. Energy Balance Equations
4. Pre- and Post-performance Nutrition to athletes

Unit-3: Ergogenic Aids (11 Hours)

1. Meaning and Definition of Ergogenic Aids
2. Types of Ergogenic Aids
3. Role of Ergogenic Aids in Sports
4. Nutrition and Ergogenic Aids

Unit-4: Doping and Sports (12 Hours)

1. Meaning and Definition of Doping
2. Disadvantages of Doping in Sports
3. Introduction to WADA (World Anti-Doping Agency)
4. Introduction to WADA NADA (National Anti-Doping Agency)

PART B: PRACTICAL (Any three) (30 Hours)

1. Preparation of a self-daily Diet/ calorie consumption Chart for a week.
2. Preparation of self-daily Diet/ calorie expenditure Chart for a week.
3. List of prohibited substances by WADA (World Anti-Doping Agency)
4. Prepare a report on the nutritional practices of sportspersons.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Anspaugh, D.J.; Ezell, G. and Goodman, K.N. (2006). Teaching Today's Health. Mosby Publishers. Chicago, USA.
2. Balayan, D. (2007). Swasthya Shiksha Evam Prathmik Chikitsa. Khel Sahitya. Delhi.
3. Chopra, D. and Simon, D. (2001). Grow Younger, Live Longer: 10 Steps to Reverse Aging. Three Rivers Press. New York. USA.
4. Dewan, A.P. (1996). School Health Manual. Nature Cure and Yoga Health Centre. New Delhi.
5. Dixit, S. (2006). Swasthya Shiksha. Sports Publication. Delhi.
6. Donatelle, R.J. (2005). Health the Basics. Sixth Edition. Oregon State University.
7. Floyd, P. M. and Yeilding, C. (2003). Personal Health: Perspectives and Lifestyles. Thomson Wadsworth. Belmont. California. USA.
8. Hales, D. (2005). An Invitation to Health. Thomson- Wadsworth, Belmont. California. USA.
9. Park, K. (2007). Park's Text Book of Preventive & Social Medicine. Banarsi Das Bhanot & Company. Delhi.
10. Snehlata (2006). Shareer, Vigyan Evam Swasthya Raksha. Discovery Pub. Houses. New Delhi.
11. Uppal, A.K. & Gautam, G.P. (2008). Health & Physical Education. Friends Publication. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER-IV

B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B4-(4): B.A.-PE-DSC-4-(4)- CORRECTIVES IN PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B4-(4): B.A.-PE-DSC-4-(4)- CORRECTIVES IN PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practical applications to the learners about the posture mechanics, anatomy and movement of the spine, common postural deformities with their corrective measures, strengthening exercises, and ergonomics application in sports.

Learning Outcomes:

1. The learners will be able to understand and analyze the concept of posture and its impact on overall health.
2. The learners will be able to comprehend and correlate the significance of good posture and the risks associated with poor posture.
3. The learners will be able to apply the knowledge of the anatomy of the spine and movement around the spine to avoid related problems.
4. The learners will be able to identify common postural deformities and apply the acquired knowledge of corrective exercises for posture improvement and management.
5. The learners will be able to demonstrate the strengthening and stretching exercises for better posture.
6. The learners will be able to better their posture in the workplace and in everyday life.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory- 45 hours

Practical-30 hours

PART-A: THEORY

Unit-1: Introduction to Posture (11 hours)

- 1.1 Meaning of Posture, Significance of Good Posture
- 1.2 Factors affecting posture, Risks associated with Poor Posture.
- 1.3 Posture and Body Mechanics - sitting, standing, walking, sleeping, lifting

Unit-2: Anatomy and Movement of Spine (11 hours)

- 2.1 Structure and the Function of the Spine
- 2.2 Types of Spinal Movement
- 2.3 Role of the Spine in Maintaining Posture.

Unit-3: Common Postural Deformities (12 hours)

- 3.1 Types of Postural Deformities- Kyphosis, Lordosis, Scoliosis, Rounded Shoulder, Knock Knees, Bow Legs, Flat Foot, Duck Feet.
- 3.2 Causes of Postural Deformities, Prevention Methods for Postural Deformities
- 3.3 Corrective Exercises and Management of Postural Deformities-Kyphosis, Lordosis, Scoliosis, Rounded Shoulder, Knock Knees, Bow Legs, Flat Foot, Duck Feet.

Unit-4: Strengthening Exercises (11 hours)

- 4.1 Core Strengthening Exercises
- 4.2 Strengthening Exercises for Back and Neck Muscles
- 4.3 Stretching Exercises for Muscle Stiffness

PART-B: PRACTICALS: (Any three) (30 hours)

1. Demonstration of corrective exercises for Kyphosis, Scoliosis, Lordosis, Knock knees, Bow Legs, Flat Foot, and Duck Feet (2 exercises for each postural deformity)
2. Demonstrate strengthening exercises for the Core, back, and neck (3 exercises each)
3. Demonstrate stretching exercises for improving range of motion (5 exercises)
4. Assessment of own posture and recommendation for improvement (if any)

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Agarwal M., Arora S., Gupta B, (2018) “**Posture; Athletic Care and First Aid**”, Vivechan Publications (INDIA) ISBN: 978-9-38391-490-6.
2. Bhandari, P. (2021) “**Athletics Care and Rehabilitation**”. New Delhi: KSK Publishers.
3. “**Essentials of Strength Training and Conditioning**” (pp.73-90). Champaign, IL: Human Kinetics.

4. Karad, P.L, (2019) **“Prevention and Treatment of Sports Injuries”**. New Delhi: KSK Publishers.
5. Kumari, Sheela S.; Rana, Amita; & Kaushik, Seema (2008), **“Fitness, Aerobics and Gym Operations”** (New Delhi: Khel Sahitya Kendra).
6. Meena, T.R. (2022) **“Sports Medicine, Physiotherapy and Rehabilitation”**. New Delhi: KSK Publishers.
7. Pande, P.K. (1987), **“Outline of Sports Medicine”** (New Delhi: Jaypee Brothers)
8. Prentice, W. (2017). **“Principles of Athletic Training: A Competency-Based Approach”**. McGraw-Hill Education.
9. Sharma, Kavita et.al. (2014), **“Fitness, Aerobics and Gym Operations”** (New Delhi: Jyoti Enterprises)
10. Singh, Ajmer et.al. (2006), **“Essentials of Physical Education”** (Ludhiana: Kalyani Publishers)
11. उप्पल, ए.के.; पदयाल, अंजुम और लाल, राजेंदर (2022), **“अंग-विन्यास तथा खिलाड़ी की देखभाल”** (नई दिल्ली: फ्रेंड्स पब्लिकेशन)
12. कुमारी, शीला एस.; राणा, अमिता; और कौशिक, सीमा (2012), **“फिटनेस, एरोबिक्स व जिम ऑपरेशंस”** (नई दिल्ली: खेल साहित्य केंद्र)।
13. Shaw D. (2019) **“Kinesio Taping in Games and Sports”** Sports Publication, ISBN: 978-93-88269-33-9.
14. Shaw D. (2019) **“Sports Injuries: A Demographic Study on Indian Sports Person”** Khel Sahitya Kendra, ISBN: 978-93-88159-87-6.
15. Shaw D. (2021) **“Athletic Care and Rehabilitation”** Sports Publication, ISBN : 978-81-951044-9-9.
16. Shaw D. (2019) **“Encyclopedia of Sports Injury”** Khel Sahitya Kendra, ISBN : 978-93-88159-87-6.

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SEMESTER-V

B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B5-(4): B.A.-PE-DSC-5-(4)-SPORTS SOCIOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B5-(4): B.A.-PE-DSC-5-(4)- SPORTS SOCIOLOGY	4	3	0	1	Class XII pass	NIL

Learning Objective:

The objective of this course is to provide an understanding and practice to the learner about sports sociology, the interrelationship between society and sports, and also gender and socialization.

Learning Outcomes:

1. The learner will understand the importance and applications of sports sociology.
2. The learners will be able to articulate sociological perspectives with sports.
3. The learners will be able to inculcate the sports culture in their life & society.
4. The learner will be able to establish the relationship between society and sports.
5. The learner will be able to analyze gender inequality in sports.
6. The learner will be able to understand the significance of socialization through games and sports.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit – I: Sports Sociology

(11 hours)

- 1.1 Meaning and definition of sociology and sport sociology
- 1.2 Nature and scope of sociology, Importance of sports sociology
- 1.3 Sociological perspectives in sports (Functionalism and Conflict)

Unit-2: Sports, Society and Culture

(11 hours)

- 2.1 Meaning and structure of society
- 2.2 Historical development of sports in different types of societies
- 2.3 Meaning of culture and sports culture, Importance of sports culture
- 2.4 Nationalism through sports

Unit-3: Sports and Gender (11 hours)

- 3.1 Gender equality and sports participation
- 3.2 Women performance in sports in India
- 3.3 Barriers and opportunities for women in sports

Unit-4: Socialization and Sports (12 hours)

- 4.1 Meaning of socialization and sports socialization
- 4.2 Agencies of sports socialization (family, school, college, peer group)
- 4.3 De-socialization of sports
- 4.4 Sports as a means of inclusion

PART-B: PRACTICALS: (30 hours)

1. Conduct a survey on the status of sports in society/ community.
2. Collect data on any sport of choice based on commercial growth
3. Sociometric Test (collect data and write an article of at least 10 members of the sports team)
4. Cultural Determination (collect data and write an article of at least 10 members of the sports team)

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Bhupinder Singh (2004), **Sports Sociology-An Indian Perspective**. New Delhi: Friends Publications, ISBN 978-8172160852.
2. Brown, S.P. (2006). **Introduction to the Sociology of Sport**. Baltimore: Lippincott Williams & Wilkins.
3. Coakley, J.J. (2009). **Sporting Sociology, Issues and controversies**, McGraw Hill International.
4. Coakley, J.J. (2015). **Sports in society: Issues and controversies**. New York: McGraw-Hill; Olympic Studies Centre. (2014).
5. Delaney, T. & Madigan, T. (2009). **The Sociology of Sport: An introduction**. USA: McFarland & Company.
6. Shaw D. (2020) **“Physical Education Practical Manual for Class XI”** Prachi Publication, ISBN: 978-8193-7698-0-5.
7. Shaw D. (2020) **“Physical Education for Class XII”** Prachi Publication, ISBN: 978-81-7730-848-8.
8. Shaw D. (2020) **“Physical Education for Class XI”** Prachi Publication, ISBN: 978-81-7730-847-1.
9. Shaw D. (2020) **“Physical Education Practical Manual for Class XII”** Prachi Publication, ISBN: 978-81-937698-1-2.
10. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.

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SEMESTER-VI

B.A. (Prog.) with Physical Education as a Major

DISCIPLINE B6-(4): B.A.-PE-DSC-6-(4)-SPORTS BIOMECHANICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE B6-(4): B.A.-PE-DSC-6(4)- SPORTS BIOMECHANICS	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about Biomechanics and its application in sports and develop the foundation to learn performance analysis.

Learning Outcomes:

1. The learners will be able to understand the fundamental concepts and practical applications related to biomechanics.
2. The learners will be able to demonstrate and correlate different components of the science of motion (human).
3. The learners will be able to analyze the sports/ exercise movements and design movement-oriented exercises.
4. The learners will be able to develop the exercise program for strengthening and stretching the muscles based on biomechanics.
5. The learners will be able to apply the knowledge and skills related to the science of movement/ motion to create a strong foundation for better sports performance.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-I: Introduction to Sports Biomechanics

(10 hours)

- 1.1 Meaning and Definition of Sports Biomechanics.
- 1.2 Aim, Objectives, and Scope of Sports Biomechanics in Physical Education and Sports
- 1.3 Importance of Sports Biomechanics for Physical Education Teachers, Athletes, and Coaches

Unit-II: Anatomical Fundamental Concepts in Sports Biomechanics (11 hours)

- 2.1 Fundamental Anatomical positions
(Anterior, Posterior, Superior, Inferior, Lateral, Medial)
- 2.2 Fundamental Movements
(Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Medial and Lateral rotation, Inversion, Eversion, Supination, Pronation)
- 2.3 Fundamental Concepts- Centre of Gravity, Line of Gravity, Axis, and Planes of Motion.

Unit-III: Location, Action of Muscles and Movement Qualities (12 hours)

- 3.1 Location and action of muscles at various joints: upper extremity: pectoralis major – pectoralis minor – deltoid – biceps brachii – triceps – teres major – latissimus dorsi – trapezius
- 3.2 Location and action of muscles at various joints: Lower extremity: rectus femoris – vastus group – Sartorius – biceps femoris – semi membranous – semi tendinosis– gluteus – gastrocnemius muscles
- 3.3 Movement Qualities: Movement Rhythm, Movement Precision, Movement Amplitude, Movement Coupling, Movement tempo, Movement Flow

Unit-IV: Biomechanical Concepts of Motion (12 hours)

- 4.1 Motion, Types of motion, Linear and Angular motion, Newton’s Laws of Motion, Levers
- 4.2 Linear Kinematics and Kinetics: Speed, velocity, acceleration, mass, weight, force, friction
- 4.3 Angular Kinematics and Kinetics: Angular Speed, angular velocity, angular acceleration, moment of inertia, conservation of momentum and transfer of momentum.

PART-B: PRACTICALS (30 Hours)

1. Demonstration of planes and axes of a given movement.
2. Demonstration of various movements around a joint. (Any two joints)
3. Determination of the location of muscles at various joints. (Any two joints)
4. Determination of the center of gravity of a bat/ racket (suspension method)

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Broer, M.R. **Efficiency of Human Movement** (Philadelphia: W.B. Saunders Co. 1969.
2. Bunn, J. W. (1972). **Scientific principles of coaching**. Englewood Cliffs, N.J.: Prentice Hall Inc.
3. Dhanajoy.S., 2005, “**Pedagogic of Kinesiology**”, Sports Publication, Chennai.
4. Gerry Carr, **Mechanics of Sport Human Kinetics**, 199
5. Hay, J. G. & Reid, J. G. (1982). **The anatomical and mechanical basis of human motion**. Englewood Cliffs, N.J.: Prentice Hall Inc.
6. Hay, J. G. & Reid, J. G. (1988). **Anatomy, mechanics, and human motion**. Englewood Cliffs, N.J.: Prentice Hall Inc.
7. Hay, J. G. (1970). **The biomechanics of sports techniques**. Englewood Cliffs, N.J.: Prentice Hall, Inc.

8. James G. Hay, **The Biomechanics of Sports Techniques**. Prentice Hall International Inc, New Jersey 1993.
9. Katharine, F. Luttgens Kathryn, **Kinesiology – Scientific Basis of Human motion Singapore**: Mc. Graw Will International Book Company, 1984)
10. Kathryn Luttgens et al. **Kinesiology (Scientific Basis of Human Motion)**, Brown and Bench mark, 1992.
11. Rasch and Burke, **Kinesiology and applied Anatomy** (Philadelphia: Leaand Fiber, 1967)
12. Roger Bartlett, **Introduction to Sports Biomechanics**. E& FN Spon New York 1997
13. Simonian, C. (1911). **Fundamentals of sport biomechanics**. Englewood Cliffs, N.J.: Prentice Hall Inc.
14. Shaw D. (2018). **“Pedagogic Kinesiology”** Sports Publication, ISBN: 978-93-86592-43-9.
15. Shaw D. (2019) **“Kinesio Taping in Games and Sports”** Sports Publication, ISBN: 978-93-88269-33-9.

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SEMESTER-VII

B.A. (Prog.) with Physical Education

DISCIPLINE-7(4): B.A.-PE-DSC-13 ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DISCIPLINE 7(4): B.A.-PE-DSC-13- ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about the organization, administration, planning, and management of facilities, equipment, and tournaments, the role of technology and media in physical education.

Learning Outcomes:

1. The learners will be able to understand the elements and principles of administration and management.
2. The learners will be able to organize physical education and sports program.
3. The learners will be able to perform different managerial functions.
4. The learners will be able to prepare a budget for different activities.
5. The learners will be able to adopt modern technologies for effective teaching and sports promotions.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory- 45 hours

Practical-30 hours

PART-A: THEORY

Unit-I: Introduction

(10 Hours)

- 1.1 Concept and significance of Planning, Organization, Administration, and Supervision in Physical education and sports
- 1.2 Use of Technology in Physical Education and Sports
- 1.3 Role of Media and Public Relations in Physical Education

Unit-II: Planning and Organization of Events in Physical Education and Sports (12 Hours)

- 2.1 Programme planning: Meaning, Importance and Principles of program planning in physical education
- 2.2 Functions of Planning, organizing, staffing, directing, communicating, co-ordination, controlling, evaluating and innovating
- 2.4 Organization of events in physical education and sports (Seminars/Workshop/ Lectures/Clinics)

Unit-III: Sports Office Management (11 Hours)

- 3.1 Meaning, definition, functions, and kinds of office management
- 3.2 Records and Registers - Maintenance of attendance register, stock register, cash register, Physical efficiency record, and Medical examination record.
- 3.3 Meaning, Importance of budget making, Criteria of a good budget, Preparation of budget

Unit-IV: Facilities, Equipment and Tournaments (12 Hours)

- 4.1 Facilities and equipment management: Types of facilities - Infrastructure-indoor, outdoor, Gymnasium, Swimming pool, Play fields; Location, Preparation, Layout, and maintenance of facilities
- 4.2 Need and importance of equipment: - Purchase, care and maintenance of equipment, Maintenance of equipment. Process of write-off and condemnation of stock.
- 4.3 Types of tournaments- Knock-out, league or round robin, combination, Organization of Intramural & Extramural sports competitions

PART-B: PRACTICALS: (30 Hours)

- Plan and organize an intramural/ extramural tournament in your college
- Plan and organize a Seminars/Workshops/ Lectures/ Webinar in your college
- Prepare a budget to organize any event in your college/ department
- Presentation on any topic from physical education using modern technology.

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Broyles, F. I. & Rober, H. D. (1979). **Administration of Sports, Athletic programme: A Managerial Approach.** New York: Prentice hall Inc.
2. Bucher, C. A. (1983). **Administration of Physical Education and Athletic Programme.** St. Louis: The C.V. Mosby Co.
3. Chakraborty, Samiram (1988), **Sports Management**, Sports publications, New Delhi.
4. Hughes, LW. and French, E. (1990) **The Administration of Physical Education**, Ronald Press Co.
5. Kamlesh, M.L., **Management concepts of physical education and sport**, New Delhi: Metropolitan Book Co., Pvt., Ltd.
6. Kozman, H.C. Cassidy, R. & Jackson, C. (1960). **Methods in Physical Education.** London: W.8. Saunders Co.

7. Pandey, L.K. (1977). **Methods in Physical Education**. Delhi: Metropolitan Book Depot.
8. Sharma, V.M. & Tiwari, R.H.: (1979). **Teaching Methods in Physical Education**. Amaravati: Shakti Publication.
9. Thomas, J. P. (1967). **Organization & Administration of Physical Education**. Madras: Gyanodayal Press.
10. Tirunaryanan, C. & Haiharan. S (1969), **Methods in Physical Education**. Karaikudi: South India Press
11. Voltmer, E. F. & Esslinger, A. A. (1979). **The Organization and Administration of Physical Education**. New York: Prentice Hall Inc.
12. Shaw D. (2018) **“Fundamental Statistics in Physical Education and Sports Sciences”** Sports Publication, ISBN: 81-86190-57-0.
13. Shaw D. (2020) **“Physical Education Practical Manual for Class XI”** Prachi Publication, ISBN: 978-8193-7698-0-5.
14. Shaw D. (2020) **“Physical Education for Class XII”** Prachi Publication, ISBN: 978-81-7730-848-8.
15. Shaw D. (2020) **“Physical Education for Class XI”** Prachi Publication, ISBN: 978-81-7730-847-1.
16. Shaw D. (2020) **“Physical Education Practical Manual for Class XII”** Prachi Publication, ISBN: 978-81-937698-1-2.
17. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.

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SEMESTER-VIII

B.A. (Prog.) with Physical Education

DSC-8(4): B.A.-PE-DSC-(4) - TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSC-8(4): B.A.-PE-DSC-14- TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION	4	3	0	1	Class XII pass	NIL

Learning Objective:

The objective of this course is to provide an understanding and practice to the learner about test, measurement, and evaluation as applicable to Physical Education and Sports Performance, criteria and administration of tests, physical fitness tests, and sports-specific skill tests.

Learning Outcomes:

1. The learners will be able to develop concepts and applications of tests, measurement, evaluation, and relationships with physical education and sports performance.
2. The learners will be able to understand and apply different types of tests for evaluating the performance of participants.
3. The learners will be able to apply the knowledge of criteria, classification and administration of test in physical fitness testing and sports specific skill testing.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-1: Test, Measurement, and Evaluation

(11 Hours)

1.1 Meaning and Definition of Test, Measurement, and Evaluation.

1.2 Need and Importance of Test and Measurement in Physical Education and Sports

Unit-II: Criteria and Administration of Test (12 Hours)

- 2.1 Classification of tests – Standardized and teacher-made tests – Objective and subjective Tests – Knowledge test- Fitness test- Sports skill test
- 2.2 Criteria of Test (Scientific Authenticity) – Reliability, Objectivity, Validity
- 2.3 Administration of Test: Preplanning, testing operation, and post-test functions

Unit- III: Measurement of Fitness Components (12 Hours)

- 3.1 Measurement of fitness components.
 - Muscular endurance (sit-ups)
 - Muscular Strength (Kraus-Weber Test)
 - Cardio-respiratory endurance (Cooper’s 12 min. run/walk test)
 - Agility (Shuttle run)
 - Speed (50m. dash)
 - Flexibility (Sit and reach)

Unit-IV: Physical Fitness Tests (10 Hours)

- 4.1 Test for Physical Fitness- AAPHERD Youth Physical Fitness Test and Roger’s Physical Fitness Index
- 4.2 Test for Motor Fitness- Indiana Motor Fitness Test and JCR Test

PART-B: PRACTICALS: (30 Hours)

- Measurement of Fitness Components (Muscular Endurance/Muscular Strength/ Cardiorespiratory endurance)
- Measurement of Fitness Components (Agility/Speed/ flexibility)
- Administration of Physical Fitness Test: AAPHERD Youth Physical Fitness Test or Roger’s Physical Fitness Index
- Administration of Motor Fitness Test: Indiana Motor Fitness Test or JCR Test

Marking Scheme:

Theory Written Exam	:	90 Marks
Internal Assessment	:	30 Marks
Practical	:	40 Marks

Suggested Readings:

1. Allen D., Phillips & James E. Hornork (1979) **Measurement and Evaluation in Physical Education.** John Willey & Sons, New York
2. Balyan, Sunita (2006). **Sharirk Shiksha main Parikshan evm maapan,** Khel Sahitya. Delhi.
3. Barrow, H.M.. and McGee, R., A (1964) **Practical Approach to Measurement in Physical Education,** Lea and Febiger, Philadelphia.
4. Barry L. Johnson, Jack K. Nelson. **Measurements for Evaluation in Physical Education.** Surjeet Publications.
5. Bovard, J.F., Cozens, F., W. and Hagman, P.E. (1949) **Test and Measurements in Physical Education,** W.B. Sanders Company, Philadelphia.
6. Cureton, T.K. (1947) **Physical Fitness Appraisal and Guidance,** The C.Mosby Company, St.Louis.
7. Harrison H. Clarke. (1976-1987) **Application of Measurement to Health & Physical Education,** Prentice Hall Inc. Englewood Cliffs N. J.
8. Hunsicker, P.A. and Montoye, H.J. (1953) **Applied Test and Measurements in Physical Education,** Prentice Hall Inc., New York.

9. Kansal D.K. (2012). **A Practical Approach to Measurement, Evaluation & Sports Selection**. Sports & Spiritual Science Publications, New Delhi.
10. Kumari, Sheela S.; Rana, Amita; & Kaushik, Seema (2008), **Fitness, Aerobics and Gym Operations** (New Delhi: Khel Sahitya Kendra).
11. Mathews K. Donald. (1973) **Measurement in Physical Education**, London W.S. Saunders Company,
12. Meyers, C.R. and Belsh, E.T. (1962) **Measurement in Physical Education**, The Ronald Press Company. New York. Sports, New Delhi: Friends Publications.
13. Safrit Margaret J. (1986) **Measurement in Physical Education and Exercise Science**. St. Louis, Times Mirror Mosby College publishing.
14. Srivastava AK (2006). **Sharirik Shiksha Evam Khel Mein Maapan Evam Mullyankan**. Sport Publications, Delhi.
15. Wilgoose, C.E (1967) **Evaluation in Health Education and Physical Education**, McGraw Hill Book Company, Inc, New York.
16. Yobu, A (2010), **Test, Measurement and Evaluation in Physical Education**, Friends Publication, New Delhi
17. Shaw D. (2018) **“Fundamental Statistics in Physical Education and Sports Sciences”** Sports Publication, ISBN: 81-86190-57-0.
18. Shaw D. (2020) **“Physical Education Practical Manual for Class XI”** Prachi Publication, ISBN: 978-8193-7698-0-5.
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22. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.

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SYLLABUS OF DISCIPLINE-SPECIFIC ELECTIVE COURSE PAPER (DSE)

SEMESTER V B.A.-DSE-PE-(4)-1.1: FUNDAMENTALS OF GAME/SPORTS (Choose Any One Sport from the Facilities Available)

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.A.-DSE-PE-(4)-1.1: FUNDAMENTALS OF GAME/SPORTS	4	3	0	1	Class XII pass	Nil

Learning Objective: - The students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

Learning Outcome: -The student will attain knowledge, understanding, interpreting, and analyzing proficiency in a game of one's choice.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

Unit-I: Introduction of the Game/Sport (11 hrs lectures)

- Historical Development and Modern Trends in the game (National and International Level)
- Organizational Structure (State, National, and International Level)
- Introduction to the Playfield/arena of any 1 game

Unit-II: Rules of the Game/Sport and Role of Coach (12 hrs lectures)

- Rules and their interpretation of any 1 sport
- Basis of Warming up and cooling down and its effect
- Role of coach in preparing players/Teams

Unit-III: Skills and Techniques (11 hrs lectures)

- Basic skills and techniques of any 1 Game
- Developmental Drills / **Preparatory Exercises** to improve skills of any 1 Game

Unit-IV: Game/Sport Related Fitness (11 hrs lectures)

- Introduction to Fitness components related to any 1 sport.
- Role of Fitness & skill related fitness components of any game in improving performance

PRACTICAL SYLLABUS

(30 hrs.)

1. Learning and demonstrating various skills/techniques of any 1 Game
2. Drills to improve Fundamental skills of any 1 game
3. Marking of Playfield/ arena of any 1 game
4. Playing ability in a match.

Suggested Readings:

1. Gothi E (2004). Teaching & Coaching Athletics. Sport Pub., New Delhi.
2. Gupta R. (2004). Layout & Marking of Track & Field. Friends Publications. India. New Delhi.
3. Handbook-Rules and Regulation. International Athletic Federation (2010).
4. Herb Amato, DA ATC et al (2002). Practical Exam Preparation Guide of Clinical Skills of Athletic Training. Slack Incorporated. 1st ed., USA.
5. Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi
6. Maughan, R. and Gluson, M. (2004). The Biomechanical Basics of Athletic Performance. Oxford University Press, U.K.
7. Prentice, W. and Arnheim, D. (2005).
8. Renwick GR (2001). Play Better Athletics. Sports Pub, Delhi.
9. Singh, Hardayal. (2019). Science of Sports Training. DVS Publication, N. Delhi.
10. Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.
11. Elliott R., (2011). Runners on Running: The Best Nonfiction of Distance Running, Human Kinetics, United States of America.
12. Galloway J., (2011). Cross Country Running, Mayer &Mayer Sport, United Kingdom.
13. Galloway J., (2012). 100 Reasons to Run, Mayer &Mayer Sport, United Kingdom.
14. Thani L., (2018). Skills & tactics field athletics, sports publication, New Delhi

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-V
B.A.-DSE-PE-(4)-1.2
STRENGTH AND CONDITIONING
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
2	B.A.-DSE-PE-(4)-1.3 STRENGTH AND CONDITIONING	04	3	0	1	XII Pass	NIL

Learning Objective: The objective of this course is to provide an understanding, practice and practical skills to the learners about Strength and Conditioning, Load and Adaptation, Warming-Up and Limbering Down, and Strength and Conditioning Programme Design.

Learning Outcomes:

1. The learners will be able to understand the concept and applications of Strength and Conditioning.
2. The learners will be able to understand the concept and applications of Load and Adaptations.
3. The learners will be able to understand and analyze the popular trends and updated research in the sports industry, specifically in the area of strength and conditioning.
4. The learners will be able to design a strength and conditioning program.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT- Introduction to Strength, Conditioning, Warming-up, and Cooling Down (10 Hours)

- 1.1 Meaning and Concept of Strength and Conditioning.
- 1.2 Aim and Objectives of Strength and Conditioning.
- 1.3 General Principles of Strength and Conditioning.
- 1.4 Concept and Importance of Warming-Up and Cooling Down

UNIT-II Load and Adaptation (12 Hours)

- 2.1 Training Load- Definition and types of training load.
- 2.2 Principles of training load (Frequency, Intensity, Density, and Volume).
- 2.3 Relationship between load and adaptation. Overload and critical load.
- 2.4 Concept of load and factor affecting load and adaptation.

UNIT-III Strength Training & Stretching (12 Hours)

- 3.1 Strength – Definition, types and their characteristics.
- 3.2 Types of muscular contraction.
- 3.3 Development of strength using own body weight and external resistance, field tests for measuring strength.
- 3.4 Core Strength and Functional training
- 3.5 Types of Stretching- Static Stretching Techniques and Dynamic Stretching Techniques

UNIT-IV: Strength and Conditioning Programme Design

(11 Hours)

- 4.1 Exercise Selection, Training Frequency, Exercise Order, Training Load and Repetitions, Volume, Rest Periods.
- 4.2 Means and Methods of Training (Resistance Training)
- 4.3 Plyometric Training, Circuit Training, Free Weight Training Methods, Bodyweight Training Methods, Core Stability and Balance Training Methods

PART-B: PRACTICALS

(30 hours)

1. Prepare a Warming-Up Exercise Programme with illustrations.
2. Prepare a Cooling-Down Exercise Programme with illustrations.
3. Prepare a Strength and Conditioning Programme for a specific games/sport.
4. Demonstrate Exercises for Core Stability and Balance (any five).

Suggested Readings:

1. Arnheim, Danial D. & Arnheim, Helene (1987) **Essentials of Athletic Training Toronto** Times Mirror.
2. Arnheim, Danial D. (1985) **Modern Principles of Athletic Training. Toronto** Time Mirror.
3. Bunn, John W. (1955) **Scientific Principles of Coaching** Englewood Cliffs N. J. Prentice Hall, Inc.
4. Dick, Frank W. (1980) **Sports Training Principles** London: Lepus Books.
5. Haff, G.G. (2016) **Essentials of Strength Training and Conditioning** Human Kinetics.
6. Hare, Dietrich (1982) **Principles Sports Training**, Berlin: Sportverlag.
7. Jensen, Clayne R & Fisher, Garth A. (1979) **Scientific Basis of Athletic Conditioning** Philadelphia: Lea & Febiger
8. Joan A. (1987) **Coaching – an Effective Behavioural Approach**, Toronto: Time Mirror
9. Novich, Max M. & Taylor Buddy (1983) **Training and Conditioning of Athletes** Philadelphia: Lea & Febiger
10. Sands, W.A., Wurth, J.J., Hewit, J.K. (2012) **Basics of Strength and Conditioning Manual** The National Strength and Conditioning Association.
11. Shaw, D. (2020) **Sports Training** Sports Publication.
12. Shaw, D. (2021) **Athletic Care and Rehabilitation** Sports Publications.
13. Singh, Hardayal (1991) **Science of Sports Training** New Delhi: D.A.V. Publication
14. Uppal A. K. (2010) **Principles of Sports Training** Friends Publications (India)
15. Uppal A. K. (2013) **Science of Sports Training** Friends Publications (India)
16. Uppal A. K. (2013) **Scientific basis of Sports Conditioning** Friends Publications (India)

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-V
B.A.-DSE-PE(4)-1.3
FITNESS FOR SENIOR CITIZENS
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
3	B.A.-DSE-PE-(4)-1.3-FITNESS FOR SENIOR CITIZENS	04	3	0	1	XII Pass	NIL

Learning Objectives:

This course will help the learner to understand the process of aging and develop the basic concepts of the physiological, psychological, and social issues affecting the fitness levels of senior citizens in society. Also, learners will be able to test and design exercise programs for the Senior Citizen.

Learning Outcomes:

1. Learners will be able to identify the physical, psychological, and social aspects of aging.
2. Learners will be able to understand aging adults' limitations, common medical conditions, the aging process, and frequent fitness obstacles.
3. Learners will be able to collect information regarding events organized by state, national, and international sports federations to promote physical activity among the aged population.
4. Learners will be able to test and design exercise programs for the Senior Citizen.
5. Learners will be able to understand and demonstrate the importance of fitness for senior citizens.
6. Learners will be able to evaluate the fitness of senior citizens.
7. Learners will be able to improve the quality of life of senior citizens.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I Introduction – Ageing and Physical Activity (10 hours)

- 1.1 Meaning, Definition of aging.
- 1.2 Countries and policies that Are Sensitive and Caring for the Aging Population
- 1.3 Scope of Practice for Senior Fitness Specialists and understand their Role in the healthcare industry

UNIT-II Physical, Physiological, and Psychological Considerations of Aging (12 hours)

- 2.1 Physical changes that occur in the aging population –Posture, Balance, Eyesight, etc.
- 2.2 Physiological changes that occur in the aging population – Neurological, Musculoskeletal, Cardiovascular, Memory loss, etc.
- 2.3 Psychological changes in the aging population – Quality of life, Self-Perception, self-confidence, emotional well-being etc.
- 2.5 Psychosocial effects of exercise and physical activity of aged people

UNIT-III Fitness Assessments for the Active Older Adult (12 hours)

- 3.1 Functional fitness of older adults.
- 3.2 Health risks related to age and physical activity.
- 3.3 Diet and Nutrition - caloric requirements, and nutrition guidelines for the aged population
- 3.4 Chronic conditions and comorbidities associated with active senior citizens

UNIT-IV Training the Senior Citizen

(11 hours)

- 4.1 Cardiorespiratory Training for Active Senior Citizens
- 4.2 Resistance Training for Active Senior Citizens
- 4.3 Flexibility and Balance for Active Senior Citizens
- 4.4 Sports for Veterans and Active Senior Citizens

PART-B: PRACTICALS

(30 hours)

1. Prepare Cardiorespiratory Training Programme for Active Senior Citizens
2. Prepare Resistance Training program for Active Senior Citizens
3. Develop a flexible exercises schedule for Active Senior Citizens
4. Develop a Balancing exercises schedule for Active Senior Citizens
5. Physical Fitness Testing and Evaluation of Senior citizen (men and women)

Suggested Readings:

1. Folan, Maureen (1995) **Exercise Machines for Older People** Physiotherapy, vol. 81, page 771. [http://dx.doi.org/10.1016/s0031-9406\(05\)66612-6](http://dx.doi.org/10.1016/s0031-9406(05)66612-6).
2. Hollrock, Ardelle P. (2004) **Exercise and the Elderly** Fogler Library, University of Maine. <http://www.library.umaine.edu/theses/pdf/HollrockAP2004.pdf>.
3. Rikli, Roberta E. & Jones, C. Jessie (2013) **Senior Fitness Test Manual** Human Kinetics.
4. Skelton, D. A., and N. Beyer. (2003) **Exercise and Injury Prevention in Older People** Scandinavian Journal of Medicine & Science in Sports vol. 13, pp. 77–85. <http://dx.doi.org/10.1034/j.1600-0838.2003.00300.x>.
5. Shaw, D., and Andrabi, S.M.H. (2021) **Fitness Reference of Senior Citizens** Khel Sahitya Kendra.
6. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN: 978-93-90461-18-9.
7. Shaw D. (2021) **“Sports Training”** Sports Publication, ISBN: 978-81-943611-3-8.
8. Underhill, J. A. (1993) **Exercise for Older People with Dementia** Age and Ageing, vol. 22, P35—P36. http://dx.doi.org/10.1093/ageing/22.suppl_3.p35-c

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER – VI
B.A DSE (PE)-2.1
RESEARCH METHODS IN PHYSICAL EDUCATION AND SPORTS

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
1	B.A DSE (PE)-2.1 RESEARCH METHODS IN PHYSICAL EDUCATION AND SPORTS	04	3	0	1	XII Pass	NIL

Learning Objective:

The student will be able to use the knowledge of Research for analysis of data leading to logical conclusions on any field of investigation in physical education and sports.

Learning Outcomes:

1. The learner will be able to understand the concepts and types of research for different applications.
2. The learner will be able to apply different sampling technique and tools in research.
3. The learner will be able to apply the criteria of selection of a problem.
4. The learner will be able to collect review of literature from different resources.
5. The learner will be able to develop a research proposal.
6. The learner will be able to develop the concept of writing a research paper/ article/ project/ dissertation.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION

(7 Hours)

- 1.1. Definition and concept of Research, Need, and importance of Research in Physical Education and sports.
- 1.2. Scope of Research in Physical Education and Sports
- 1.3. Types of Research: Analytical, Descriptive, Experimental, Qualitative, etc.

UNIT-II SAMPLING TECHNIQUES AND HYPOTHESIS

(8 Hours)

- 2.1. Identification of Research Problem
- 2.2. Meaning, definition, and importance of Hypothesis
- 2.3. Meaning, definition, and importance of Sampling
- 2.4. Types of Sampling Techniques

UNIT-III TOOLS IN RESEARCH

(8 Hours)

- 3.1. Types of data, collection of data, data interpretation, and result analysis.
- 3.2. Different types of tools of research: questionnaires, Interviews, observation, tests and inventories

UNIT IV CRITERIA OF SELECTION OF RESEARCH

(11 Hours)

- 4.1. Criteria of Selection of Problem, Statement of a Research Problem, Limitations and Delimitations.
Review of related literature- Need and importance
- 4.2. Major literature resources- Documentation over-view, Library sources, Research reviews, Card catalog indices – physical education indices, Abstracting material

UNIT-V METHOD OF WRITING RESEARCH PROPOSAL/ THESIS/ RESEARCH ARTICLES

(11 Hours)

- 5.1 Method of writing Research proposal
- 5.2 Method of Writing Thesis
- 5.3 Method of writing abstract
- 5.4 Method of Writing a research paper for Conferences and journals
- 5.5 Method of Writing Footnote and Bibliography
- 5.6 Method of representing data through tables, graphs, and illustrations

PART-B: PRACTICALS

(30 hours)

1. Prepare ten footnotes and bibliography containing references from books, journals, dissertation, periodicals and websites etc.
2. Prepare a review of the literature (any ten research) related to any one topic of your choice.
3. Prepare a research proposal

Suggested Readings:

1. Author's Guide. (1991) **Research Methods Applied to Health Physical and Recreation** Washington, D.C.
2. Best John & Kahni, J.V. (1992) **Research in Education** New Delhi: Prentice Hall of India (Pvt.) Ltd.
3. Bompa, T. O. & Haff, G. G. (2009) **Periodization: Theory and Methodology of Training**, 5th ed. Champaign, IL: Human Kinetics.
4. Brown, L. E., & Ferrigno, V. A. (2005) **Training for Speed, Agility and Quickness** 2nd ed. Champaign, IL: Human Kinetics.
5. Clark, H. H., & Clark, D. H. (1975) **Research Process in Physical Education** Englewood Cliffs, New Jersey: Prentice Hall, Inc.
6. Clarke, H.H. (1992) **The Application of Measurement in Health and Physical Education**.
7. Garrett, H.E. (1981) **Statistics in Psychology and Education** New York: Vakils Feffer and Simon Ltd.
8. Koul, L. (2002) **Methodology of Educational Research** Vikas Publishing House, New Delhi
9. Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987) **Introduction to Research: A Guide for The Health Science Professional**. Landon: J.B. Lippincott Company.
10. Rothstein, A.L. (1985) **Research Design and Statistics for Physical Education** Prentice Hall, New Jersey, U.S.A.
11. Shaw, D. (2007) **Fundamental Statistics in Physical Education & Sports Sciences**, New Delhi: Sports Publication.
12. Smith, R. Philosophy (2007) **Methodology and Educational Research** Wiley Black Well, USA.
13. Swann, J. Pratt (2007) **Educational Research in Practice: Making Sense of Methodology** New Delhi: Viva.
14. Thomas, J.R., & Nelson J.K. (2005). **Research Method in Physical Activity**. U.S.A: Champaign, IL: Human Kinetics Books.
15. Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011) **Research Method in Physical Activity** U.S.A: Champaign, IL: Human Kinetics Books.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VI
B.A-DSE-PE-(4)-2.2
PUBLICATION ETHICS IN PHYSICAL EDUCATION AND SPORTS SCIENCES
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
2	B.A.-DSE-PE-(4)-2.2 PUBLICATION ETHICS IN PHYSICAL EDUCATION AND SPORTS SCIENCES	04	3	0	1	XII Pass	NIL

Learning Objective:

The objective of this course is to provide the understanding through practical knowledge and practices about publication ethics in physical education and sports sciences for enough scope of creativity/Innovations in the field of physical education.

Learning Outcomes:

1. The learner will be able to understand the concepts with practices and skills of research integrity and publication ethics.
2. The learner will be able to (Hands-on-sessions are designed) identify research misconduct and predatory publications, Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools along with the contents of the theory and practical syllabus.

SYLLABUS

CREDITS:4 [Theory-3,Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I PHILOSOPHY AND ETHICS

(7 Hours)

- 1.1 Introduction to Philosophy: definition, nature and scope, content, branches
- 1.2 Ethics: definition, moral philosophy, nature of moral judgments and reactions

UNIT-II ETHICS AND RESEARCH

(8 Hours)

- 2.1 Ethics with respect to science and research
- 2.2 Intellectual honesty and research integrity

UNIT-III SCIENTIFIC CONDUCT

(10 Hours)

- 3.1 Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
- 3.2 Redundant publications: duplicate and overlapping publications, salami slicing
- 3.3 Selective reporting and misrepresentation of data

UNIT-IV PUBLICATION ETHICS

(10 Hours)

- 4.1 Publication ethics: definition, introduction, and importance
- 4.2 Best practices/standards setting initiatives and guidelines: COPE, WAME, etc.
- 4.3 Conflicts of Interest

UNIT-V PUBLICATION VIOLATIONS

(10 Hours)

- 5.1 Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
- 5.2 Violation of publication ethics, authorship, and contributorship
- 5.3 Identification of publication misconduct, complaints, and appeals, Predatory publishers and journals

PART: B- PRACTICALS

(30 hours)

1. Open-access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.
5. Group Discussions
 - a. Subject-specific ethical issues, FFP, authorship
 - b. Conflicts of interest
 - c. Complaints and appeals: examples and fraud from India and abroad
6. Software tools uses: Use of plagiarism software like Turnitin, Urkund and other open source software tools
7. Databases and Research Metrics
 - a. Databases
 - b. Indexing databases
 - c. Citation databases: Web of Science, Scopus, etc.
8. Research Metrics
 - a. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, CiteScore
 - b. Metrics: h-index, g index, i10 index, altmetrics

Suggested Readings:

1. Bird, A. (2006) **Philosophy of Science** Routledge.
2. MacIntyre, Alasdair (1967) **A Short History of Ethics**. London.
3. P. Chaddah, (2018) **Ethics in Competitive Research: Do not get Scooped; do not get Plagiarized**, ISBN:978- 9387480865
4. National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. (2009) **On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition**. National Academies Press.
5. Resnik, D. B. (2011) What Is Ethics in Research & Why is It Important. *National Institute of Environmental Health Sciences*, 1-10..Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
6. Beall, J. (2012) Predatory Publishers are Corrupting Open Access. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>
7. Indian National Science Academy (INSA) (2019), **Ethics in Science Education, Research and Governance** ISBN:978-81-939482-1-7 http://www.insaindia.res.in/pdf/Ethics_Book.pdf

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VI
B.A.-DSE-PE-(4)-2.3-
THESIS WRITING IN PHYSICAL EDUCATION AND SPORTS
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
3	B.A.-DSE-PE (4)-2.3- THESIS WRITING IN PHYSICAL EDUCATION AND SPORTS	04	3	0	1	XII Pass	NIL

Learning Objective: The objective of the course is to provide an understanding and practice to the learners about thesis writing mechanisms, skills, and practices in physical education and sports

Learning Outcomes:

1. Learners will be able to develop a synopsis/ research proposal.
2. Learners will be able to prepare an abstract of a research article/ thesis/ project.
3. Learners will be able to cite references in different formats.
4. Learners will be able to write the dissertation/thesis.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION TO SCIENTIFIC WRITING (10 hours)

- 1.1 Thesis Writing
- 1.2 Dissertation
- 1.3 Project Report
- 1.4 Short Article
- 1.5 Long article

UNIT-II INTRODUCTION TO RESEARCH PROPOSAL AND CASE STUDY (11 hours)

- 2.1 Synopsis
- 2.2 Research Proposal
- 2.3 Abstract and Short Abstract
- 2.4 Case Study

UNIT-III BIBLIOGRAPHY AND REFERENCES (12 hours)

- 3.1 Different formats of Referencing: APA, MLA, IEEE, Chicago, etc.
- 3.2 Bibliography and Working Bibliography
- 3.3 References
- 3.4 Scientific Abstracting
- 3.5 Footnote/Endnote/ Citation

UNIT-IV GENERAL THESIS FORMAT

(12 hours)

- 1.1 Certifications and Preliminaries
- 1.2 Introduction
- 1.3 Review of Related Research
- 1.4 Procedure
- 1.5 Analysis of the Data and Findings of the Study
- 1.6 Summary, Conclusions, and Recommendations, Appendix

PART-A: PRACTICALS

(30 hours)

1. Prepare an abstract of a research article.
2. Prepare a bibliography of at least 10 references from a topic.
3. Prepare a research proposal of your choice.

Suggested Readings:

1. Best John & Kahni, J.V. (1992) **Research in Education**, New Delhi. Prentice Hall of India (Pvt.) Ltd.
2. Bompa, T. O. & Haff, G. G. (2009) **Periodization: Theory and Methodology of Training** 5th ed. Champaign, IL: Human Kinetics.
3. Brown, L. E., & Ferrigno, V. A. (2005) **Training for Speed, Agility and Quickness** 2nd ed. Champaign, IL: Human Kinetics.
4. Carl, E. K., & Daniel, D. A. (1969) **Modern Principles of Athletes Training** St. Louis: St. Louis's Mosby Company.
5. Clark, H. H., & Clark, D. H. (1975) **Research Process in Physical Education** Englewood cliffs, New Jersey: Prentice Hall, Inc.
6. Clarke, H.H. (1992). **The Application of Measurement in Health and Physical Education** Prentice Hall, New York.
7. Garrett, H.E. (1981) **Statistics in Psychology and Education**. New York: Vakils Feffer and Simon Ltd.
8. Koul, L. (2002) **Methodology of Educational Research**, Vikas Publishing House, New Delhi
9. Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). **Introduction to Research: A guide for the Health Science Professional**. London: J.B. Lippincott Company.
10. Rothstein, A.L. (1985) **Research Design and Statistics for Physical Education** Prentice Hall, New Jersey, U.S.A.
11. Shaw, Dhananjoy (2007) **Fundamental Statistics in Physical Education & Sports Sciences**, Sports Publication, Delhi.
12. Smith, R. Philosophy (2007) **Methodology and Educational Research**, Wiley Black Well, USA.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VII
B.A.DSE (PE)-3.1
SPORTS MANAGEMENT
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
1	B.A.DSE (PE) 3.1 SPORTS MANAGEMENT	04	3	0	1	XII Pass	NIL

Learning Objectives: The objective of this course is to provide an understanding, skills, and practices to the learners about the management of sports, leadership skills, various aspects of sports programs, and principles of budgeting.

Learning Outcomes:

1. Learners will be able to develop leadership and management skills.
2. Learners will be able to understand the practices involved in managing sports events.
3. Learners will be able to conduct sports programs.
4. Learners will be able to understand the principles and the process involved in budgeting.
5. Learners will be able to distinguish the difference between Intramural and Extramural Tournaments in terms of management.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION TO SPORTS MANAGEMENT (11 Hours)

- 1.1 Concept, Nature and Scope of Sports Management
- 1.2 Qualities and Competencies Required for the Sports Manager
- 1.3 Event Management in physical education and sports

UNIT-II LEADERSHIP (11 Hours)

- 2.1 Meaning and Definition of Leadership
- 2.2 Leadership style and method, Elements of leadership
- 2.3 Forms of Leadership - Autocratic, Laissez-faire, Democratic, Benevolent Dictator

UNIT-III PLANNING & BUDGETING (11 Hours)

- 3.1 Planning: Definition, meaning and importance of planning
- 3.2 Budget: Definition, meaning and importance of Budget
- 3.3 Principles of planning and budgeting
- 3.4 Steps involved in the planning process.

UNIT-IV FACILITIES, EQUIPMENT, AND TOURNAMENTS (12 Hours)

- 4.1 Facilities and equipment management: Types of facilities - Infrastructure-indoor, outdoor, Gymnasium, Swimming pool, Play fields; Location, Preparation, Layout, and maintenance of facilities

- 4.2 Need and importance of equipment: - Purchase, care and maintenance of equipment, Maintenance of equipment. Process of write-off and condemnation of stock.
- 4.3 Types of tournaments- Knock-out, league or round robin, combination, Organization of Intramural & Extramural sports competitions

PART B: PRACTICALS

(30 Hours)

1. Plan and organize a sports event / Intramural / Tournament / Seminar etc. at your Institute/ Locality.
2. Prepare a budget to organize any event in your college/ department/ Locality.
2. Prepare a Presentation on any sports management topic using Audio Visual Aids.
3. Prepare a report on the sports facilities & equipment available in your college.

Suggested Readings:

1. Ashton, D. (1968) **Administration of Physical Education for Women** New York: The Ronal Press Cl.
2. Broyles, F. I. & Rober, H. D. (1979) **Administration of Sports, Athletic Programme: A Managerial Approach** New York: Prentice hall Inc.
3. Bucher, C. A. (1983) **Administration of Physical Education and Athletic Programme**. St. Lolis: The C.V. Hosby Co.
4. Chakraborty, Samiram (1988) **Sports Management** Sports publications, New Delhi.
5. Daughtrey, G. & Woods, J.B. (1976) **Physical Education and Intramural Programmes, Organisation and Administration** Philadelphia U.S.A. : W.B. Saunders Cp.
6. Earl, F. Z,& Gary, W. B. (1963) **Management Competency Development in Sports and Physical Education**. Philadelphia: W. Lea and Febiger
7. Hughes, LW. and French, E. (1990) **The Administration of Physical Education** Ronald Press Co.
8. Kamlesh, M.L., **Management Concepts of Physical Education and Sport**, New Delhi: Metropolitan Book Co., Pvt., Ltd.
9. Kozman, H.C. Cassidy, R. & Jackson, C. (1960). **Methods in Physical Education**. London: W.8. Saunders Co.
10. Pandey, L.K. (1977) **Methods in Physical Education** Metropolitan Book Depot, Delhi.
11. Sharma, V.M. & Tiwari, R.H.: (1979) **Teaching Methods in Physical Education** Amaravati: Shakti Publication.
12. Shaw D. (2020) **“Parable Global English Hindi Dictionary of Physical Education & Sports Sciences”** Khel Sahitya Kendra, ISBN : 978-93-90461-18-9.
13. Thomas, J. P. (1967) **Organization & Administration of Physical Education** Madras: Gyanodayal Press.
14. Tirunarayanan, C.& Haiharan.S (1969) **Methods in Physical Education** Karaikudi: South India Press
15. Voltmer, E. F. & Esslinger, A. A. (1979) **The Organization and Administration of Physical Education** New York: Prentice Hall Inc.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VII
B.A.DSE (PE)-3.2
SPORTS JOURNALISM
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
2	B.A.DSE (PE)-3.2 SPORTS JOURNALISM	04	3	0	1	XII Pass	NIL

Learning Objective:

The objective of the course is to provide an understanding and practice to the learners about sports journalism, functions of sports mass media, writing sports news/stories, and the use of information technology.

Learning Outcomes:

In this paper, the learners will be able to develop expertise related to the following: -

1. Understand the fundamental concepts of Sports journalism and news.
2. The students will acquire knowledge about the scope of Journalism in the Sports world.
3. The students will be able to learn about the Role of Journalism in the field of Physical Education.
4. The students will comprehend the importance of basic writing fundamentals, high ethical standards, and essential values for sports journalists.
5. Review the editing process in journalism, including the principles of editing for clarity, accuracy, fairness, and style.
6. The students will know about various career opportunities available in Sports Journalism.

SYLLABUS

Credits: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

UNIT I: SPORTS JOURNALISM

(12 hours)

1. Meaning and Definition of Sports Journalism, Historical development of sports journalism
2. Role of Journalism in the Field of Physical Education and Sports
3. Values and Ethics of Journalism, Characteristics of Sports Journalist. Role of Sports Journalist in Promoting Mental Wellbeing of a Sportsperson
4. Sports News- Meaning and News Sources for Sports Journalism

UNIT II: SPORTS REPORTING, WRITING AND DESIGNING

(12 hours)

1. Coverage of Sports Beat reporting, Language of Sports Journalism, Principles of Editing, Process of editing.
2. Types and techniques of writing sports stories: Feature, Advanced Story, Trend Story, Column, News Story, and Game Story.
3. Radio and T.V. commentary, anchoring, interviews, group discussion, talk shows.
4. Designing: Headings, front heading, layout and page making, story, editorial tools, marks and skills, webpage

UNIT III: PHOTO JOURNALISM, EMERGING TRENDS AND OPPORTUNITIES IN SPORTS (10 hours)

1. Meaning and types of Photo Journalism
2. Sports Photo Features and writing captions of photos
3. New Trends in Sports Journalism: News Alerts for Mobiles, E-magazines, Twitter, Blogs and Podcasts
4. Future of Sports Journalism and Career Opportunities

UNIT-4 MEDIA: COMMERCIALIZATION & PRIVATIZATION AND INFORMATION TECHNOLOGY (11 hours)

1. Role of Media in image building (positive and negative images)
2. Impact of commercialization and privatization in sports media
3. Various types of information technology
4. Use of satellite communication- Internet, radio and TV, communication for sports information.

PART-B: PRACTICAL (30 hours)

1. Preparing a report of an Annual Sports Meet for Publication in the Newspaper or online media.
2. Record an Interview of any player using a mobile phone (3-5 minutes).
3. Preparing handouts/brochures/punch lines/slogans for society to communicate the importance of sports.
4. Case study of Indian Eminent Sports Journalist/Sports Writer/Sports Commentator.

Suggested Readings:

1. Aamieor, A (2003) **Real Sports Reporting** Indiana University Press. Valparaiso. Indiana USA.
2. Ahuja, B.N. (1998) **Theory and Practise of Journalism** Surjeet Publication, Delhi.
3. Andrew, P. (2005) **Sports Journalism: A Practical Introduction** Sage Publications, Delhi.
4. Boyle, R. (2006) **Sports Journalism: Context and Issues** Sage Publications, Delhi.
5. Kamath, M.V. (1980) **Professional Journalism** Khel Sahitya Kendra, Delhi.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VII
B.A.-DSE-PE-3.3
SPORTS PEDAGOGY
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
3	B.A.-DSE-PE-3.3-SPORTS PEDAGOGY	04	3	0	1	XII Pass	NIL

Learning Objective:

The objective of this course is to provide an understanding through practical knowledge, skills, and practices about sports pedagogy which will promote the communication of educational experiences in physical education and youth sport and related fields.

Learning Outcomes:

1. The learner will be able to understand the concept of pedagogy and its applications in the field of physical education and sports.
2. The learner will be able to apply various teaching and coaching techniques in physical activity sessions.
3. The learner will be able to implement various teaching aids and technology during teaching sessions.
4. The learner will be able to differentiate between different types of lesson plans as per the requirements.
5. The learner will be able to develop and create various lesson plans as needed.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION TO PHYSICAL EDUCATION PEDAGOGY (12 hours)

- 1.1 Physical Education Pedagogy: Definition and Scope.
- 1.2 Pedagogical Approaches: Constructive, Collaborative, Integrative, Reflective, Inquiry-Based Learning
- 1.3 Characteristics of Effective Teaching
- 1.4 Importance of Devices and Methods of Teaching.

UNIT-II TEACHING TECHNIQUE, TEACHING PROCEDURE AND PRESENTATION TECHNIQUE (12 hours)

- 2.1 Teaching Technique – Lecture method, Command method, Demonstration method, Imitation method, project method, etc.
- 2.2 Teaching Procedure – Whole method, whole – part – whole method, part – whole method.
- 2.3 Presentation Technique – Personal and technical preparation

UNIT-III TEACHING AIDS (10 hours)

- 3.1 Teaching Aids – Meaning and Importance
- 3.2 Types of Teaching Aids – Audio-visual, Charts, Models, Films, Blackboard etc.
- 3.3 Criteria for selecting teaching aids

UNIT-IV LESSON PLANNING AND MICRO TEACHING

(11 hours)

- 4.1 Lesson Planning – Meaning and principles of lesson plan
- 4.2 Types of Lesson Plans
- 4.3 Qualities of a good lesson plan

PART B- PRACTICALS

(30 hours)

1. Prepare a presentation using any teaching aid.
2. Prepare a lesson plan of 30 minutes duration for any physical activity.
3. Conduct a classroom activity using different teaching techniques/ teaching procedures.

Suggested Readings:

1. Abels. (2010) **Teaching Movement Education** Human Kinetics: Champaign, IL
2. Bonnie S. Mohnsen. (2003) **Teaching Middle School Physical Education** Human Kinetics: Champaign, IL
3. Daryl Siedentop. Et.l (2004) **Complete Guide to Sports Education** Human Kinetics: Champaign, IL
4. Graham, George. H. S. Ann. P. Melissa. (2010) **Children Moving: A Reflective Approach to Teaching Physical Education**, McGraw Hill.
5. Healthy Schools. (2007) **Physical Activity HS Booklet A: At least one-hour-a-day.** www.healthyschools.gov.uk/Theme-Physical-Activity.aspx
6. Higgs, C., Way, R., Vicki Harber, M., Jurbala, P., Balyi, I., Carey, A. (2019). **Long-Term Development in Sport and Physical Activity 3.0.** Canadian Sports for Life https://spectrumofteachingstyles.org/assets/files/book/Teaching_Physical_Edu_1st_Online.pdf
7. Isobel Kleninman (2001) **Complete Physical Educational Plan for Grade 7-12.** Human Kinetics: Champaign, IL
8. Shaw D. (2018). **“Pedagogic Kinesiology”** Sports Publication, ISBN: 978-93-86592-43-9.
9. Shaw D. (2021) **“Lesson Planning & Teaching Methods”** Khel Sahitya Kendra, ISBN:978-81-7524-022-9.
10. USDHHS. (1999) **Promoting Physical Activity-A Guide for Community Action.** Human Kinetics: Champaign, IL

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER – VI
B.A DSE (PE)-3.4
RESEARCH METHODS IN PHYSICAL EDUCATION AND SPORTS

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
4	B.A DSE (PE)-3.4 RESEARCH METHODS IN PHYSICAL EDUCATION AND SPORTS	04	3	0	1	XII Pass	NIL

Learning Objective:

The student will be able to use the knowledge of Research for analysis of data leading to logical conclusions on any field of investigation in physical education and sports.

Learning Outcomes:

1. The learner will be able to understand the concepts and types of research for different applications.
2. The learner will be able to apply different sampling technique and tools in research.
3. The learner will be able to apply the criteria of selection of a problem.
4. The learner will be able to collect review of literature from different resources.
5. The learner will be able to develop a research proposal.
6. The learner will be able to develop the concept of writing a research paper/ article/ project/ dissertation.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION

(7 Hours)

- 1.1 Definition and concept of Research, Need, and importance of Research in Physical Education and sports.
- 1.2 Scope of Research in Physical Education and Sports
- 1.3 Types of Research: Analytical, Descriptive, Experimental, Qualitative, etc.

UNIT-II SAMPLING AND HYPOTHESIS

(8 Hours)

- 2.1. Identification of Research Problem
- 2.2. Meaning, definition, and importance of Hypothesis
- 2.3. Meaning, definition, and importance of Sampling
- 2.4. Types of Sampling Techniques

UNIT-III TOOLS IN RESEARCH

(8 Hours)

- 3.1. Types of data, collection of data, data interpretation, and result analysis.
- 3.2. Different types of tools of research: questionnaires, Interviews, observation, tests and inventories

UNIT IV CRITERIA OF SELECTION OF RESEARCH

(11 Hours)

- 4.1. Criteria of Selection of Problem, Statement of a Research Problem, Limitations and Delimitations.
- 4.2 Review of related literature- Need and importance
- 4.2. Major literature resources- Documentation over-view, Library sources, Research reviews, Card catalog indices – physical education indices, Abstracting material

UNIT-V METHOD OF WRITING RESEARCH PROPOSAL/ THESIS/ RESEARCH ARTICLES

(11 Hours)

- 5.1 Method of writing Research proposal
- 5.2 Method of Writing Thesis
- 5.3 Method of writing abstract
- 5.4 Method of Writing a research paper for Conferences and journals
- 5.5 Method of Writing Footnote and Bibliography
- 5.6 Method of representing data through tables, graphs, and illustrations

PART-B: PRACTICALS

(30 hours)

- 1 Prepare ten footnotes and bibliography containing references from books, journals, dissertation, periodicals and websites etc.
- 2 Prepare a review of the literature (any ten research) related to any one topic of your choice.
- 3 Prepare a research proposal

Suggested Readings:

- 1 Author's Guide. (1991) **Research Methods Applied to Health Physical and Recreation** Washington, D.C.
- 2 Best John & Kahni, J.V. (1992) **Research in Education** New Delhi: Prentice Hall of India (Pvt.) Ltd.
- 3 Bompa, T. O. & Haff, G. G. (2009) **Periodization: Theory and Methodology of Training**, 5th ed. Champaign, IL: Human Kinetics.
- 4 Brown, L. E., & Ferrigno, V. A. (2005) **Training for Speed, Agility and Quickness** 2nd ed. Champaign, IL: Human Kinetics.
- 5 Clark, H. H., & Clark, D. H. (1975) **Research Process in Physical Education** Englewood Cliffs, New Jersey: Prentice Hall, Inc.
- 6 Clarke, H.H. (1992) **The Application of Measurement in Health and Physical Education**.
- 7 Garrett, H.E. (1981) **Statistics in Psychology and Education** New York: Vakils Feffer and Simon Ltd.
- 8 Koul, L. (2002) **Methodology of Educational Research** Vikas Publishing House, New Delhi
- 9 Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987) **Introduction to Research: A Guide for The Health Science Professional**. Landon: J.B. Lippincott Company.
- 10 Rothstein, A.L. (1985) **Research Design and Statistics for Physical Education** Prentice Hall, New Jersey, U.S.A.
- 11 Shaw, D. (2007) **Fundamental Statistics in Physical Education & Sports Sciences**, New Delhi: Sports Publication.
- 12 Smith, R. Philosophy (2007) **Methodology and Educational Research** Wiley Black Well, USA.
- 13 Swann, J. Pratt (2007) **Educational Research in Practice: Making Sense of Methodology** New Delhi: Viva.
- 14 Thomas, J.R., & Nelson J.K. (2005). **Research Method in Physical Activity**. U.S.A: Champaign, IL: Human Kinetics Books.
- 15 Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011) **Research Method in Physical Activity** U.S.A: Champaign, IL: Human Kinetics Books.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VII
B.A-DSE-PE(4)-3.5
BASICS OF EXERCISE PRESCRIPTION
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
5	B.A.DSE (PE)-3.5 BASICS OF EXERCISE PRESCRIPTION	04	3	0	1	XII Pass	NIL

Learning Objective: The objective of the course is to develop an understanding of practical skills in exercise testing and exercise prescription that can be beneficial for self-evaluation and appraisal and help learners, assist people in the community to develop basic training modules for health and wellness.

Learning Outcomes:

1. Learners will gain an understanding and skills in health appraisals including screening and risk stratification of self and other people.
2. Learners will be able to design a basic individualized exercise program using the results of fitness and exercise testing.
3. Learners will be able to design a basic exercise prescription for healthy individuals.
4. Learners will be able to assist Medical Professionals to execute exercise prescriptions for individuals in cardiac rehabilitation, lifestyle diseases, hypertension, diabetes, or obesity.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT- I INTRODUCTION- SPORTS TRAINING

(7 hours)

- 1.1 Meaning, Definition, and Scope of fitness and sports training.
- 1.2 Latest trends in fitness and sports training.
- 1.3 Role of Sports and fitness Training in promoting a positive lifestyle.

UNIT-II PRINCIPLES OF SPORTS TRAINING

(8 hours)

- 2.1 Basic understanding of Principles of Sports Training
- 2.2 Testing Physical Activity Readiness and Risk Assessment for Exercises

UNIT-III TESTING AND EXERCISE FOR HEALTH - RELATED FITNESS

(11 hours)

- 3.1 Basic testing and designing training modules for Cardiovascular Endurance
- 3.2 Basic testing and designing training modules for Muscular Endurance
- 3.3 Basic testing and designing training modules for Muscular Strength
- 3.4 Basic testing and designing training modules for Flexibility
- 3.5 Basic testing and designing training modules for Body Composition

UNIT-IV EXERCISE PRESCRIPTION FOR DIFFERENT CATEGORIES (10 hours)

- 4.1 Exercise prescription for children
- 4.2 Exercise prescription for adults
- 4.3 Exercise prescription for women
- 4.4 Exercise prescription for specific sportsperson

UNIT-V TESTING AND EXERCISE FOR PEOPLE WITH SPECIAL NEEDS (9 hours)

- 5.1 Testing and Training for Senior Citizens
- 5.2 Testing and training for people with illness and lifestyle disease (Obesity, Diabetes)
- 5.3 Testing and designing training programs for people with special needs (Cardiovascular disease, Asthma)

PART-B: PRACTICALS (30 Hours)

1. Plan and Design a One Week Training Program for a youth under 25 years of age
2. Testing for Cardiovascular Endurance
3. Testing for Muscular Endurance
4. Testing for Muscular Strength
5. Testing for Flexibility
6. Testing for Body Composition

Suggested Readings:

1. Lippincott Williams & Wilkins (2013) **Guidelines for Exercise Testing and Prescription** American College of Sports Medicine, 9th ed.
2. Lippincott Williams & Wilkin, Fourth edition (2013) **ACSM Guidelines for Exercise Testing and Prescription** ACSM's Health-Related Physical Fitness Assessment Manual, American College of Sports Medicine.
3. Rebecca Tanner and Christopher Gore, (2012) **Physiological Tests for Elite Athletes** by the ASC Physiological Tests for Elite Athletes with Australian Institute of Sport, 2nd edition.
4. James Morrow Jr., Allen Jackson, James Disch, Dale Mood (2010) **Physiological Tests for Elite Athletes** by the ASC Measurement and Evaluation in Human Performance with Web Study Guide-4th Edition.
5. Peter Maud and Carl Foster (2005) **ACSM Guidelines for Exercise Testing and Prescription** Physiological Assessment of Human Fitness — 2nd Edition
6. Shaw, D. (2021) **Athletic Care and Rehabilitation** Sports Publications.
7. Shaw, D. (2020) **Sports Training** Sports Publication, 2020.

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POOL OF COURSES
SYLLABUS OF DISCIPLINE-SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VIII
B.A.DSE (PE)-4.1
INTRODUCTION TO KINESIOLOGY
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
1	B.A.DSE (PE)-4.1 INTRODUCTION TO KINESIOLOGY	04	3	0	1	XII Pass	NIL

Learning Objective: The objective of this course is to provide an understanding and practice to the learners about Kinesiology and its application in sports and develop the foundation to learn performance analysis.

Learning Outcomes:

1. Students will be able to impart knowledge about the various movements of the body affecting performance in sports and a basic knowledge of various Sports Injuries and their management.
2. Students will learn the science of movement for better sports performance and the basic knowledge of the various injuries and their management.
3. Such core knowledge and skill help to create a strong foundation to engage human subjects of all ages, sexes, and abilities.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

UNIT-I: INTRODUCTION TO KINESIOLOGY

(12 Hours)

- 1.1 Meaning and Definition of Kinesiology
- 1.2 Historical Perspectives of Kinesiology
- 1.3 Importance of Kinesiology in Sports Sciences
- 1.4 Aim and Objectives of Kinesiology in Sports Sciences
- 1.5 Scope of Kinesiology
- 1.6 Modern Technological Enhancement in Kinesiological Analysis and Methods.

UNIT-II: UNDERSTANDING OF JOINTS

(10 Hours)

- 2.1 Classification of joints and muscles
- 2.2 Major characteristics of joints - Shoulder, Elbow, Wrist related to sports
- 2.3 Major characteristics of joints - Hip, Knee, and Ankle related to sports.

UNIT-III: UNDERSTANDING MUSCLES

(10 Hours)

- 3.1 Types of Muscle Contractions, Angle of Pull
- 3.2 Origin and insertion of major muscles in Upper Extremity:
- 3.3 Origin and insertion of major muscles in Lower Extremity

UNIT-IV: FUNDAMENTAL MOVEMENTS

(13 Hours)

- 4.1 Fundamental Movements- Flexion, Extension, Abduction, Adduction, and Rotation.
- 4.2 Muscular analysis of fundamental movements – walking, running, jumping, throwing, catching, pulling, pushing, striking, hanging, and fundamental starting position.
- 4.3 All and none law and reciprocal Innervations.
- 4.4 Axis and Planes of Motion.

4.5 Gravity- Definition, line of gravity, Centre of gravity.

4.6 Equilibrium and types of equilibrium.

PART-B: PRACTICAL

(30 HOURS)

1. Demonstration of planes & axes of a given movement.
2. Determination of the location of muscles at various joints: Shoulder girdle, Shoulder joints, Elbow joint.
3. Determination of the location of muscles at various joints: Hip joint, Knee joint, Ankle joint.
4. Prepare a presentation on any topic of the theory syllabus.

Suggested Readings:

1. Blazeovich, A.J. (2017). Sports Biomechanics. Bloomsbury Sports Publishers.
2. Colby, L.A and C. Kisner (2002). Therapeutic Exercise. F.A. Davis Co. Publishers, Philadelphia, Pennsylvania, USA.
3. Dillon, G. (2017). Principles of Exercise Therapy. Syrawood Publishing House, ISBN: 978168286-489-0, New York, NY100017, USA.
4. Souza, P.D. (2016). Sports Biomechanics and Medicine. Callisto Publishers, New York, USA.
5. Watkins, J. (2014) Fundamental Biomechanics of Sports and Exercise. Routledge Publishers, USA.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VIII
B.A.DSE (PE)-4.2
PROFESSIONAL PREPARATION AND CURRICULUM DESIGN
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
2	B.A.DSE (PE)-4.2 PROFESSIONAL PREPARATION AND CURRICULUM DESIGN	04	3	0	1	XII Pass	NIL

Learning Objectives:

1. To develop an understanding of professional preparation in physical education.
2. To develop skills to meet professional requirements.
3. To understand the need for professional development.
4. To acquire skills and competencies for professional development.

Learning Outcomes:

- 1 Understand professional preparation in physical education, comparing perspectives from pre- and post-independence India and other countries.
- 2 Gain knowledge of the foundation, objectives, and characteristics of professional preparation programs, courses available in physical education and sports, and the role of physical education teachers and institutes.
- 3 Define and understand concepts such as profession, professional, and professionalism in physical education, explore career avenues at different educational levels, and apply learning through practical activities like case studies and surveys.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

THEORY SYLLABUS

(45 HOURS)

UNIT-I HISTORICAL PERSPECTIVE

(10 HOURS)

1. Professional Preparation in India
2. Pre-Independence perspective
3. Post-Independence perspective

UNIT-II PROFESSIONAL PREPARATION PROGRAMMES

(12 HOURS)

1. Foundation: need, objectives, and characteristics of professional preparation programs
2. Courses available in physical education and sports
3. Role of physical education teachers and institutes in professional preparation programs

UNIT-III PHYSICAL EDUCATION AND PROFESSIONALISM (11 HOURS)

1. Concept and meaning of Profession, Professional and Professionalism
2. Physical education as a profession

UNIT-IV CAREER AVENUES & JOB OPPORTUNITIES IN PHYSICAL EDUCATION & SPORTS (12 HOURS)

1. Career avenues after certificate course, diploma, under-graduation and post-graduation, and research degrees.
2. Planning for a career: self-assessment, motivational dynamics, decision-making, counseling, and guidance
3. Challenges and opportunities in physical education
4. Inter-relationships among various careers in physical education and sports

PRACTICALS: (30 HOURS)

1. Case study on National Sports Policy
2. Case study on National Education Policy highlighting the role of physical education.
3. A Survey on current job avenues with certificate courses, diploma courses, under-graduation degrees, post-graduation degrees, and doctoral degrees in physical education.

Suggested Readings:

1. Gupta Rakesh, Sharma Akhilesh, and Sharma Santosh, Professional Preparation and Curriculum Designing Physical Education & Sports Sciences, New Delhi, Friends Publications, 2004.
2. Sandhu Kiran, Professional Preparation and Career Development in Physical Education, New Delhi, Friends Publications, 2004.
3. Sandhu Kiran, Trends and Development in Professional Preparation in Physical Education, New Delhi, Friends Publication, 2006.
4. Zeigler E.F, Professional and Scholarly Foundation of Physical Education and Kinesiology, Sports Educational Technologies, 2007.
5. Gupta, Rakesh (2017), Curriculum design, Friends publications.
6. Sharma, J.P (2005), Curriculum design in Physical education, Khel Sahitya Kendra.
7. James, Jose (2005) Curriculum design in Physical education and sports, Friends publications.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VIII
B.A.DSE (PE)-4.3
SPORTS FIELD TECHNOLOGY
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
3	B.A.DSE (PE)-4.3 SPORTS FIELD TECHNOLOGY	04	3	1	0	XII Pass	NIL

Learning Outcome:

The learner will be able to use the knowledge of Yoga and will have a command of the basic and advanced rules and regulations and conduct a tournament.

Learning Objectives: -The student will get the knowledge of-

1. Technical preparation, Marking, Physical, physiological, psychological, and sociological characteristics
Technical Preparation for Focused Events, Required motor abilities and their technical preparation, Technical and tactical preparation, Physical, physiological, psychological, and sociological characteristics of athletes.
2. Structure and organization of the meet Budgeting, purchase of equipment Preparation, execution, and conclusion of the respective events Protocols and ceremonies.
3. How a particular instrument is made and how it is used.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

THEORY SYLLABUS

(45 HOURS)

Unit I – Sports Technology

(12 Hrs)

- 1.1 Meaning and definition of sports technology.
- 1.2 Significance of technology in sports
- 1.3 General Principles of instrumentation in sports.
- 1.4 Meaning of Foams, Types of foams (Polyurethane, Polystyrene, Styrofoam, closed-cell, open-cell foams, and Neoprene) and their uses in different sports.

Unit II – Nanotechnology in Sports Materials

(10 Hrs)

- 2.1 Meaning and Definition of Nanotechnology
- 2.2 Meaning of nano glue and nano molding technology.
- 2.3 Uses and Benefits of Nanotechnology in sports uniforms, and Safety equipment
- 2.4 Uses and Benefits of Nanotechnology in Sports equipment and playing surfaces

Unit III – Surfaces of Playfields and Measuring Gadgets

(10 Hrs)

- 3.1 Method of construction and installation for Synthetic and Cinder tracks.
- 3.2 Meaning and types of flooring materials for different sports: synthetic (polyurethane and poly grass) and wooden.
- 3.4 Modern Measuring Equipment Used in Running, Throwing, and Jumping Events.

Unit IV – Modern Stadiums and Training Machines

(12 Hrs)

- 4.1 Identifying requirements of indoor and outdoor playfields
- 4.2 Tennis: Serving Machine, Mechanism and Advantages
- 4.3 Dimensions of Sports Infrastructure - Gymnasium, Pavilion, Swimming Pool, Indoor Stadium and Outdoor Stadium.
- 4.4 Lighting Facilities: Method of erecting and luminous in indoor and outdoor stadiums. Methods of measuring luminous.

PRACTICAL

(30 hours)

1. Enlist any 10 instruments/ equipments in sports with their uses from the perspective of technology.
2. Prepare a presentation of different types of foams used in sports.
3. Prepare a model/ chart/ presentation on different types of flooring in sports.
4. Prepare an analytical report on facilities/ training machines in sports.

Suggested Readings

1. Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials "UK: Butterworth Heiremann.
2. Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: JaicoPublisher.
3. John Mongilo, (2001). "Nano Technology 101 "New York: Green wood publishing group. Walia.
4. J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.
5. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982
6. Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VIII
B.A.DSE (PE)-4.4
FACILITY PLANNING AND MANAGEMENT IN SPORTS
DSE

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
4	B.A.DSE (PE)-4.4 FACILITY PLANNING AND MANAGEMENT IN SPORTS	04	3	0	1	XII Pass	NIL

Learning Objectives: To acquaint the students with the management of various sports facilities planning and related Legislation

Learning Outcomes:

The Learner will able to:

1. Learn the facility management and its assessment.
2. Understand indoor and outdoor facility management in conjunction with facility maintenance and supervision.
3. Develop to know the concept of supply & Maintenance of Equipment.
4. Able to understand the fundamental concepts regarding Logistics management.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

UNIT -1 HISTORY

(10 Hours)

- 1.1 Modern Era of Stadium
- 1.2 Technology in the Stadium
- 1.3 Types of Public Assembly – Arenas, facilities, convention centers, stadium, University venues, local/civic venues.

Unit – II FACILITY PLANNING

(10 Hours)

- 2.1 Meaning and concept of facility management
- 2.2 Planning the facility
- 2.3 Health and legal considerations in facility planning
- 2.4 Assessment of Facility Management

Unit – III FACILITY MANAGEMENT

(10 Hours)

- 3.1 Indoor facilities management – Site selection, Indoor surfaces, Walls, Ceilings, Doors, Windows, Acoustics, Service areas, Lighting & Air quality control.
- 3.2 Outdoor facility management – Site selection and Development, Natural surface, Synthetic surface, Fencing & Seating plan.
- 3.3 Facility maintenance.
- 3.4 Facility Supervision and Security.

Unit – IV FACILITY FINANCING AND LOGISTICS MANAGEMENT

(15 Hours)

- 4.1 Facility Financing Mechanism, why do cities subsidize sports facilities?
- 4.2 Facility marketing – Marketing and Promotion & Facility Revenues & Expenses

- 4.3 Career Opportunities-Marketing Director & Public Relations/Communication Director
- 4.4 Meaning and Concept of Logistics Management
- 4.5 Planning the Competition Venue
- 4.6 Venue operation and crowd safety
- 4.7 Selection and Training of Workforce

PRACTICAL

(30 Lectures)

1. Visit Indoor and Outdoor Sports facilities and prepare a detailed report.
2. Event Planning and Execution (Provide hands-on Experience in planning and organizing Sports Events, covering logistics, security & crowd management.
3. Budgeting and Financial Management (Guide students, through creating a budget for sports facilities considering operation costs, maintenance, and potential revenue streams.
4. Technology Integration (Explore the use of technology for efficient facility management)
5. Contract Negotiation and Vendor Management (Teach negotiation skills and vendor management techniques essential for securing services and resources for sports facilities.

Suggested Readings:

1. Broyles, F. J. & Rober, H. D. (1979). Administration of sports, Athletic programme: A Managerial Approach.
2. New York: Prentice hall Inc. Bucher, C. A. (1983). Administration of Physical Education and Athletic programme.
3. St. Lolis: The C.V. Hosby Co. Kozman, H.C. Cassidly, R. & Jackson, C. (1960).
4. Methods in Physical Education. London: W.B. Saunders Co. Pandey, L.K. (1977).
5. Methods in Physical Education. Delhi: Metropolitan Book Depo. 2 years B.P.Ed Curriculum | Sharma, V.M. & Tiwari, R.H.: (1979).
6. Teaching Methods in Physical Education. Amaravati: Shakti Publication. Thomas, J. P.(1967).
7. Organization & administration of Physical Education. Madras: Gyanodayal Press. Tirunarayanan, C. & Hariharan, S. (1969).
8. Methods in Physical Education. Karaikudi: South India Press. Voltmer, E. F. & Esslinger, A. A. (1979).
9. The organization and administration of Physical Education. New York: Prentice Hall Inc.

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SYLLABUS OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (DSE)
SEMESTER-VIII
B.A.DSE (PE)-4.5
STATISTICAL APPLICATIONS IN PHYSICAL EDUCATION

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/ Practice		
5	B.A-DSE-PE (4)-4.5 STATISTICAL APPLICATIONS IN PHYSICAL EDUCATION	04	3	0	1	XII Pass	NIL

Learning Objectives:

The objective of this course is to provide the understanding through practical knowledge and practices about statistics for enough scope of creativity/Innovations in the field of physical education and sports.

Learning Outcomes:

1. The learner will be able to understand the basic concepts of statistics in physical education.
2. The learner will be able to illustrate group and ungroup data through graphical presentation.
3. The learner will be able to compute measures of central tendency and variability.
4. The learner will be able to assess validity, reliability and objectivity.
5. The learner will be able to apply parametric and non-parametric tests in the field of physical education and sports.

SYLLABUS

CREDITS: 4 [Theory-3, Practical-1]

Theory-45 hours

Practical-30 hours

PART-A: THEORY

UNIT-I INTRODUCTION TO STATISTICS, DATA IN STATISTICS AND DATA MEASUREMENT SCALES (9 Hours)

- 1.1 Meaning, types and Importance of Statistics in Physical education and sports
- 1.2 Data and its types in statistics: Grouped and ungrouped data, Parametric and Non-parametric, Continuous and Discrete
- 1.3 Data measurement scales: ratio scale, nominal scale, ordinal scale, interval Scale

UNIT-II POPULATION, SAMPLING TECHNIQUE AND DATA MANAGEMENT (9 hours)

- 2.1 Population and Sample, Sampling Techniques
- 2.2 Class Distribution, Construction of Tables
- 2.3 Importance, Advantages, Disadvantages and Calculation from Grouped and Ungrouped data
- 2.4 Graphical representation of data: Histogram, Frequency Polygon, Frequency Curve, Cumulative Frequency Polygon, Pie Diagram

UNIT-III MEASURES OF CENTRAL TENDENCY, MEASURES OF VARIABILITY AND PERCENTILES AND QUARTILES (9 hours)

- 3.1 Measures of Central Tendency: Meaning, importance, computing from group and ungroup data
- 3.2 Measures of Variability: Meaning, importance, computing from group and ungroup data
- 3.3 Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data

UNIT-IV VALIDITY, RELIABILITY AND OBJECTIVITY (9 Hours)

- 4.1 Normal Curve: Meaning, importance, and characteristics

- 4.2 Meaning and Definition of Validity and its measure
- 4.3 Meaning and Definition of Reliability and its measures
- 4.4 Meaning and Definition of Objectivity and its measures

UNIT-V T- TEST, ANOVA, AND CHI SQUARE

(9 hours)

- 5.1 T-test- Meaning, Formula, Types and Uses
- 5.2 Analysis of Variance (ANOVA)- Meaning, Formula, Types and Uses
- 5.3 Chi-square- Meaning, Formula, Types, and Uses

PART-B: PRACTICALS

(30 hours)

- 1. Draw a frequency distribution table from a given set of data.
- 2. Calculate the Measure of central tendency from a given set of data.
- 3. Calculate the Measure of variability from a given set of data.
- 4. Graphical Presentation of the data: Histogram, Frequency Polygon, Frequency Curve, Cumulative Frequency Polygon, Pie Diagram (anyone)

Suggested Readings:

- 1. Best, J.W. (1963) **Research in Education** U.S.A.: Prentice Hall.
- 2. Bompa, T. O. & Haff, G. G. (2009) **Periodization: Theory and Methodology of Training** 5th ed. Champaign, IL: Human Kinetics.
- 3. Brown, L. E., & Ferrigno, V. A. (2005) **Training for Speed, Agility and Quickness** 2nd ed. Champaign, IL: Human Kinetics.
- 4. Brown, L.E. & Miller, J., (2005) **How the Training Work. In: Training Speed, Agility, and Quickness** Champaign, IL: Human
- 5. Garrett, H.E. (1981) **Statistics in Psychology and Education** New York: Vakils Feffer and Simon Ltd.
- 6. Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987) **Introduction to Research: A guide for the Health Science Professional** Landon: J.B. Lippincott Company.
- 7. Shaw D. (2018) **“Fundamental Statistics in Physical Education and Sports Sciences”** Sports Publication, ISBN: 81-86190-57-0.
- 8. Thomas, J.R., & Nelson J.K. (2005) **Research Method in Physical Activity** U.S.A: Champaign,IL: Human Kinetics Books.
- 9. Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011) **Research Method in Physical Activity** U.S.A: Champaign, IL: Human Kinetics Books.
- 10. Uppal, A. K. (1990) **Physical Fitness: How to Develop** New Delhi: Friends Publication.
- 11. Verma, J. P. (2000) **A Text Book on Sports Statistics** Gwalior: Venus Publications.

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