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NON LAW PAPERS FOR BBA LL.B. (HONS.)
SEMESTER-III TO VI

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DISCIPLINE SPECIFIC CORE COURSE : MANAGERIAL ECONOMICS II: MACROECONOMIC ENVIRONMENT
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		
MANAGERIAL ECONOMICS II: MACROECONOMIC ENVIRONMENT	4	5	1	0	Class XII	Nil

Learning Objectives

This course aims to provide a foundational understanding of macroeconomics. It will enable students to identify major macroeconomic issues and understand their relevance to the real economy.

Learning outcomes

By studying this course, the students will be able to:

- Understand the basic concept of macroeconomics and national income determination
- Introduce basic concepts of classical & modern (Keynesian) approaches and the theory of full employment and Income
- Analysis of Money Supply and Inflation
- Comprehend and apply key macroeconomic models, including the Aggregate Demand and Aggregate Supply (AD-AS) model, the Keynesian Cross, and the IS-LM model

Unit - I: Concepts of Macro Economics and National Income Determination

Definitions, Importance, Limitations of Macro-Economics, Macro-Economic Variables. Circular Flow of Income in Two, Three, Four Sector Economy, Relation between Leakages and Injections in Circular Flow; National Income: Concepts, Definition, Methods of Measurement, National Income in India, Problems in Measurement of National Income & Precautions in Estimation of National Income.

Unit – II: Macro-Economic Framework-Theory of Full Employment and Income

Classical, Modern (Keynesian) Approach, Consumption Function, Relationship between Saving and Consumption; Investment function, Concept of Marginal Efficiency of Capital and Marginal Efficiency of Investment; National Income Determination in Two, Three and Four Sector Models; Multiplier in Two, Three and Four Sector Model.

Unit- III: Analysis of Money Supply and Inflation

Functions and Forms of Money, Demand for Money - Classical, Keynesian and Friedmanian Approach, Measures of Money Supply, Quantity Theory of Money, Inflation- Types, Causes, Impact and Remedies

Unit-IV: Equilibrium of Product and Money Market

Introduction to IS-LM Model, Equilibrium- Product Market and Money Market, Monetary Policy, Fiscal Policy

Unit-V: Open Economy

Open economy – flows of goods and capital, saving and investment in a small and a large open economy, exchange rates, Mundell – Fleming model with fixed and flexible prices in a small open economy with fixed and with flexible exchange rates.

Practical Exercises:

The learners are required to analyse the legal and economic response of the following cases:

- The Great Depression and the New Deal (1930s, USA)
- Post-World War II Economic Boom and the Bretton Woods System (1944-1971)
- The Economic Transition of China (1978-Present)
- European Union's Monetary Union and the Eurozone Crisis (1999-Present)
- Dodd-Frank Wall Street Reform and Consumer Protection Act (2010, USA)

Essential/Recommended readings

- Abel Andrew B., Bernanke Ben and Croushore Dean (2011). Macroeconomics (7th edition). Pearson
- Schiller Bradley R. and Gebhardt Karen (2019) Macroeconomy Today (14th edition), McGraw Hill
- Froyen Richard T. (2013). Macroeconomics: Theories and Policies (10th ed.), Pearson.
- Blanchard O. (2017). Macroeconomics (7th edition). Pearson
- Dornbusch R., Fischer S., and Startz R. Macroeconomics (11th edition). McGraw-Hill
- Colander David C. (2017) Macroeconomics (9th edition), McGraw Hill

Suggested readings

- Gordwin, Harris, Nelson, Roach and Torris (2017) Macroeconomics in context (2nd edition), Routledge Taylor and Francis Pub Indian Edition
- Mankiw N. Gregory, Macroeconomics, Worth Publishers.
- Chugh, S. (2015) Modern Macroeconomics, MIT Press.
- D'Souza, E, Macroeconomics, Pearson Education

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

DISCIPLINE SPECIFIC CORE COURSE
MARKETING MANAGEMENT

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		
Marketing Management	4	5	1	NIL	CLASS XII	NIL

Learning Objectives

The course aims to develop an understanding of concepts and principles of marketing in the students by elucidating various principles and theories. The focus is on various methods, tools and techniques which they can use for managing a firm's marketing operations.

Learning outcomes

On completion of the course, students will be able to:

- Demonstrate an understanding of marketing concepts
- Identify the tools and techniques applicable to short-run and long-run strategies
- Understand the role of product life cycle management
- Explain appropriate digital marketing tools and techniques

Unit-I: Introduction

Meaning, Nature, Functions and Scope of Marketing; Evolution of Marketing Concept; Marketing Mix; Market Segmentation, Targeting and Positioning; Marketing Environment: Micro and Macro Environment

Unit-II: Product Planning and Pricing

Product: Meaning and types; Product layer concepts; Product life cycle, new product development process; Consumer adoption process; Pricing decisions, policies and strategies, Determinants of price

Unit-III: Promotion and Distribution Decisions

Promotion (Meaning and Importance); Promotion Mix; Promotional Tools and their suitability; Distribution (Meaning and Nature); Distribution Channels; Distribution Channel Planning; Types and Functions of Intermediaries; Physical distribution/logistics- meaning and major logistic decisions.

Unit-IV: Digital Marketing

Digital Marketing (Forms, Channels, Types); Digital Marketing Plan; Social Media Marketing, E-Mail Marketing; Affiliate Marketing; Attribution Model and framework; Key Performance Indicators (KPIs); Ethical Digital Marketing; Search Engine Optimization and its types, Website Indexing; Long Tail Theory; Role of Google Ads

Unit V - Contemporary Development and Issues in Marketing:

Internal marketing, Green marketing, Sustainable Marketing, Social Marketing, Socially responsible marketing, Ethical and legal aspects of marketing and Service Marketing.

Case Studies

- Rajan, T. (2020). The Flipkart Story in India: From the Start to Walmart, Asian Journal of Management Cases, Sage Publications
- Panigrahi, A. et al., (2018). Success Story of a Start-Up – A Case Study of OLA Cab. IOSR Journal of Business and Management
- The business model of Zomato Vs Swiggy Vs UberEats
- Other relevant case studies
- The value proposition model of Nykka

References

- Kotler, Philip, Keller, Kevin Lane, Koshy, Abraham, & Mithileshwar Jha (2012). *Marketing Management: A South Asian Perspective*. Pearson.
- Kotler, Philip & Keller, Kevin Lane (2012). *Marketing Management*. Pearson.
- Ian, Dodson I. (2016). *The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns*. Wiley.
- Kotler, P. Kartajaya, H & Setiawan, I. (2017). *Marketing 4.0: Moving from Traditional to Digital*. Wiley.
- Kumar, S. and Kaur, S. (2023). *Digital Marketing*. Taxmann Publications
- Gupta, S. (2022). *Digital Marketing*. McGraw Hill

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DISCIPLINE SPECIFIC CORE COURSE
HUMAN RESOURCE MANAGEMENT

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		
HUMAN RESOURCE MANAGEMENT	4	5	1	NIL	CLASS XII	NIL

Learning Objectives

The course aims to develop an understanding of human resource management concepts and how these concepts are related to the human resource policies and practices of any organization.

Learning outcomes

On completion of the course, students will be able to:

- Understand HRM and the role of HRM in any organization
- Explain various human resource practices required to produce competent employees
- Analyze the role of HRM in improving employee engagement
- Develop proficiency in managing workplace conflict and the latest trends in HRM

Unit I- Introduction:

Meaning, definition, importance, scope and objectives of HRM; Evolution and development of HRM; Approaches to HRM Personnel Management Vs Human Resource Management; HRM and competitive advantage. HR department- organizational composition, role, functions

Unit II- Human Resource Planning:

Meaning and Importance of HR planning; Job analysis---process of job analysis, job description, job specification, methods of job analysis; Conventional Vs strategic planning; Recruitment--concept, sources; Selection-- concept, Difference between recruitment and selection, process--test, interview, placement, induction and socialization; retention.

Unit III- Training and Development:

Concepts; importance; Training and development methods; Apprenticeship, job rotation, vestibule training, case study, role-playing, sensitivity training, management games, conferences and seminars, coaching and mentoring; Management Development Programs; Training process, outsourcing.

Unit IV- Performance Appraisal and Compensation:

Performance appraisal--need, objectives, process and methods. Compensation; Objective, Principles, classification, factors Influencing employee compensation.

Unit V- Industrial Relations (IR) and Trade Unions, HRM Trends:

IR: Meaning and objectives of IR, Overview of Industrial Dispute & Grievance; Trade Unions: Meaning and functions of Trade Unions, Trade Union's Act, 1926; Electronic HRM, Green HRM, Human Resource Information System, HR Audit, workforce diversity, downsizing, work-life balance, Labour localization.

Case Studies

- PowerTech India: Redesigning Workforce Composition by Bishakha Majumdar, Rudranil Chakraborty
- Professionalization of HR at Mahindra (A): Trigger for Transformation by Sunil Sharma, Rajeshwar Tripathi, Riya Dalvi, Shivin Tikoo

References

- Dessler, Human Resource Management, Prentice Hall of India
- VSP Rao, Human Resource Management, Excel Books
- Essentials of Human Resource Management & Industrial Relations; P. Subba Rao; Himalaya Publishing House 3rd Edition
- K.Asathappa, Human Resource Management Text and Cases, McGraw Hill Education

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DISCIPLINE SPECIFIC CORE COURSE
ORGANIZATIONAL BEHAVIOR

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		
Organizational Behavior	4	5	1	NIL	CLASS XII	NIL

Learning Objectives

The course aims to understand the fundamentals of organizational behavior - such as working with people, the nature of organizations, communication, leadership, and people’s motivation.

Learning outcomes

On completion of the course, students will be able to:

- Understand the conceptual framework of OB theories
- Demonstrate the dynamics of individual and organizational behavior and relationship
- Develop the ideas and skills of individual behavior into practice

Unit 1: Introduction to Organizational Behavior

Definition, Evolution of the Concept of OB, Contributions to OB by major behavioral science disciplines, Challenges and Opportunities for OB managers, Models of OB study

Unit 2: Foundations of Individual Behavior and Group Behavior:

Attitudes and Job Satisfaction, Components of Attitude, Major Job Attitude, Job Satisfaction, Personality and Values, Personality Determinants, MBTI, Big – Five Model, Values, Formation, Types of Values, Perception, Factors influencing Perception.

Formation of Group, Group - Classification, Properties, Roles, Norms, Status, Size and Cohesiveness, Group decision-making, Understanding teams, Creating effective teams, Conflict process, Conflict management communication.

Unit 3: Motivation and Leadership Motivation and Leadership

Concept of motivation, Definition, Theories of Motivation, Maslow's need Theory, ERG Theory, Theory X and Theory Y, Two two-factor theory, McClelland's Theory, Equity Theory, Vroom's Expectancy Theory. Concept of Leadership, Theories of leadership, Traits of a good Leader.

Unit 4: Conflict Management and Stress Management

Meaning, types and sources of conflict, Process of conflict management, approaches to conflict management. Stress management: sources of stress, approaches for stress management.

References

- Robbins, Timothy Judge, Seema Sanghi, Organizational Behavior, Stephen Pearson Prentice Hall.
- Fred Luthans, Organizational Behavior, McGraw Hill Inc.
- Aswathappa, K., Organisational Behaviour– Text and Problem, Himalaya Publication
- Pardeshi, P. C., Organizational Behaviour & Principles & Practice Of Management, Nirali publication
- Management of Organizational Behavior, PHI

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DISCIPLINE SPECIFIC CORE COURSE
QUANTITATIVE TECHNIQUES FOR MANAGEMENT

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		
Quantitative Techniques for Management	4	5	1	0	CLASS XII	NIL

Learning Objectives

The course aims to develop the knowledge of quantitative tools for decision-making and to prepare for the application of these tools in different organizational settings. The focus of the course is to train the students in the mathematical formulation of real-life business problems and apply quantitative approaches to find optimal solutions.

Learning outcomes

On completion of the course, students will be able to:

1. Understand the decision-making process under different business situations and the role of quantitative analysis in decision-making process.
2. Learn the quantitative approaches to find optimum solutions to various business problems constrained by the availability of resources and understand the sensitivity of various decision variables, resource limitation on the solution obtained through quantitative approaches.
3. Ensure prudent and cost-effective decision-making in transportation and assignment problems.
4. Learn various models of Inventory management and application of game theory in deciding business strategies.
5. Work on project scheduling and controlling problems using PERT and CPM technique.

Unit – I: Fundamentals of Decision Making

Types of decisions; Steps in decision making; Quantitative analysis and decision making; Different types of models and their uses; Model building steps.

Unit II - Linear Programming

Basic concepts; mathematical formulation and applications of LPP; Solution to Linear Programming Problem (LPP) using the graphical method – unboundedness, infeasibility, multiple optimal solution. Solution to Linear Programming Problem (LPP) using Simplex method – solution to Maximization and Minimization problem, infeasibility, degeneracy, multiple optimal solution, Sensitivity analysis and interpretation of solution (*using MS-Excel Solver or other software package*).

Unit III – Transportation and Assignment

Transportation Problems: Formulation of transportation problem, Balanced and unbalanced transportation problem; Solving transportation problem – Initial solution using Vogel's Approximation Method (VAM), testing for optimality using Modified Distribution (MODI) method, Degenerate solution. solution to maximization type of transportation problems.

Assignment Problems: Formulation of Assignment problems, Balanced and unbalanced assignment problem, Solving Assignment problems using the Hungarian Method, solution to maximization type of assignment problems.

Unit IV – Inventory Management and Game Theory

Inventory Management: Concepts of inventory management; Inventory models– classical EOQ, EOQ with price breaks, EOQ model for production runs, planned shortage model deciding optimum safety stock and reorder level, Selective inventory control techniques.

Game Theory: Pure strategy games; Mixed strategy games; Value of the game; Solving $m \times n$ games by reducing to 2×2 game using rules of dominance.

Unit V – Project Scheduling

Concepts of PERT & CPM techniques and their applications; Network analysis- scheduling activities, determining critical path, calculation of floats; Time-cost trade-off, Resource allocation & Resource Levelling.

References

1. Vohra, N. D. & Arora, H. (2021). *Quantitative Techniques in Management*. McGraw Hill Education.
2. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., and Cochran, J. J. (2022). *An Introduction to Management Science: Quantitative Approaches to Decision Making*. Cengage Learning India Pvt. Ltd.
3. Taha, H.A. (2019). *Operations Research: An Introduction*. Pearson Publication.

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DISCIPLINE SPECIFIC CORE COURSE : INTERNATIONAL BUSINESS

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		
International Business	4	5	1	0	Class XII	Nil

Learning Objectives:

The course aims to impart the core body of knowledge in international business to the students. The course would introduce students to the international trading and investment environment and also create awareness about emerging issues such as outsourcing and sustainable development in the context of international business.

Learning Outcomes:

After completion of the course, learners will be able to:

1. Analyse the process of globalization and its impact on the growth of international business.
2. Evaluate the changing dynamics of the diverse international business environment.
3. Understand the theoretical dimensions of international trade as well as intervention measures adopted.
4. Learn the significance of different forms of regional economic integration and the role played by various international economic organisations.
5. Evaluate the forms of foreign direct investment and analyse the benefits and costs of FDI.

Unit 1: Introduction to International Business

Globalization - concept, significance and impact on International Business; international business contrasted with domestic business; complexities of international business; internationalisation stages and orientations; Modes of entry into international businesses.

Unit 2: International Business Environment

Role of political and legal systems in international business; cultural environment of international business (including Hofstede's dimensions of culture); implications of economic environment for international business.

Unit 3: International Trade and BOP

Theories of international trade – Theory of Absolute Advantage theory, Theory of Comparative Advantage, Factor Proportions theory and Leontief paradox, Product Life Cycle theory, Theory of National Competitive Advantage; Instruments of trade control. Balance of payments (BOP) statement and its components

Unit 4: Regional Economic Integration and International Economic Organisations

Forms of regional economic integration; Integration efforts amongst countries in Europe, North America and Asia: EU, USMCA, SAARC and ASEAN; Cost and benefits of regional economic integration. International Economic Organisations: WTO- functions, structure and scope; World Bank and IMF.

Unit 5: International finance and contemporary issues in IB

Types of FDI - Greenfield investment, Mergers & Acquisition, strategic alliances; benefits and drawbacks of FDI, Overview of exchange rate systems, Outsourcing and its potential for India; international business and sustainable development.

Exercises:

The learners are required to analyse the legal and economic response of the following cases:

1. The European Union's General Data Protection Regulation (GDPR)
2. The Foreign Corrupt Practices Act (FCPA) and Siemens AG
3. Trade Sanctions and Huawei Technologies
4. Intellectual Property (IP) Disputes and Apple vs. Samsung

Suggested Readings:

1. Bennett, R. (2006). International Business. Delhi: Pearson.
2. Cavusgil, S. T., Knight, G. & Riesenberger, J. (2006). International Business: Strategy, Management and the New Realities. Pearson India.
3. Chaturvedi, D.D. & Jindal, D., & Kaur, R. (2022). International Business. Delhi: Scholar Tech Press.
4. Hill, C.W.L., & Jain, A. K. (2011). International Business. New Delhi: Tata McGraw Hill.
5. Daniels, J. D., Radenbaugh, L. H., & Sullivan, D. P. (2016). International Business. Uttar Pradesh, India: Pearson Education.
6. Griffin, R. W., & Pustay, M. W. (2014). International Business - A Managerial Perspective. New Jersey, United States: Prentice Hall.
7. Joshi, R.M. (2009). International Business. Delhi, India: Oxford University Press.
8. Menipaz, E., Menipaz A., & Tripathi, S.S. (2017). International Business: Theory and Practice. Delhi, India: Sage Publications India Pvt. Ltd.

Additional Resources

- Economic Survey, various issues.
- RBI Report on Currency & Finance, various issues.
- World Investment Reports, UNCTAD
- Websites: RBI, IMF, World Bank, WTO.
- WTO Annual Reports

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DISCIPLINE SPECIFIC CORE COURSE
FINANCIAL MARKETS AND INSTITUTIONS

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		
Financial Markets and Institutions	4	5	1	NIL	CLASS XII	NIL

Learning Objectives

The purpose of this course is to equip students with an understanding of the financial system, its constituents, the principles on which it operates, inter-linkages, regulatory concerns, and implications for society.

Learning outcomes

On completion of the course, students will be able to:

- Understand the functioning of financial institutions and markets both individually and as an interlinked system.
- Understand the organization, role, functioning and need for regulation of different types of financial markets and the implications of the same on society.
- Understand the organization, role and functioning of different types of institutions like mutual funds, pension funds, insurance, venture capital, private equity and hedge funds and the implications of the same on society.
- Critically analyse the pivotal role of banking in a financial system.

Unit I – Introduction: Overview of financial markets and financial instruments; Role of financial Institutions. Regulatory Institutions in India: RBI, SEBI, IRDA, PFRDA.

Unit II- Financial Markets: Money markets-organization, economic role, instruments & regulation.

Capital Markets- Primary & secondary markets and their organization; Stock Exchanges in India, demutualization of exchanges, Indian Stock Indices and their construction. Major Instruments traded in stock markets: Equity Shares, Debentures, Exchange Traded Funds. Trading of securities on a stock exchange; Major Instruments traded in stock markets, Trading of securities on a stock exchange; DEMAT System, placing an order for purchase/sale of shares, margin

trading and margin adjustment, contract note and settlement of contracts, Algorithmic trading, Settlement mechanism at BSE & NSE.

Unit III- Financial Institutions: Mutual Funds- Types of mutual funds schemes, ETFs, Expenses associated with mutual funds; An overview of Indian Mutual Funds Industry; Hedge funds, venture capital funds, private equity funds and regulation.

Pension Funds- Issues in saving for retirement & role of the financial system; Defined benefit & defined contribution pension plans.

Insurance: Concept of insurance- importance and types; Essential requirements and principles of insurance; Insurance and risk management; Risk and uncertainty, classification of risks, sources of risk-external and internal, risk management; General insurance and life insurance; Overview of insurance sector in India; Role of insurance in economy, reinsurance; Bancassurance.

Unit IV- Banking: Universal Banking: need and importance, Core banking solution (CBS), NBFCs and its types; comparison between Banks and NBFCs. Corporate banking, retail banking, international banking, rural banking, priority sector lending, digital banking, electronic banking, mobile banking and other innovative uses of IT. Major banking scams in India and the world, reasons for occurrence, handling of the same and preventive measures. Consumer Protection and Banking Ombudsman Scheme.

Case Studies

- RBI News play (Nifty Options)
<https://zerodha.com/varsity/chapter/case-studies-wrapping-it-all-up/>
- Calculating a Mutual Fund's Net Asset Value, The Long-Term Capital Debacle, Mutual Funds Caught Ignoring Ethical Standards (Mishkin, F., Eakins S. (2023)).
- Additional Cases: Case Study Digest by ICAI
<https://resource.cdn.icai.org/63177bos51123p6b.pdf>

References:

Pathak, B. V. (2018). Indian Financial System: Markets, Institutions and Services (5th ed.). Pearson Education.

Madura, J. (2018). *Financial markets and institutions* (13th ed.). Cengage learning.

Mishkin, F. S. (2022). *The economics of money, banking, and financial markets* (13th ed.). Pearson education.

Khan, M Y. (2019). Financial Services (10th ed.). McGraw Hill Higher Education

Saunders, A., Cornett, M. M., & Erhemjamts, O. (2021). *Financial institutions management: A risk management approach*. McGraw-Hill.

Mishkin, F., Eakins S. (2023). *Financial markets and institutions*. Pearson,

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DISCIPLINE SPECIFIC CORE COURSE
BUSINESS ANALYTICS

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		
Business Analytics	4	5	1	NIL	CLASS XII	Basic Statistics

Learning Objectives

The purpose of this course is to equip students with an understanding how business performance can be improved by changing the course of actions and using various tools to perform informed decision making. To expose students to various models of business analytics to enable them to select and apply such models as per requirements.

Learning outcomes

On completion of the course, students will be able to:

- Understand the need for effective business analytics within an organization.
- Analyze complex problems using advanced analytics tools.
- Learn descriptive, predictive and prescriptive business analytics.
- Interpret data for better decision-making.

Unit I – Introduction

Business Analytics meaning, Using Business Analytics, Impacts and Challenges, Evolution of Business Analytics, Analytic Foundations, Modern Business Analytics, Software Support and Spreadsheet Technology, Data for Business Analytics, Big Data, Data Reliability and Validity, Models in Business Analytics: Descriptive Models, Predictive Models, Prescriptive Models, Model Assumptions, Uncertainty and Risk, Problem-Solving with Analytics.

Unit II- Database Analytics

Data Sets and Databases, Using Range Names in Databases. Data Queries: Tables, Sorting, and Filtering, Sorting Data in Excel, Pareto Analysis, Filtering Data, Database Functions, Logical Functions, Lookup Functions for Database Queries, Excel Template Design: Data Validation Tools, Form Controls. PivotTables: PivotTable Customization, Slicers.

Unit III- Descriptive Analytics

Descriptive Statistical Measures: measures of location, dispersion, shape and association. Visualizing and Exploring Data: Overview, Tables, Charts, Advanced data visualization, data dashboards.

Unit IV: Predictive Analytics

Trendlines and Regression Analysis, Forecasting Techniques, Introduction to Data Mining, Spreadsheet, Modelling and Analysis, Monte Carlo Simulation and Risk Analysis.

Unit V: Prescriptive Analytics

Linear Optimization, Applications of Linear Optimization, Integer Optimization, Decision Analysis.

Unit VI: Business Analytics Applications

Application of Analytics in Finance, Marketing, Human Resource Management, Supply Chain, Healthcare, Social Media and Cyber Space.

Case Studies

- Drout Advertising Research Project, Case: Performance Lawn Equipment (James, E.R. (2021).
- Heavenly Chocolates Web Site Transactions (Camm, J.D. (2018).
- All-Time Movie Box-Office Data (Camm, J.D. (2018).
- Performance Lawn Equipment (James, E.R. (2021).
- Alumni Giving (Camm, J.D. (2018)).
- Four Corners, Case Problem: Investment Strategy (Camm, J.D. (2018).

References:

- James, E.R. (2021). Business Analytics (3rd ed.). Pearson Education Limited.
- Jaggia, S., Kelly, A., Lertwachara, K., & Chen, L. (2023). *Business analytics: Communicating with numbers* (2nd ed.). New York, NY, USA: McGraw Hill.
- Camm, J.D. (2018). Essentials of Business Analytics (3rd ed.). South Western Educational Publishing.
- Prasad, R. N., Acharya, S. (2011), Fundamentals of Business Analytics, Wiley.
- Schniederjans, M.J., Schniederjans, D.G., Starkey, C.M. (2014), Business Analytics: Principles, Concepts and Applications, Pearson.

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