

MOUNT ZION

COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

(Approved by AICTE, Affiliated to Anna University & Accredited by NAAC with A+ Grade)

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Curriculum and Syllabus Handbook

Master of Business Administration [Regulation 2025]

[CHOICE BASED CREDIT SYSTEM]

Approved by Academic Council on 24.06.2026

INSTITUTE VISION AND MISSION	
VISION	□ To be the Preferred choice of Students who aspire to become Engineers of the highest calibre.
MISSION	• Provide world-class physical and digital infrastructure and learning Environment. • Develop the competencies of students to make them Job ready and Entrepreneurs. • Facilitate Mental, Physical, Emotional and spiritual development of students and ensure Their Holistic Development. • Preserve The Environment Through the Implementation of Eco-Friendly and Sustainable Practices. • Serve The Community Through Skill Development and Other Need-Based Services. • Establish Sustainable Partnerships with Industries And R&D Laboratories for Mutual Benefit.

DEPARTMENT OF MANAGEMENT STUDIES	
VISION	• To empower individuals on their paths of transformation, guiding them to become value-based and purpose-driven leaders dedicated to creating a more prosperous world.
MISSION	• To develop young individuals into technically proficient, managerially competent, and socially purposeful professionals. • To facilitate the transformation of entrepreneurial ideas into scalable and sustainable economic and social institutions. • To foster responsible leadership by integrating ethical values, social dimensions, and long-term sustainability.
PROGRAMME EDUCATIONAL OBJECTIVES (PEO)	The graduates of Master of Business Administration will be able to PEO1: To ensure a core business practice and empower them to tackle complex business challenges with innovative and effective solutions PEO2: To familiarize students with emerging technologies and provide them with the necessary skills to meet the changing demands of the industry. PEO3: To provide leadership qualities, a strong ethical foundation, and a commitment to lifelong learning.

PROGRAMME SPECIFIC OUTCOMES (PSO)	Students will be able to PSO1: Integrate core business functions with modern management practices to solve complex problems, drive innovation, and build entrepreneurial, industry ready capabilities. PSO2: Demonstrate expertise in emerging technologies, data-driven decisions, and global practices to adapt to changing industries and drive organizational growth. PSO3: Exhibit ethical leadership, strong communication, teamwork, and a commitment to lifelong learning, contributing to sustainable development and societal well-being.
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PROGRAMME OUTCOMES

At the end of this programme the students will be able to

PO NO.	GRADUATE ATTRIBUTES	PROGRAMME OUTCOMES
PO1	Management knowledge application	Apply knowledge of management theories and practices to solve business problems.
PO2	Analytical & Critical Thinking	Foster analytical and critical thinking abilities for data-based decision making
PO3	Value-based Leadership	Ability to develop value-based leadership ability.
PO4	Business Environment, Ethics & Communication	Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO5	Teamwork & goal oriented Leadership	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

Mapping of Programme Educational Objectives with

Programme Outcomes

PEO	PROGRAMME OUTCOMES				
	1	2	3	4	5
1	3	3	2	2	2
2	2	3	1	2	1
3	2	2	3	3	3

Mapping of programme specific objectives with

Programme outcomes

PSO	PROGRAMME OUTCOMES				
	1	2	3	4	5
1	3	3	2	2	2
2	2	2	3	3	2
3	2	2	3	2	3

3: High Correlation

2: Average Correlation

1: Low Correlation

MASTER OF BUSINESS ADMINISTRATION

CURRICULUM

SEMESTER-I

SEMESTER-I									
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
THEORY									
1.	MB25C01	Statistics for Management	T	ES(PC)	3	1	0	4	4
2.	MB25C02	Management concepts and Organizational Behavior	T	ES(PC)	4	0	0	4	4
3.	MB25C03	Managerial Economics	T	ES(PC)	4	0	0	4	4
4.	MB25101	Accounting for Decision making	T	ES(PC)	3	1	0	4	4
5.	MB25C04	Legal Aspects of Business	T	ES(PC)	4	0	0	4	4
6.	MB25102	Information Management	T	ES(PC)	4	0	0	4	4
7.	****	Non-functional Elective	T	ES(PE)	3	0	0	3	3
8.	MB25103	Indian Ethos and Business Ethics	L	--	0	0	4	4	2
9.	MB25C05	Contemporary Business Communication	L	--	0	0	4	4	2
Total credits								35	31

NOTE: In the first semester students need to choose one elective from the Non-Functional stream.

SEMESTER-II									
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
THEORY									
1.	MB25C07	Applied Operations Research	T	ES(PC)	3	1	0	4	4
2.	MB25201	Financial Management	T	ES(PC)	3	1	0	4	4
3.	MB25C09	Human Resource Management	T	ES(PC)	4	0	0	4	4
4.	MB25C11	Operations Management	T	ES(PC)	3	1	0	4	4
5.	MB25C08	Business Research Methods	T	ES(PC)	3	1	0	4	4
6.	MB25202	Business Analytics	T	ES(PC)	4	0	0	4	4
7.	MB25C10	Marketing Management	T	ES(PC)	4	0	0	4	4
PRACTICALS									
8.	MB25203	Creativity and Innovation Laboratory	L	--	0	0	4	4	2
9.	MB25204	Data Analysis and Business modelling	L	--	0	0	4	4	2
Total Credits								36	32

SUMMER INTERNSHIP–MINIMUM OF 4 WEEKS OF INTERNSHIP

The report along with the company certificate should be submitted within the two weeks of the reopening date of 3rd semester. The report should be around 40 pages. The report should be sent to the controller of examinations by the HoD through the principal, before the last working day of the 3rd semester

SEMESTER–III									
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
THEORY									
1.	PB25301	Strategic Management	T	ES(PC)	4	0	0	4	4
2.	PB25302	International Business	T	ES(PC)	4	0	0	4	4
3.	PB25P**	Programme Elective I	T	ES(PE)	3	0	0	3	3
4.	PB25P**	Programme Elective II	T	ES(PE)	3	0	0	3	3
5.	PB25P**	Programme Elective III	T	ES(PE)	3	0	0	3	3
6.	PB25P**	Programme Elective IV	T	ES(PE)	3	0	0	3	3
7.	PB25P**	Programme Elective V	T	ES(PE)	3	0	0	3	3
PRACTICALS									
8.	PB25303	Capstone Simulation	L	ES(PC)	0	0	4	4	2
9.	PB25R01	Summer Internship	L	SD	0	0	4	4	2
Total Credits								34	30

SEMESTER-IV									
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
PRACTICALS									
1.	PB25401	Project Work	PW	SD	0	0	24	24	12
Total Credits								24	12

Total: 105 Credits

NOTE:

- ❖ Students should select the project topic for their project work only based on the selected area from two functional specializations.

NON - FUNCTIONAL ELECTIVES (2 ELECTIVES)

S. NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
1.	MB25C06	Entrepreneurship Development	NEC	ES (PE)	3	0	0	3	3
2.	MB25104	Event Management	NEC	ES (PE)	3	0	0	3	3

PROGRAMME ELECTIVE COURSES – (PE)

FUNCTIONAL SPECIALISATIONS

- 1. Students can take three elective subjects from two functional specializations.**

S. NO.	COURSE CODE	COURSE TITLE	TYPE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
STREAM/ SPECIALIZATION: FINANCIAL MANAGEMENT									
1.	PB25P01	Security Analysis and Portfolio Management	T	ES (PE)	3	0	0	3	3
2.	PB25P02	Financial Markets	T	ES (PE)	3	0	0	3	3
3.	PB25P03	Banking and Financial Services	T	ES (PE)	3	0	0	3	3
4.	PB25P04	Financial Derivatives	T	ES (PE)	3	0	0	3	3
5.	PB25P05	Fintech and Sustainability	T	ES (PE)	3	0	0	3	3
6.	PB25P06	Behavioral Finance	T	ES (PE)	3	0	0	3	3
STREAM/ SPECIALIZATION: MARKETING MANAGEMENT									
7.	PB25P07	Retail Marketing	T	ES (PE)	3	0	0	3	3
8.	PB25P08	Consumer Behaviour and Neural Marketing	T	ES (PE)	3	0	0	3	3
9.	PB25P09	Services Marketing	T	ES (PE)	3	0	0	3	3

10.	PB25P10	Sales and Distribution Management	T	ES (PE)	3	0	0	3	3
11.	PB25P11	Product and Brand Management	T	ES (PE)	3	0	0	3	3
12.	PB25P12	Digital Marketing	T	ES (PE)	3	0	0	3	3
STREAM/ SPECIALIZATION: HUMAN RESOURCE MANAGEMENT									
13.	PB25P13	Knowledge Management and Innovation	T	ES (PE)	3	0	0	3	3
14.	PB25P14	Industrial Relations and Labour Legislations	T	ES (PE)	3	0	0	3	3
15.	PB25P15	Negotiation and Conflict Management	T	ES (PE)	3	0	0	3	3
16.	PB25P16	Reward and Compensation Management	T	ES (PE)	3	0	0	3	3
17.	PB25P17	International Human Resource Management	T	ES (PE)	3	0	0	3	3
18.	PB25P18	Managing HR in Digital Age	T	ES (PE)	3	0	0	3	3
STREAM/ SPECIALIZATION: OPERATIONS MANAGEMENT									
19.	PB25P19	Supply Chain and Logistics Management	T	ES (PE)	3	0	0	3	3
20.	PB25P20	Quality Management	T	ES (PE)	3	0	0	3	3

21.	PB25P21	Materials Management	T	ES (PE)	3	0	0	3	3
22.	PB25P22	Services Operations Management	T	ES (PE)	3	0	0	3	3
23.	PB25P23	Lean Six Sigma and Business Excellence	T	ES (PE)	3	0	0	3	3
24.	PB25P24	Project Management	T	ES (PE)	3	0	0	3	3
STREAM/ SPECIALIZATION: BUSINESS ANALYTICS AND SYSTEMS									
25.	PB25P25	Data Mining and Decision Science	T	ES (PE)	3	0	0	3	3
26.	PB25P26	Deep Learning	T	ES (PE)	3	0	0	3	3
27.	PB25P27	Social Media Web Analytics	T	ES (PE)	3	0	0	3	3
28.	PB25P28	E-Business Management	T	ES (PE)	3	0	0	3	3
29.	PB25P29	Enterprise Resource Planning	T	ES (PE)	3	0	0	3	3
30.	PB25P30	Business Analytics Using Python	T	ES (PE)	3	0	0	3	3

OPEN ELECTIVES OFFERED TO OTHER DEPARTMENT

S. NO.	COURSE CODE	COURSE TITLE	TYPE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	C
					L	T	P		
1.	MG25X01	Project Management	T	OEC	3	0	0	3	3
2.	MG5X02	Retail Marketing	T	OEC	3	0	0	3	3
3.	MG25X03	International Human Resource Management	T	OEC	3	0	0	3	3
4.	MG25X04	Product And Brand Management	T	OEC	3	0	0	3	3
5.	MG25X05	Management Concepts and Organizational Behaviour	T	OEC	3	0	0	3	3
6.	MG25X06	Quality Management	T	OEC	3	0	0	3	3
7.	MG25X07	Marketing Management	T	OEC	3	0	0	3	3
8.	MG25X08	Supply Chain and Logistics Management	T	OEC	3	0	0	3	3

I SEMESTER

MB25C01	STATISTICS FOR MANAGEMENT		L	T	P	C
			3	1	0	4
Course Objectives:	● To understand probability concepts and statistical methods for business decision making. ● To apply sampling and estimation techniques for analyzing business data. ● To use hypothesis testing methods for solving business problems. ● To analyze relationships among variables using correlation and regression techniques. ● To utilize analytical and software tools for business analytics and data visualization.					
Course Outcomes					Knowledge Level	
The students will be able to						
CO1	Understand basic probability concepts and rules to solve business-related uncertainty problems.				K2	
CO2	Understand probability concepts, sampling distributions and estimation techniques.				K2	
CO3	Apply parametric hypothesis testing methods for business decision making.				K3	
CO4	Apply non-parametric statistical tests in real-world business situations.				K3	
CO5	Apply correlation and regression models for interpreting relationships among business variables.				K3	

UNIT I – Probability and Probability Distributions	12
Basic probability concepts and rules, conditional probability, independence of events, Bayes theorem. Random variables. Probability distributions – Binomial, Poisson, Uniform and Normal distributions. Business applications.	
UNIT II – Sampling and Estimation Techniques	12
Sampling distributions of mean and proportion. Central Limit Theorem. Sampling techniques. Point and interval estimation for population parameters (large and small samples). Determination of sample size. Business applications.	
UNIT III – Parametric Hypothesis Testing	12
Hypothesis testing concepts. One sample and two sample tests for means and proportions (Z-test). One sample and two sample tests for means (t-test). F-test for comparing variances. One-way and two-way ANOVA.	
UNIT IV – Non-Parametric Tests and Correlation	12
Chi-square test for goodness of fit and independence of attributes. Sign test, rank sum test, Mann-Whitney U test, Kruskal-Wallis test, Kolmogorov-Smirnov test, run test. Correlation, coefficient of determination, rank correlation.	
UNIT V – Regression Analysis and Business Analytics Tools	12
Regression analysis, estimation of regression line, method of least squares, standard error of estimate. Application of statistics in business analytics. Data visualization, interpretation using Excel/SPSS/R. Dashboarding and data-driven storytelling.	
TOTAL (L:45 , T:15): 60 PERIODS	
Text Books: 1. Levin, R.I. et al. (2023). Statistics for Management. Pearson.	

References:

1. Srivastava, T.N. & Rego, S. (2017). Statistics for Management. Tata McGraw Hill.
2. Black, K. (2023). Applied Business Statistics. Wiley India.
3. Anderson, D.R. et al. (2024). Statistics for Business and Economics. Cengage.
4. Gupta, S.C. & Kapoor, V.K. (2024). Fundamentals of Applied Statistics.

E-Resources:

1. NPTEL – Business Statistics and Analytics
2. Statistical tools – R, Python, IBM SPSS, MS Excel

MAPPING OF COs WITH POS / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	–	–	–	3	2	2	–
2	3	–	–	–	3	2	3	–
3	3	2	–	–	–	3	3	2
4	3	2	–	–	–	3	2	2
5	3	3	–	–	2	3	3	3
Avg.	2.8	2.33	–	–	2.6	2.6	2.6	2.7

MB25C02	MANAGEMENT CONCEPTS AND ORGANIZATIONAL BEHAVIOR	L	T	P	C
		4	0	0	4
Course Objectives:	● To understand management principles, functions, and evolution of management thought. ● To develop knowledge of planning, organizing, decision-making, and control processes. ● To analyze organizational behavior, leadership, culture, and change in global contexts. ● To evaluate individual and group behavior, motivation, and leadership in organizations. ● To apply organizational culture, change management, and cross cultural management concepts in global business environments.				
Course Outcomes The students will be able to			Knowledge Level		
CO1	Understand management concepts, functions, and evolution of management thought in organizations			K2	
CO2	Apply planning, decision-making, and organizing techniques to achieve organizational objectives			K3	
CO3	Analyze organizational design and control systems in relation to technology and structure			K4	
CO4	Analyze individual and group behavior, motivation, and leadership in workplace settings			K4	
CO5	Apply organizational culture, change, and cross-cultural management concepts in global contexts			K3	

UNIT I – Fundamentals and Evolution of Management	12
Meaning and levels of management. Management as art or science. Managerial functions and roles. Evolution of management thought – Classical, Behavioral and Management Science approaches. Contributions of F.W. Taylor and Henri Fayol. Neo-classical approach – Mayo and Hawthorne Experiments. Modern approaches – Systems and Contingency approach. Managerial skills.	
UNIT II – Planning, Decision Making and Organizing	12
Planning process, scope and limitations. Forecasting and types of planning. Characteristics of sound plans. Management by Objectives (MBO). Policies and strategies — scope and formulation. Decision making — types, techniques and processes. Organization structure and design. Authority–responsibility relationships. Delegation and decentralization. Inter departmental coordination. Control — meaning, functions, process and types of control.	
UNIT III – Organizational Design and Control	12
Impact of technology on organizational design. Mechanistic vs adaptive structures. Formal and informal organization. Modern approaches to control and technology-enabled organizational practices.	
UNIT IV – Individual Behavior and Group Dynamics	12
Meaning and importance of organizational behavior. Contributing disciplines. Perception and learning. Personality and individual differences. Motivation theories and job performance. Values, attitudes and beliefs. Communication — types, process and barriers. Groups and teams — definition and differences Stages of group development. Group cohesiveness. Types of teams. Leadership styles and approaches. Power and politics.	
UNIT V – Organizational Culture and Contemporary Perspectives	12
Organizational climate and culture. Conflict — concept, sources, stages and management. Organizational change and development. Comparative management styles. Japanese management practices. Organizational creativity and innovation. Cross-cultural organizational behavior. Managing international workforce. Productivity and cultural contingencies. Cross-cultural communication and management of diversity.	

TOTAL (L:60): 60 PERIODS

Text Books:

1. DuBrin, A.J. (2020). *Essentials of Management*.
2. Certo & Certo (2021). *Modern Management*.

References:

1. Koontz & Weihrich (2020). *Essentials of Management*.
2. Robbins (2023). *Organizational Behavior*.

E-Resources:

1. NPTEL – Principles of Management and Organizational Behavior

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	2	1	2	1	2	2	2
CO2	3	3	2	2	2	3	2	3
CO3	2	3	2	3	2	3	2	3
CO4	2	3	3	2	3	2	2	2
CO5	2	2	3	3	3	2	3	3
Avg.	2.40	2.6	2.20	2.40	2.20	2.4	2.20	2.60

MB25C03	MANAGERIAL ECONOMICS	L	T	P	C
		4	0	0	4
Course Objectives:	• To provide a strong foundation in economic principles and tools applicable to managerial decision-making. • To introduce the concepts of scarcity, efficiency and market mechanisms in micro and macroeconomic settings. • To analyze market structures and factor pricing for business decisions. • To evaluate macroeconomic indicators and fiscal policies affecting the business environment. • To analyze the impact of inflation, unemployment, and monetary policy on business performance.				
Course Outcomes The students will be able to				Knowledge Level	
CO1	Understand fundamental concepts of managerial economics, demand–supply and consumer behaviour.				K2
CO2	Apply production, cost and pricing concepts in managerial decision making.				K3
CO3	Apply market structures and factor pricing concepts in business situations.				K3
CO4	Analyze macroeconomic indicators and fiscal policy in evaluating business environment				K4
CO5	Analyze inflation, unemployment and monetary policy impacts on business performance				K4

UNIT I – Introduction to Managerial Economics and Fundamental Concepts	12
Themes of economics. Scarcity and efficiency. Three fundamental economic problems. Society's capability. Production Possibility Frontier (PPF). Productive efficiency vs economic efficiency. Economic growth and stability. Microeconomics and Macroeconomics. Role of markets and government. Positive vs negative externalities.	
UNIT II – Demand, Supply and Consumer Behaviour	12
Market – demand and supply. Determinants. Market equilibrium. Elasticity of demand and supply. Consumer behaviour. Consumer equilibrium. Approaches to consumer behaviour.	
UNIT III – Production, Cost Analysis and Pricing Models	12
Production – short-run and long-run production function. Returns to scale. Economies vs diseconomies of scale. Analysis of cost. Short-run and long-run cost functions. Relation between production and cost function. Production pricing model. Types of pricing models.	
UNIT IV – Market Structures and Factor Pricing	12
Product market – perfect and imperfect market. Different market structures. Firm's equilibrium and supply. Market efficiency. Economic costs of imperfect competition. Factor market – land, labour and capital. Demand and supply. Determination of factor price. Interaction of product and factor market. General equilibrium and efficiency of competitive markets.	
UNIT V – Macro economic Indicators and Monetary Perspectives	12
Macroeconomic aggregates. Circular flow of macroeconomic activity. National income determination. Aggregate demand and supply. Macroeconomic equilibrium. Components of aggregate demand and national income. Multiplier effect. Demand-side management. Fiscal policy in theory. Short-run and long-run supply curve. Unemployment and its impact. Okun's Law. Inflation – reasons and impact. Demand vs supply factors. Inflation vs unemployment trade-off. Phillips Curve – short-run and long-run. Supply-side policy and management. Money market. Demand and supply of money. Money market equilibrium and national income. Role of monetary policy.	
TOTAL (L:60): 60 PERIODS	

Text Books:

1. Lipsey,R., & Chrystal, A. (2015). Economics (13th ed.) Oxford University Press.

References:

1. Samuelson, P.A.,Nordhaus,W.D.,Chaudhuri,S.,& Sen,A.(2019).Economics (20th ed.). Tata McGraw Hill.
2. Boyes, W., & Melvin, M. Text book of economics. Biztantra. (Note :No year provided if you can share that, I can add it.)
3. Mankiw,N.G.(2022). Principles of Economics(8thed.,India release).Thomson Learning/Cengage India.

E-Resources:

1. NPTEL: Managerial Economics (<https://nptel.ac.in>)
2. RBI Bulletin and Monetary Policy Reports (<https://rbi.org.in>)

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	–	–	–	2	2	2	–
2	3	–	–	–	3	3	2	–
3	3	2	–	–	2	3	3	2
4	3	3	–	2	–	3	2	2
5	3	3	–	2	2	3	3	3
Avg.	2.8	2.67	-	2	2.25	2.8	2.4	2.25

MB25101	ACCOUNTING FOR DECISION MAKING	L	T	P	C
		3	1	0	4
Course Objectives:	• To equip students with comprehensive understanding of financial, cost and management accounting principles. • To enable analysis and interpretation of financial statements and costing information for managerial decision-making. • To utilize financial analysis tools and cost systems for planning and control. • To analyze financial statements and variance reports to evaluate business performance. • To apply accounting standards, ethical practices, and accounting information for strategic decision-making.				
Course Outcomes			Knowledge Level		
The students will be able to					
C01	Understand financial accounting concepts, account preparation and financial statement analysis.			K2	
C02	Apply costing, marginal costing and budgeting for managerial decisions.			K3	
C03	Apply financial analysis tools and cost systems for performance planning.			K3	
C04	Analyze financial statements and variance reports to assess business performance.			K4	
C05	Analyze accounting standards, ethics and strategic use of accounting in decision making.			K4	

UNIT I – Financial Accounting and Reporting Fundamentals	12
Introduction to Financial, Cost and Management Accounting- Generally Accepted Accounting Principles- Double Entry System. Preparation of Journal, Ledger and Trial Balance. Preparation of Final Accounts – Trading, Profit and Loss Account and Balance Sheet (Problem)- Reading the financial statements.	
UNIT II – Financial Statement Analysis	12
Financial ratio analysis (Problem). Interpretation of ratios for financial decisions. Dupont ratios. Comparative statements- Common size statements- Cash Flow Statement (as per Accounting Standard 3) and Funds Flow Statement analysis (Problem)- Trend analysis.	
UNIT III – Cost Accounting Systems	12
Cost accounts- Classification of costs- Job cost sheet- Job order costing- Process costing (excluding interdepartmental transfers and equivalent production)- Joint and by-product costing- Activity Based Costing- Target costing.	
UNIT IV – Marginal Costing and Decision Making	12
Marginal costing and profit planning-Cost-Volume-Profit analysis- Break-even analysis. Decision-making problems – Make or Buy decisions. Determination of sales mix (Problem)Exploring new markets - Add or drop products- Expand or contract.	
UNIT V – Budgeting, Performance Management and Strategic Accounting	12
Budgetary control- Sales, production and cash budgets- Fixed and flexible budgets (Problem)-Standard costing and variance analysis (excluding overhead costing)- Accounting standards and accounting disclosure practices in India-Accounting standards and disclosures in India- Overview of IFRS and convergence- Ethical issues in accounting- Financial statement fraud detection- Use of accounting in strategic business decision-making- Role of analytics in finance and accounting.	
TOTAL (L:45 , T:15): 60 PERIODS	

Text Books:

1. R. Narayanaswamy (2022). Financial Accounting (7th ed.). PHI Learning.
2. M. Y. Khan & P. K. Jain (2021). Management Accounting (8th ed.). Tata McGraw Hill.

References:

1. N. M. Singhvi & R. J. Bodhanwala (2018). Management Accounting: Text and Cases. PHI.
2. Earl K. Stice & James D. Stice (2024). Financial Accounting, Reporting & Analysis. Cengage.
3. A. K. Bhattacharya (2012). Introduction to Financial Statement Analysis. Elsevier.
4. T. S. Reddy & A. Murthy (Latest ed.). Financial Accounting. Margham Publications.

E-Resources:

1. Institute of Chartered Accountants of India – Accounting Standards & Guidance Notes →<https://www.icaai.org>
2. IFRS Foundation →<https://www.ifrs.org>

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	–	–	–	–	1	–
2	2	3	1	2	3	3	2	3
3	2	3	2	3	3	3	3	3
4	2	3	2	3	3	3	3	2
5	2	2	2	3	2	2	2	2
Avg.	1.8	2.75	1.75	2.75	2.25	2.75	2.20	2.75

MB25C04	LEGAL ASPECTS OF BUSINESS		L	T	P	C
			4	0	0	4
Course Objectives:	- To introduce key business laws and their applications in commercial and corporate environments. - To develop awareness of legal frameworks related to taxation, consumer protection, cyber laws and intellectual property rights for risk management. - To ensure legal compliance in business operations and decision making. - To analyze legal risks, competition law, cyber law, and industrial relations issues. - To evaluate consumer protection, taxation, and intellectual property rights for strategic business decisions.					
Course Outcomes					Knowledge Level	
The students will be able to						
CO1	Understand commercial, company, labour and taxation laws.				K2	
CO2	Apply legal provisions on contracts, governance, taxation and IPR.				K3	
CO3	Apply legal compliance requirements in business operations.				K3	
CO4	Analyze legal risks, competition, cyber and industrial relations issues.				K4	
CO5	Analyze consumer protection, taxation and IPR for strategic decisions.				K4	

UNIT I – Commercial Laws and Business Contracts	12
The Indian Contract Act 1872 – Definition and essentials of contract- Types and formation of contract- Performance, breach and remedies- Quasi contracts- Contract of Agency – nature, creation, authority and liability of agent and principal- Rights and duties. Termination. Sale of Goods Act 1930 – Nature of sales contract. Documents of title. Risk of loss. Guarantees and warranties- Performance of sales contracts- Conditional sales. Rights of unpaid seller. Negotiable Instruments Act 1881 – Nature and requisites. Types. Liability of parties. Holder in due course. Special rules for cheque and drafts- Discharge of negotiable instruments Payment and Settlement Systems Act 2007.	
UNIT II – Company Law and Competition Regulations	12
Company Act 1956 & 2013 – Principles and types of companies- Formation- Memorandum and Articles of Association- Prospectus- Powers, duties and liabilities of directors- Winding up- Corporate governance. Competition Act 2002 – Introduction. Definitions- Enquiry into agreements- Dominant position of enterprise.	
UNIT III – Industrial Relations and Labour Legislation	12
Overview of Factories Act- Payment of Wages Act- Payment of Bonus Act- Industrial Disputes Act- Legal aspects of industrial relations and dispute resolution mechanisms.	
UNIT IV – Corporate Taxation and GST Framework	12
Corporate tax planning- Corporate taxes- Overview of indirect tax laws relating to GST – Constitutional aspects- Levy and collection of CGST & IGST- Time and value of supply- Input tax credit- Computation of GST liability- Registration- Tax invoice. Credit and debit notes Electronic way bill- Returns- Payment of taxes including reverse charge.	
UNIT V – Consumer Protection, Cyber Laws and Intellectual Property Rights	12

Consumer Protection Act – Consumer rights and grievance redressal mechanisms- Consumer forums. Cyber crimes. IT Act 2000 and amendments- Cyber laws. Intellectual Property Rights – Patents, copyright, trademarks- Filing of patent applications- Rights and infringement- Civil remedies- Right to Information Act 2005.

Text Books:

1. N. D. Kapoor (2024). Elements of Mercantile Law. Sultan Chand.

References:

1. Ravinder Kumar (2016). Legal Aspects of Business. Cengage.
2. P. K. Sinha & Vinod Singhania (2018). Indirect Taxes. Taxmann.
3. Taxmann (2023). GST Manual.
4. P. K. Goel (2023). Business Law for Managers. Biztantra.

E-Resources:

1. Ministry of Corporate Affairs → <https://www.mca.gov.in>
2. Goods and Services Tax Network → <https://www.gst.gov.in>
3. World Intellectual Property Organization → <https://www.wipo.int>

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	–	–	–	–	1	–
2	2	2	1	2	3	3	2	3
3	2	3	2	3	3	3	3	3
4	2	3	3	3	3	2	3	3
5	2	1	2	3	2	2	2	2
Avg.	1.8	2.25	2	2.75	2.75	2.50	2.20	2.75

MB25102	INFORMATION MANAGEMENT	L	T	P	C
		4	0	0	4
Course Objectives:	• To understand the fundamentals of information systems, system design models, and database concepts. • To apply system analysis techniques, database tools, and information technologies in business environments. • To utilize integrated information systems and security practices for organizational decision support. • To analyze information system performance, data warehousing concepts, and emerging technologies. • To evaluate the strategic role of IT governance, analytics, and digital transformation in organizations.				
Course Outcomes				Knowledge Level	
The students will be able to					
CO1	Understand fundamentals of information systems, system design models and database concepts.			K2	
CO2	Apply system analysis techniques, database tools and information technologies in business situations.			K3	
CO3	Apply integrated information systems and security practices for organizational decision support.			K3	
CO4	Analyze information system performance, data warehousing concepts and emerging technology impacts.			K4	
CO5	Analyze strategic use of IT governance, analytics and digital transformation in organizations.			K4	

UNIT I – Fundamentals of Information Systems in Business	12
Data and information- Information systems- Evolution and types based on functions and hierarchy- Enterprise and functional information systems- Strategic role of IT in business- Role of CIO and IT governance.	
UNIT II – Systems Analysis, Design and Managerial Applications	12
Role of system analyst- System Development Life Cycle- System design models – Agile, Waterfall, Spiral, Iterative and Incremental, RAD- Requirement analysis. Data Flow Diagram. Entity relationship diagram. UML diagram- Implementation, evaluation and maintenance of MIS- Technology adoption models- IT project management- Legal and ethical issues in information management.	
UNIT III – Database Management Systems and Business Intelligence	12
Overview of database systems- DBMS types and evolution – RDBMS, OODBMS. Data warehousing- Data marts- Data mining – association rule mining, clustering, pattern matching- Business intelligence- Data science- Big data analytics- Expert systems.	
UNIT IV – Integrated Systems and Information Security	12
Knowledge-based decision support systems- Integration of social media and mobile technologies- Cyber safety and security- Cryptography and RSA model. IS vulnerability Disaster management- Computer crimes- Securing the web. Block chain technology- Ecommerce and E-business models- IoT and RFID.	
UNIT V – Emerging Information Technologies and Strategic Use	12
Machine learning and deep learning- Cloud computing - Pervasive computing. Advancements in Artificial Intelligence- Block chain and cryptocurrency- Quantum computing- Role of information systems in business analytics and decision science.	
TOTAL (L:60): 60 PERIODS	
Text Book: 1. R. Panneerselvam (2018). Database Management Systems. PHI Learning.	

References:

- 1.Kenneth C. Laudon & Jane P. Laudon (2022). Management Information Systems (17th ed.). Pearson.
- 2.Ruth Schultheis & Mary Sumner. Management Information Systems – The Manager’s View. Tata McGraw Hill.
- 3.Efraim Turban et al. (2023). E-Commerce: Business, Technology, Society. Pearson.
- 4.David Loshin (2021). Big Data Analytics. Elsevier.
5. Jiawei Han et al. (2012). Data Mining: Concepts and Techniques.

E-Resources:

1. NPTEL – MIS Courses →<https://onlinecourses.nptel.ac.in>
2. World Economic Forum – Emerging Technology Report →<https://www.weforum.org>

Mapping of COs with POs / PSOs								
POs						PSOs		
Cos	1	2	3	4	5	1	2	3
1	2	-	-	-	1	-	1	2
2	2	3	2	2	3	2	2	3
3	-	2	3	3	3	2	2	3
4	2	3	-	3	2	2	2	2
5	2	1	3	3	3	1	-	3
Avg.	2.00	2.25	2.67	2.75	2.40	1.75	1.75	2.60

MB25103	INDIAN ETHOS AND BUSINESS ETHICS	L	T	P	C
		0	0	4	2
Course Objectives:	• To develop understanding of Indian ethos, ethical values and value based managerial decision making. • To promote ethical awareness, social responsibility and sustainability practices in business organizations. • To integrate CSR and sustainability principles into organizational practices. • To analyze ethical issues related to leadership, technology, and globalization. • To evaluate traditional values and contemporary ethical challenges for responsible management.				
Course Outcomes				Knowledge Level	
The students will be able to					
CO1	Understand Indian ethos, ethical principles and value systems in management.			K2	
CO2	Apply ethical decision-making frameworks and Indian wisdom in professional contexts.			K3	
CO3	Apply CSR and sustainability principles in organizational situations.			K3	
CO4	Analyze ethical issues in leadership, technology and globalization.			K4	
CO5	Analyze traditional values and modern ethical challenges for responsible management.			K4	

UNIT I – Foundations of Indian Ethos in Management	6
• Concept of Indian ethos • Cultural intelligence • Indian philosophy and ethical principles in leadership • Work ethos and ethics for professional managers • Indian values and value systems – Dharma, Karma, Nishkama Karma • Wisdom for modern managers from scriptures	
UNIT II – Indian Learning Systems and Holistic Development	6
• Gurukul system and its relevance today • Law of humility • Law of growth • Law of responsibility • Ancient learning methods and modern parallels • Spiritual quotient in leadership development • Personality development through Indian ethos	
UNIT III – Business Ethics in Contemporary Organizations	6
• Meaning, scope and importance of business ethics • Ethical codes of conduct and governance • Ethical decision-making models and frameworks • Organizational values and trust building • Ethics in leadership and strategic decision making	
UNIT IV – Individual Ethics, CSR and Sustainability	6
• Personal values and ethical behaviour at workplace • Integrity, honesty, empathy and loyalty • Conflict between personal and professional ethics	

- Concept and scope of CSR in India
- Corporate accountability and stakeholder perspectives
- Sustainable development and ESG goals
- Triple bottom line approach

UNIT V – Cyber Ethics, IPR and Global Ethical Challenges

6

- Ethics in technology and digital business
- Cyber law and ethical issues in e-commerce
- Intellectual property rights and ethical considerations
- Ethical issues in AI, automation and surveillance
- Cross-cultural business ethics and globalization

TOTAL : 30 PERIODS

NOTE:

The following topics are suggested for preparation and presentation by students twice during the semester.

These presentations will be evaluated by the faculty member(s) handling the course, and the final marks will be consolidated at the end of the semester.

No End Semester Examination is prescribed for this course.

Suggested Topics:

1. Indian Ethos and Personality Development
2. Work Ethos and Ethics for Professional Managers
3. Indian Values, Value Systems and Managerial Wisdom
4. Ethos in Leadership Development
5. Indian System of Learning – Gurukul System, Law of Humility, Law of Growth and Law of Responsibility

Text Books:

1. Clarence Fernando (2019). Business Ethics – An Indian Perspective. Pearson.

References:

1. S. Balachandran (2018). Ethics, Indian Ethos and Management. PHI Learning.
2. Laura P. Hartman et al. (2023). Business Ethics: Decision Making for Personal Integrity. Mc Graw Hill.
3. Swami Ranganathananda. Universal Message of the Bhagavad Gita.
4. Peter Drucker (2010). Managing for Results.
5. R. Nandagopal & A. Sankar (2015). Indian Ethos and Values in Management. Tata McGraw Hill.

E-Resources:

1. NPTEL – Ethics Courses → <https://onlinecourses.nptel.ac.in>
2. Stanford University – Business Ethics Encyclopedia → <https://plato.stanford.edu>
3. United Nations Global Compact → <https://unglobalcompact.org>

MAPPING OF COS WITH POS / PSOS								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	–	2	3	–	2	2	–	–
2	2	3	3	–	–	2	2	–
3	2	3	3	–	–	3	2	2
4	–	3	3	2	–	3	2	2
5	–	3	3	2	–	3	3	2
Avg.	2	2.8	3	2	2	2.6	2.25	2

MB25C05	CONTEMPORARY BUSINESS COMMUNICATIONS	L	T	P	C
		0	0	4	2
Course Objectives:	• To develop essential oral and written communication skills required for modern managerial roles. • To enhance professional communication abilities in interviews, meetings, presentations and corporate correspondence • To develop interviewing, networking, and public speaking skills in professional contexts. • To analyze communication situations and adapt styles for different audiences. • To evaluate communication effectiveness for building professional relationships and personal branding.				
Course Outcomes The students will be able to				Knowledge Level	
C01	Understand principles of business communication and professional interaction skills.				K2
C02	Apply business writing, presentation and interpersonal communication techniques.				K3
C03	Apply interviewing, networking and public speaking skills in professional contexts.				K3
C04	Analyze communication situations and adapt communication styles for different audiences.				K4
C05	Analyze communication effectiveness to build professional relationships and personal brand.				K4

UNIT I – Communication Fundamentals and Managerial Speech Practice	6
Introduction to Business Communication: Principles of effective communication, Target group profile, Barriers of Communication, Reading Skills, Listening, Feedback., Principles of Nonverbal Communication: Professional dressing and body language. Role Playing, Debates and Quiz. Types of managerial speeches - Presentations and Extempore, speech of introduction, speech of thanks, occasional speech, theme speech., Group communication: Meetings, group discussions. Other Aspects of Communication: Cross Cultural Dimensions of Business Communication Technology and Communication, Ethical & Legal Issues in Business Communication.	
UNIT II – Business Writing and Corporate Communication Tools	6
Business letters- Routine letters- Bad news and persuasion letters- sales letters- collection letters- Maintaining a Diary- Resume/CV- job application letters, proposals- Internal communication through, notices, circulars, memos, agenda and minutes, reports- Case Studies- Exercises on Corporate Writing, Executive Summary of Documents, Creative Writing, Poster Making, Framing Advertisements, Slogans, Captions, Preparing Press Release and Press Notes	
UNIT III – Presentation, Public Speaking and Interview Skills	6
Principles of Effective Presentations – Principles Governing the Use of Audio-Visual Media – Public Speaking Practice – Managerial Presentations – Extempore Speaking – Mastering the Art of Giving Interviews – Selection Interviews – Placement Interviews – Discipline Interviews – Appraisal Interviews – Exit Interviews – Web / Video Conferencing – Tele-meetings	
UNIT IV – Business Networking and Personal Branding	6

Business networking techniques–Ice-breakers, small talk, digital etiquette – Conversational intelligence – Professional dining etiquette – Social media presence and grooming – Self-confidence and image management – Real-life simulations and feedback.

UNIT V – Report Writing and Analytical Communication

6

Objectives of report, types of report, Report Planning, Types of Reports, Developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing.

TOTAL : 30 PERIODS

Note : The emphasis of the entire subject should be on practical aspects.

Practical: This module introduces both written and spoken communication skills to students to build their confidence in delivering clear and logical messages to their audience. They will develop written communication skills through crafting Business messages such as Business letters, emails, and meeting minutes. In addition, students will work through presentations and simulated Meetings to refine their spoken communication skills, discussion techniques and people's skills.

Text Books:

1. Pal, R., & Korlahalli, J. S. Essentials of Business Communication (13th Rev. Ed.), Sultan Chand.

References:

1. Sharma, R. C., & Mohan, K. Business Correspondence and Report Writing (6th Ed.), Tata McGraw Hill.
2. Goodale, M. Professional Presentations: Developing Communication Skills, Cambridge University Press.
3. Adair, J. Effective Communication, Pan Macmillan.
4. Thill, J. V., & Bovee, G. L. Excellence in Business Communication 14th Ed.

E-Resources:

1. NPTEL – Soft Skills: https://onlinecourses.nptel.ac.in/noc21_hs76
- 2.
3. Mind Tools – Communication Skills Portal: www.mindtools.com
4. TEDx Talks – Effective Speaking and Personal Branding:
<https://www.youtube.com>

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	-	3	-	-	3	-	-	-
2	-	3	-	-	3	-	-	-
3	1	3	-	2	-	-	-	-
4	-	3	-	-	-	2	2	-
5	-	3	2	-	3	-	-	-
Avg.	1	3	2	2	3	2	2	-

NON-FUNCTIONAL ELECTIVES

MB25C06	Entrepreneurship Development	L	T	P	C
		3	0	0	3
Course Objectives:	• To equip students with knowledge to identify entrepreneurial opportunities and develop business plans. • To understand startup launch, growth, sustainability, ethical practices and entrepreneurial ecosystem support. • To apply startup launching and funding strategies. • To analyze business operations, growth, and scaling strategies. • To evaluate sustainability, exit strategies, and ethical practices in entrepreneurship.				
Course Outcomes				Knowledge Level	
The students will be able to					
CO1	Understand entrepreneurial mindset, competencies and ecosystem support.			K2	
CO2	Apply opportunity identification and business planning techniques.			K3	
CO3	Apply startup launching and funding strategies.			K3	
CO4	Analyze business operations, growth and scaling frameworks.			K4	
CO5	Analyze sustainability, exit strategies and ethical business practices.			K4	

UNIT I – Entrepreneurial Mindset and Ecosystem	9
Entrepreneurship concept – Entrepreneurship as a career – Entrepreneurial personality – Characteristics, knowledge and skills of successful entrepreneurs. Entrepreneurial	

environment – Role of family, society and culture – Government industrial policies – State and Central schemes (Startup India, Stand-Up India, PMEGP, MSME) – Role of DICs, SIDBI, EDII, TBI, DST, NSIC – Industry associations – Incubation centers and accelerators – Global policy ecosystem (Global Innovation Index, GEM).

UNIT II – Opportunity Identification and Business Planning

9

Sources of product for business – Prefeasibility study – Criteria for product selection – Ownership – Capital budgeting – Project profile preparation – Matching entrepreneur with project – Feasibility report preparation and evaluation criteria.

UNIT III – Launching the Startup and Funding Mechanisms

9

Finance and human resource mobilisation – Operations planning – Market and channel selection – Growth strategies – Product launching – Incubation – Venture capital – Startups.

UNIT IV – Managing and Scaling the Business

9

Small business operations – Inventory, finance and people management – Customer acquisition and retention – Digital tools for small business – Measuring business performance – Managing uncertainty and change – Business model innovation – Lean startup strategy – Scaling frameworks – Case studies on growth-oriented startups.

UNIT V – Business Sustainability, Exit Strategies and Ethics

9

Monitoring and evaluation of business – Business sickness – Prevention and rehabilitation of business units – Effective management of small business – Ethical practices – Exit strategies – Case studies.

TOTAL : 45 PERIODS

Text Books:

1. Khanka, S.S. (2020). *Entrepreneurial Development*. S. Chand.

References:

1. Roy, R. (2020). *Entrepreneurship*. Oxford University Press.
2. Kumar, A. (2012). *Entrepreneurship*. Pearson.
3. Chandra, P. (2023). *Projects – Planning, Analysis, Selection, Implementation and Review*. Tata McGraw Hill.

E-Resources:

1. Startup India Portal
2. Your Story

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	–	2	1	2	-	2	2
2	3	2	1	2	2	2	2	2
3	-	3	2	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	1	2	3	2	2	2	1
Avg.	2.0	2.25	2.0	2.4	2.4	2.5	2.4	2.2

MB25104	Event Management	L	T	P	C
		3	0	0	3
Course Objectives:	• To provide theoretical and practical skills for planning, executing and evaluating events. • To develop competencies in event design, marketing, legal compliance, logistics and risk management. • To apply legal, marketing, and sponsorship strategies in event planning. • To analyze event operations, logistics, and vendor coordination. • To evaluate risk management, safety measures, and event performance.				
Course Outcomes The students will be able to		Knowledge Level			
C01	Understand foundations, types and professional aspects of event management.	K2			
C02	Apply event design, conceptualization and budgeting techniques.	K3			
C03	Apply legal, marketing and sponsorship strategies in event planning.	K3			
C04	Analyze event operations, logistics and vendor coordination.	K4			
C05	Analyze risk, safety measures and evaluate event performance.	K4			

UNIT I – Foundations of Event Management	9
History and evolution of event management – Types of events – MICE (Meetings, Incentives, Conferences and Exhibitions) – Event industry structure – Event management as a profession – Perspectives: Government, corporate, community – Professional ethics and codes of conduct.	
UNIT II – Event Design and Conceptualization	9
Event ideation – Roles of host, sponsor, media, participants, spectators and crew – Designing event concept – Theme and content development – Setting event objectives – Functional sheets – Timeline planning – Budget preparation and checklist.	
UNIT III – Legal Aspects and Event Marketing	9
Contracts and agreements – Event insurance – Licenses and permits – Government regulations and compliance – Negotiation techniques – Risk mitigation through legal frameworks – Strategic event marketing – Pricing decisions – Communication channels – Integrated marketing communication – Sponsorship planning and evaluation – Role of digital marketing in events.	
UNIT IV – Event Operations and Logistics	9
Venue and site selection – Infrastructure requirements (AV, lighting, catering, stage, décor) – Protocols and guest management – Freelance event operations – Event day logistics – Onsite execution and supply coordination – Managing children, media and entertainment – Vendor management.	
UNIT V – Risk, Safety and Event Evaluation	9
Risk identification and assessment – Safety planning – Food safety – Fire and structural safety – Crowd and traffic control – Waste and sanitation – Post-event evaluation – Customer satisfaction – Service quality – Measuring event impact.	
TOTAL : 45 PERIODS	
Text Books: 1. Lynn Vander Wagen & Louise H. (2023). <i>Event Management for Tourism, Cultural Business & Sporting Events</i> (6th Ed.). Pearson.	

References:

1. John Beech, Sebastian Kaiser & Robert Kaspar (2019). *The Business of Events Management*. Pearson.
2. Julia Rutherford Silvers (2022). *Professional Event Coordination* (3rd Ed.). Wiley.
3. Shannon Kilkenny (2021). *The Complete Guide to Successful Event Planning* (Revised 3rd Ed.). Atlantic Publishing.

E-Resources:

1. Event Manager Blog
2. You Tube Learning – Event planning simulations & operations

MAPPING OF COS WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	2	1	2	-	1	2
2	2	2	1	2	2	2	2	2
3	3	3	2	3	3	3	3	3
4	3	3	3	3	3	3	3	3
5	2	1	2	2	2	3	2	1
Avg.	2.20	2.25	2.0	2.20	2.40	2.75	2.4	2.2

II SEMESTER

MB25C07	Applied Operations Research	L	T	P	C
		3	1	0	4
Course Objectives:	● To formulate and solve linear programming problems for optimal resource allocation and operational efficiency, and to analyze decision-making under conditions of certainty, risk, and uncertainty using appropriate decision models. ● To evaluate inventory control systems and determine optimal ordering policies to minimize costs. ● To apply quantitative models using spreadsheet-based tools and modern decision-support software. ● To interpret model outputs and provide strategic recommendations for logistics, finance, operations, and project management. ● To integrate computational and strategic approaches in assessing real-world business challenges and to develop practical skills in modeling, analysis, and interpretation using modern analytical application				
Course Outcomes The students will be able to			Knowledge Level		
CO1	Solve linear programming problems using graphical and simplex methods			K4	
CO2	Solve transportation and assignment problems for optimal resource allocation.			K4	
CO3	Apply decision-making techniques under risk, uncertainty, and game theory models.			K3	
CO4	Understand and apply inventory models such as EOQ, EBQ, and quantity discount models.			K2	
CO5	Understand and apply queuing models and Monte Carlo simulation techniques.			K2	

Unit I: Introduction to Quantitative Decision Models	12
Relevance of quantitative techniques in management decision making. Linear Programming formulation, solution by graphical and simplex methods (Primal – Penalty, Two Phase), special cases and sensitivity analysis.	
Unit II-Extensions of Linear Programming – Transportation & Assignment	12
Transportation models (minimising and maximising problems) – balanced and unbalanced problems – initial basic feasible solution by North-West Corner Rule, Least Cost Method and Vogel’s Approximation Method – optimality test by MODI / Stepping Stone Method – case of degeneracy – transshipment models. Assignment models (minimising and maximising problems) – balanced and unbalanced problems – solution by Hungarian and Branch and Bound algorithms – Travelling Salesman Problem – Crew Assignment Models.	
Unit III-Decision Theory and Game Theory Applications	12
Decision making under risk – decision trees – decision making under uncertainty. Game theory – two-person zero-sum games – saddle point – dominance rule – convex linear combination (averages method) – methods of matrices – graphical and linear programming solutions.	
Unit IV- Inventory Control and Replacement Models	12

Inventory models – EOQ and EBQ models (with and without shortages) – quantity discount models. Replacement models – individual replacement models (with and without time value of money) – group replacement models	
Unit V-Queuing Models, Simulation and Emerging Quantitative Tools (Theory and Problem)	12
Queuing theory – single and multi-channel models – infinite number of customers and infinite calling source. Monte Carlo simulation – use of random numbers – application of simulation techniques. Integration of quantitative techniques in business analytics – use of Excel Solver, R and Python in Operations Research – introduction to prescriptive analytics.	

Text Books:

1. Rosen. K.H., "Discrete Mathematics and its Applications", 7th Edition, Tata Mc Graw Hill Pub. Co. Ltd., New Delhi, Special Indian Edition, 2017.
2. Tremblay. J.P. and Manohar. R, "Discrete Mathematical Structures with Applications to Computer Science", Tata Mc Graw Hill Pub. Co. Ltd, New Delhi, 30th Reprint, 2011.

References:

1. Grimaldi. R.P. "Discrete and Combinatorial Mathematics: An Applied Introduction", 5th Edition, Pearson Education Asia, Delhi, 2013.
2. Lipschutz. S. and Mark Lipson., "Discrete Mathematics", Schaum's Outlines, Tata Mc Graw Hill Pub. Co. Ltd., New Delhi, 3rd Edition, 2010

E-Resources:

1. <http://discrete.openmathbooks.org>
2. <http://www.mheducation.com>
3. <http://nptel.ac.in>

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	3	3	-	-	3	2	2	2
2	3	2	-	1	3	2	2	2
3	3	2	1	2	3	2	2	2
4	3	2	2	2	3	2	2	2
5	3	2	2	2	3	2	2	2
Avg.	3	2.2	1.75	1.75	3	2	2	2

MB25201	FINANCIAL MANAGEMENT		L	T	P	C
			3	1	0	4
Course Objectives:	• To impart a comprehensive understanding of the core financial functions in an organization. • To emphasize value creation and efficient allocation of financial resources. • To develop knowledge of investment, financing, working capital, and dividend decisions. • To analyze cash flows, leverage, and working capital management decisions. • To evaluate financial strategies, capital structure, and financing options.					
Course Outcomes The students will be able to					Knowledge Level	
CO1	Understand key financial management concepts					K2
CO2	Understand objectives, risk–return, and capital market concepts.					K2
CO3	Apply financial management techniques to business decisions					K3
CO4	Analyze cash flows, leverage, and working capital decisions.					K4
CO5	Analyze financial strategies, capital structure, and financing options.					K4

UNIT I-Foundations of Financial Management	12
Introduction, Nature and Scope of Financial Management – Objectives of Financial Management -Major Financial Decisions – Role of Finance Manager – Organization of Finance Functions – Time Value of Money – Valuation of Shares and Bonds – Risk and Return Analysis: Single Asset and Portfolio Context.	
Unit II-Investment and Capital Budgeting Decisions	12
Capital Budgeting: Concepts and Relevance – Identification of Cash Flows – Evaluation Techniques: Payback, ARR, NPV, IRR, Profitability Index (Problem) – Comparison of DCF and Non-DCF Methods – Cost of Capital: Specific Costs and Weighted Average Cost (Problem) – Application of Investment Appraisal Tools.	
Unit III-Financing Decisions and Capital Structure	12
Leverages – Operating and Financial Leverage (Problem) – Combined Leverage – E BIT-EPS Analysis – Indifference Point (Problem) – Capital Structure Theories: NI, NOI, MM Approach – Determinants of Capital Structure – Financial Planning and Strategy.	
Unit IV-Dividend Policy Decisions and Working Capital Management	12
Dividend Policy: Importance and Issues – Relevance and Irrelevance Theories – Walter's Model, Gordon's Model, MM Hypothesis – Types and Forms of Dividends – Factors Influencing Dividend Decisions – Real-World Dividend Practices. Working Capital: Concepts, Determinants and Estimation (Problem) – Operating Cycle – Receivables Management – Inventory and Cash Management – Working Capital Financing: Trade Credit, Commercial Paper, Bank Finance, Company Deposits – Liquidity vs Profitability Trade-offs.	
Unit V-Long-Term Financing and Capital Markets	12
Indian Capital Market Overview – Primary and Secondary Markets – Long-Term Sources: Equity, Debentures, Term Loans – Lease and Hire Purchase – Venture Capital and Private Equity – SEBI Regulations – Financing Strategies for Startups.	
TOTAL(L:45,T:15):60 PERIODS	

Text Books:

1. I.M. Pandey, Financial Management, Vikas Publishing House, 12th Edition, 2023.

References:

1. Eugene F. Brigham and Michael C. Ehrhardt, Financial Management: Theory and Practice, Cengage Learning, 15th Edition, 2022.
2. Prasanna Chandra, Financial Management: Theory and Practice, Tata Mc Graw Hill, 10th Edition, 2022.
3. R.M. Srivastava and Anil Kumar Mishra, Financial Management, Oxford University Press, 2nd Edition, 2019.

E-resources:

1. Investopedia Financial Education – <https://www.investopedia.com>
2. NSE India Corporate Finance Modules – <https://www.nseindia.com>

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	-	1	1	2	-	2	1
2	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3
4	3	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3	3
Avg.	2.8	3	2.6	2.6	2.8	3	2.8	2.6

MB25C09	HUMAN RESOURCE MANAGEMENT	L	T	P	C
		4	0	0	4
Course Objectives:	• To understand core concepts, evolution and strategic role of HRM. • To learn workforce planning, recruitment, training, motivation and compensation. • To gain knowledge of performance management, employee movement and grievance handling. • To understand HR governance, legal compliance, well being and emerging HR trends • To evaluate HR governance, compliance, AI applications, and sustainability practices.				
Course Outcomes The students will be able to				Knowledge Level	
CO1	Understand strategic HRM concepts and evolution.			K2	
CO2	Apply workforce planning and recruitment practices.			K2	
CO3	Implement training, motivation, and compensation systems.			K3	
CO4	Analyze performance management and grievance handling.			K4	
CO5	Analyze HR governance, compliance, AI, and sustainability practices.			K4	

Unit I-Strategic Perspectives in Human Resource Management	12
Evolution of human resource management – The importance of the human capital – Role of human resource manager –Challenges for human resource managers - trends in Human resource policies – Computer applications in human resource management – Human resource accounting and audit – Introduction to HR analytics.	
Unit II-Workforce Planning and Talent Acquisition	12
Importance of Human Resource Planning – Forecasting human resource requirement – matching supply and demand - Internal and External sources - Organizational Attraction - Recruitment, Selection, Induction and Socialization - Theories, Methods and Process – Legal and ethical issues in hiring.	
Unit III-Training, Development and Knowledge Management	12
Types of training methods –purpose- benefits- resistance. Executive development programme –Common practices - Benefits – Self-development – Knowledge management systems and practices.	
Unit IV-Motivation, Compensation, and Career Engagement	12
Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction, Employee Engagement, Organizational Citizenship Behavior: Theories, Models.	
Unit V-Performance Management and Employee Movement and HR Governance and Emerging Issues	12
Method of performance evaluation – Feedback – Industry practices. Promotion – Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods.HR control processes – Legal compliance in HRM – Diversity and Inclusion – Ethical HR practices – Employee wellbeing – Future of work: AI in HRM, remote workforce management – HR metrics and dashboards – Global HRM trends – Sustainable HRM practices – Requirement of effective control systems grievances – Causes Implications – Redressal methods	
TOTAL (L:60): 60 PERIODS	

Text Books:

1. R. Wayne Mondy & Joseph J. Martocchio (2016). *Human Resource Management*.
2. Raymond A. Noe, John R. Hollenbeck, Barry Gerhart & Patrick M. Wright (2023). *Fundamentals of Human Resource Management*.

References:

1. Sharon Armstrong & Barbara Mitchell (2019). *The Essential HR Handbook*.
2. Brian Becker, Mark Huselid & Dave Ulrich (2001). *The HR Scorecard*

E-Resources:

- 1.NPTEL – Principles of Management and Organizational Behaviour

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	1	2	2	2	2	2
2	2	2	2	2	2	2	2	3
3	2	2	2	3	2	2	2	2
4	2	2	2	3	2	2	2	2
5	2	1	3	2	2	2	2	3
Avg.	2	1.8	2	2.4	2	2	2	2.4

MB25C11	OPERATIONS MANAGEMENT		L	T	P	C
			3	1	0	4
Course Objectives:	• To provide a holistic understanding of operations management as a vital function in achieving strategic and operational excellence in organizations. • To cover tools, techniques, and strategies to design, plan, control, and improve manufacturing and service operations. • To emphasis on capacity planning, product design, supply chain strategies, quality management, and lean operations. • To explore recent trends including digital operations, sustainable practices, and data-driven decision-making to gain competitive advantage in the global market.					
Course Outcomes The students will be able to					Knowledge Level	
CO1	Understand the framing and structuring operations in goods and services.					K2
CO2	Apply and utilize staff and location effectively and make decisions.					K3
CO3	Analyze the process of manufacturing goods and their facilities.					K4
CO4	Apply the demands and plan resources and their inventory optimally.					K3
CO5	Analyze tools for quality and green products as well trendy.					K4

Unit I-Overview of Operations Management and Strategic Alignment	12
Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends. Operations Strategy – Strategic fit, framework. Productivity; World-class manufacturing practices	
Unit II-Capacity, Facility and Supply Chain Decisions	12
Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location – Theories, Steps in Selection, Location Models. Sourcing and procurement - Strategic sourcing, make or buy decision, procurement process, managing vendors.	
Unit III-Process, Product and Layout Design	12
Product Design - Criteria, Approaches. Product development process - stage-gate approach - tools for efficient development. Process - design, strategy, types, analysis. Facility Layout – Principles, Types, Planning tools and techniques – Service blueprinting – Role of design in lean and agile systems.	
Unit IV-Forecasting, Resource and Inventory Planning	12
Demand Forecasting – Need, Types, objective and Steps - Overview of Qualitative and Quantitative methods. Operations planning - Resource planning - Inventory Planning and Control. Operations Scheduling - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing	
Unit V-Quality Management, Lean Thinking and Emerging Trends in Operations Management	12
Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality management tools, certification and awards. Lean Management - philosophy, elements of	
JIT manufacturing, continuous improvement. Six sigma and DMAIC methodology. Digital transformation in operations – Industry 4.0 and smart factories – Sustainable operations and green manufacturing – Service operations and scalability – Operations analytics – Block chain in supply chains – Resilience and risk mitigation – Global operations strategy – Case studies on Indian and global practices.	
TOTAL(L:45,T:15):60 PERIODS	
Text Books: 1. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, Mc Graw Hill, 17th Ed., 2023	

References:

1. R. Paneerselvam, Production and Operations Management, PHI Learning, 3rd Ed., 2017
2. Nigel Slack, Operations Management, Pearson, 10th Ed., 2023
3. S. Chopra & P. Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 8th Ed., 2024

E-resources:

- MIT Open CourseWare – Operations Management
- Coursera – Operations Management by Wharton
- LinkedIn Learning – Operations Strategy
- ASQ – American Society for Quality

MAPPING OF COS WITH POS / PSOS								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	1	2	2	2	2	2
2	2	2	2	2	2	2	2	3
3	2	2	2	3	2	2	2	2
4	2	2	2	3	2	2	2	2
5	2	1	3	2	2	2	2	3
Avg.	2	1.8	2	2.4	2	2	2	2.4

MB25C08	BUSINESS RESEARCH METHODS	L	T	P	C
		3	1	0	4
Course Objectives:	• To understand the fundamentals of business research and the research process. • To learn research design, measurement, and data collection techniques. • To develop skills in data analysis using statistical tools. • To understand research reporting, ethics, and emerging trends in research • To prepare ethical research reports and evaluate business trends.				
Course Outcomes			Knowledge Level		
The students will be able to					
CO1	Understand business research concepts and theory.		K2		
CO2	Apply research design and measurement techniques.		K3		
CO3	Use data collection and sampling methods.		K3		
CO4	Analyze data using appropriate statistical tools and software		K3		
CO5	Prepare ethical research reports and assess trends.		K4		
UNIT I -FOUNDATION OF BUSINESS RESEARCH AND SCIENTIFIC INQUIRY					12
Business Research–Definition and Significance –the research process–Types of Research–Exploratory and causal Research–Theoretical and empirical Research –Cross–Sectional and time – series Research – Research questions / Problems – Research objectives – Research					

hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.

UNIT II-RESEARCH DESIGN AND MEASUREMENT TECHNIQUES	12
Research design – Definition – types of research design – exploratory and causal research design – Descriptive and experimental design – different types of experimental design – Validity of findings – internal and external validity – Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument.	
UNIT III- DATA COLLECTION METHODS AND SAMPLING TECHNIQUES	12
Types of data–Primary Vs Secondary data–Methods of primary data collection–Survey Vs Observation–Experiments–Construction of questionnaire and instrument–Types of Validity – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Sampling methods.	
UNIT IV-DATA PREPARATION AND ANALYTICAL TECHNIQUES	12
Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Applications of Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling – Conjoint Analysis – Application of statistical software for data analysis.	
UNIT V-RESEARCH COMMUNICATION, ETHICS, AND EMERGING TRENDS	12
Research report –Types–Contents of report –need for executive summary –chapterization – contents of chapter–report writing–the role of audience–readability–comprehension–tone – final proof – report format – title of the report – ethics in research – Ethics in research – Subjectivity	
and Objectivity in research. Research Integrity – Emerging Trends: Digital Surveys, AI in Research, Online Panels, Real-Time Analytics – Case Studies on Ethical Dilemmas in Research.	

Text Books:

1. Donald R.Cooper, Pamela S.Schindler, J.K.Sharma, Business Research Methods, Mc Graw Hill, 13th Ed., 2021
2. Uma Sekaran & Roger Bougie, Research Methods for Business: A Skill Building Approach, Wiley, 7th Ed., 2020

References:

1. R.Paneer selvam, Research Methodology,PHILearning,2ndEd.,2015
2. Mark Saunders, Philip Lewis, Adrian Thornhill, Research Methods for Business Students, Pearson, 8th Ed., 2022

E-Resources:

- Stat Soft Textbook–Statistics and Analytics
- Coursera–Data-Driven Decision Making (PwC)

Mapping of COs with POs / PSOs								
Pos						PSOs		
Cos	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	-	-	-	1	1	2	2
CO2	2	3	2	2	3	3	3	3
CO3	-	2	3	3	3	3	3	3
CO4	2	3	-	-	2	3	2	2
CO5	2	1	3	3	3	3	3	3
Avg.	2.00	2.25	2.67	2.75	2.40	2.60	2	2.60

MB25202	BUSINESS ANALYTICS	L	T	P	C
		4	0	0	4
Course Objectives:	• To understand the fundamentals and process of business analytics. • To apply appropriate data sources for organizational requirements. • To use visualization tools and analytics techniques for data interpretation. • To analyze data using predictive analytics models. • To optimize data sources for different business applications.				
Course Outcomes The students will be able to				Knowledge Level	
CO1	Understand the basic foundation and core for the business analytics process			K2	
CO2	Apply appropriate data sources for a specified organization			K3	
CO3	Apply appropriate visualization tools and analytics methods for the analytics process			K3	
CO4	Analyze the data sources using appropriate predictive analytics models.			K4	
CO5	Analyze and optimize appropriate data sources for different applications.			K4	

UNIT I-FOUNDATIONS OF BUSINESS ANALYTICS	12
Business Analytics – Importance – Business Analytics Process – Relationship between Business Analytics and Organizational Decision Making – Business Analytics for Competitive Advantage – Strategic role of analytics.	

UNIT II -DATA AND RESOURCE MANAGEMENT IN ANALYTICS	12
Managing Analytics Infrastructure – Human Resources and Data Requirements – Aligning Organizational Structure with BA – Role of Technology – Information Policy – Data Governance – Data Quality Management – Change Management in BA	
UNIT III - DESCRIPTIVE ANALYTICS AND VISUALIZATION	12
Descriptive Analytics – Visualizing and Exploring Data – Descriptive Statistics – Sampling Techniques – Estimation Methods – Probability Distributions used in Descriptive Analytics – Use of dashboards and visualization tools.	
UNIT IV-PREDICTIVE ANALYTICS AND DATA MINING	12
Predictive Analytics – Predictive Models – Data-driven vs. Logic-driven Models – Predictive Modelling Procedures – Supervised vs. Unsupervised Learning – Reinforcement Learning – Data Mining Techniques – Association Analysis and Cluster Analysis – Model Validation – Application in Business cases.	
UNIT V-PRESCRIPTIVE ANALYTICS AND OPTIMIZATION: APPLICATIONS AND EMERGING TRENDS IN BUSINESS ANALYTICS	12
Prescriptive Analytics – Prescriptive Modelling Techniques – Non-linear Optimization – Simulation – Scenario Planning – Demonstrating Business Performance Improvement – Role of decision support systems-Industry applications in Marketing, HR, Finance, and Operations – Real-time analytics – AI & ML integration – Cloud based BA tools – Business Intelligence vs. BA – Ethics in Analytics – Case Studies on contemporary analytics usage	
TOTAL(L:45,T:15):60PERIODS	
Text Books: 1. Christian S. Albright & Wayne L. Winston, Business Analytics: Data Analysis and Decision Making, Cengage, 6 th Ed., 2019	

References:

1. U Dinesh Kumar, Business Analytics: The Science of Data-Driven Decision Making, Wiley, 2nd Ed., 2021
2. N. D. Vohra, Quantitative Techniques in Management, Mc Graw Hill, 6th Ed., 2021
3. James R. Evans, Business Analytics: Methods, Models and Decisions, Pearson, 3rd Ed., 2020

E-resources:

1. Harvard Business Review: <https://hbr.org/topic/Business-analytics>
2. IBM Data and AI Blog: <https://www.ibm.com/blogs/watson> 39
3. Microsoft Learn for Data Analytics:
<https://learn.microsoft.com/enus/training/paths/analyze-data-power-bi>

Mapping of COs with POs / PSOs

POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	-	-	1	2	1	2	2
2	2	2	1	2	3	2	2	3
3	2	3	3	3	3	3	3	3
4	2	3	2	3	2	3	2	2
5	2	3	3	3	3	3	3	3
Avg.	2	2.75	2.25	2.4	2.6	2.4	2.4	2.6

MB25C10	MARKETING MANAGEMENT	L	T	P	C
		4	0	0	4
Course Objectives:	● The course develops a comprehensive understanding of marketing fundamentals, strategic planning, and marketing mix decisions in dynamic global and digital environments. ● It enables students to analyze buyer behavior and formulate effective market-driven strategies. ● The course provides knowledge and application of contemporary tools in digital and social media marketing. ● It equips learners with skills in customer relationship management, ethical marketing practices, and data-driven decision-making.				
Course Outcomes The students will be able to		Knowledge Level			
C01	Understand business environmental analysis and global marketing.	K2			
C02	Apply marketing strategy, and marketing mix decisions.	K3			
C03	Apply Concepts of branding, promotion, and pricing decisions.	K3			
C04	Analyze buyer behavior and customer loyalty development.	K4			
C05	Analyze marketing research digital marketing and ethical practices.	K4			

UNIT I – Foundations of Marketing and Business Environment	12
Defining Marketing – Core Concepts in Marketing – Evolution of Marketing – Marketing Planning Process – Scanning Business Environment: Internal and External – Value Chain – Core Competencies – PESTEL Analysis – SWOT Analysis – Marketing Interface with Functional Areas (Production, Finance, Human Resource Management, Information Systems) – Marketing in Global Environment – International Marketing – Rural Marketing: Prospects and Challenges.	
UNIT II – Strategic Marketing and Market Segmentation	12
Marketing Strategy Formulation – Key Drivers of Marketing Strategies – Strategies for Industrial Marketing – Consumer Marketing – Services Marketing – Competition Analysis – Analysis of Consumer and Industrial Markets – Influence of Economic and Behavioral Factors – Strategic Marketing Mix Components – Market Segmentation – Targeting – Positioning.	
UNIT III – Product, Pricing and Channel Decisions	12
Product Planning and Development – Product Life Cycle – New Product Development and Management – Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics – Advertising and Sales Promotion – Pricing Objectives, Policies and Methods.	
UNIT IV – Consumer and Organizational Buyer Behaviour	12
Understanding Industrial and Consumer Buyer Behaviour – Influencing Factors – Buyer Behaviour Models – Online Buyer Behaviour – Building and Measuring Customer Satisfaction – Customer Relationship Management – Customer Acquisition, Retention and Defection – Creating Long-Term Loyalty Relationships.	
UNIT V – Marketing Research, Digital Trends and Ethical Marketing	12
Marketing Information System – Marketing Research Process – Applications in Product, Advertising, Promotion, Consumer Behaviour and Retail Research – Customer Driven Organizations – Cause-Related and Sustainable Marketing – Ethical and Legal Aspects in Marketing – Green Marketing – Online Marketing Trends – Social Media Marketing – Influencer and Content Marketing – Mobile and Digital Marketing Trends – Personalization and Marketing Automation – Emerging Tools in Digital Marketing (SEO, SEM, Email Marketing, Analytics) – Customer-Centric Marketing Organizations.	
TOTAL (L:45,T:15):60 PERIODS	

Text Book:

1. V.S. Ramaswamy & S. Nama Kumari, *Marketing Management: Global Perspective Indian Context*, Macmillan, 7th Ed., 2023

References:

1. K.S. Chandrasekar, *Marketing Management – Text and Cases*, Tata Mc Graw Hill, 2012
2. Rajan Saxena, *Marketing Management*, Mc Graw Hill Education, 6th Ed., 2023
3. Michael Solomon, *Consumer Behavior: Buying, Having, and Being*, Pearson, 14th Ed., 2023
4. Jean-Noël Kapferer, *The New Strategic Brand Management*, Kogan Page, 6th Ed., 2020

E-resources:

1. Harvard Business Review: <https://hbr.org/topic/Business-analytics> IBM Data and AI
Blog: <https://www.ibm.com/blogs/watson> 39
2. Microsoft Learn for Data Analytics:
[https://learn.microsoft.com/enus/training/paths/analyze data-power-bi](https://learn.microsoft.com/enus/training/paths/analyze-data-power-bi)
3. Coursera (Business Analytics):
<https://www.coursera.org/specializations/Businessanalytics>
4. Tableau Public Learning: <https://public.tableau.com/en-us/s/resources>
5. Kaggle (Datasets and Analytics Cases): <https://www.kaggle.com/>

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	-	-	-	1	1	2	2
2	2	3	2	2	3	3	3	3
3	-	2	3	3	3	3	3	3
4	2	3	-	3	2	3	2	2
5	2	1	3	3	3	3	3	3
Avg.	2.00	2.25	2.67	2.75	2.40	2.6	2.6	2.6

MB25203	CREATIVITY AND INNOVATION LABORATORY		L	T	P	C
			0	0	4	2
Course Objectives:	• To apply creative thinking and innovation principles in problem-solving. • To generate novel ideas, visualize innovative concepts and apply design thinking techniques. • To explore heuristic models, tools for directed creativity and disruptive innovation frameworks. • To acquire the mindset and tools required to ideate and develop innovative products, services or solutions in Business contexts.					
Course Outcomes The students will be able to					Knowledge Level	
CO1	Apply the basics of Creativity and its types and barriers.					K3
CO2	Apply the technic mechanisms and its nuances.					K3
CO3	Apply the different dimensions in creativity innovation.					K3
CO4	Evaluate and develop ideas and fulfil the demands.					K5
CO5	Analyze the best tools for innovation development of projects.					K4

Unit I -Foundations of Creativity and Innovation	6
Importance of creative thinking in Business - Directed creativity theories - Components of creativity - Organizational and individual creativity - Innovation types - Barriers to innovation - Innovation process - Assessing creativity and innovation.	
Unit II – Thinking Mechanisms and Visualization Techniques	6
Cognitive mechanisms and heuristics - Models supporting creative thinking - Visual elements and design principles (line, form, texture, color, symmetry) - Spatial composition - Basics of computer animation - Aerodynamics - Scientific visualization and benchmarking.	
Unit III – Understanding Creativity and Its Dimensions	6
Creativity components: Person, Process, Product, Environment - ICEDIP model - (Inspiration, Clarification, Distillation, Perspiration, Evaluation, Incubation) - Motivation and rewards in creativity - Tools for directed creative stimulation - Applying creativity in innovation.	
Unit IV – Creativity in Design and Problem Solving	6
Generating and developing ideas - Product and service design - Six Thinking Hats - Lateral Thinking - Contextual influences on creativity - Personal creativity assessment - Hands-on exercises and case-based simulations.	
Unit V – Innovation Tools, Methodologies and Practice-Based Project	6
Types of innovation: Radical, Evolutionary - TRIZ methodology for inventive problem solving - Disruptive innovation and new market disruption - Strategic innovation models - Entrepreneurial tools for innovation development. Workshop format - Students ideate – design, and build an innovative product or service - Design Thinking framework - Prototyping - Peer review - Final presentation and evaluation by faculty panel - Focus on problem-solving, teamwork and creativity.	
TOTAL:30 PERIODS	

LIST OF EXPERIMENTS:

1. The foundation of Creative thinking in business and its components.
2. Overcoming the Barriers to innovation and assessing them.
3. Practicing the models supporting creative thinking.
4. Learning the basics of computer animation for efficient designing.
5. Applying ICEDIP model for creative dimensions.
6. Understanding the Creativity components and different dimensions.
7. Applying the tools for creativity in innovation.
8. Solving a problem using six thinking hats.
9. Designing creativity and solving problem.
10. Assessing creativity and simulation on case-study.
11. Applying innovation tools and methodologies.
12. Creating solutions using TRIZ methodology.
13. Applying disruptive innovation for problem solving.
14. Design thinking framework using Peer Review.

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	1	2	3	2	3	1
2	2	3	2	3	3	3	3	2
3	1	2	3	2	2	3	2	3
4	1	2	1	2	3	2	3	2
5	0	0	0	0	2	1	2	2
Avg.	1.2	1.8	1.4	1.8	2.6	2.2	2.6	2

MB25204	Data analysis and Business Modeling	L	T	P	C
		0	0	4	2
Course Objectives:	● To apply data analysis techniques to solve business problems. ● To Equip spreadsheet tools and analytical software for descriptive statistics, hypothesis testing, forecasting, and modeling. ● To explore data analysis to real-world business scenarios, including risk analysis, revenue management, and optimization models. ● To Integrate advanced decision-making techniques for informed, data-driven strategies. ● To prepare strategic and operational decision-making across various functional domains using real-world data.				
Course Outcomes The students will be able to				Knowledge Level	
CO1	Apply financial models to optimize business decisions.				K3
CO2	Operate research models to analyze business problems.				K3
CO3	Apply techniques to solve business problems.				K3
CO4	Analyze research models to evaluate solutions.				K4
CO5	Evaluate integrated solutions to make optimized business decisions				K5

UNIT I – Data Description and Hypothesis Testing	6
Descriptive statistics – Data visualization – Measures of central tendency and dispersion – Parametric tests (t-test, ANOVA) – Non-parametric tests (Chi-square, Mann-Whitney U test) – Interpretation using spreadsheet software or R/Python.	
UNIT II-Correlation, Regression and Forecasting	6
Bivariate and multivariate correlation – Simple and multiple regression analysis – Interpretation of coefficients – Forecasting using time series data – Moving averages – Exponential smoothing – Real-time forecasting models.	
UNIT III- Financial Modeling for Business Decisions	6
Portfolio selection – Scenario analysis – Sensitivity analysis – Risk and return measures – Application in investment decision-making – Simulation techniques in Excel.	
UNIT IV - Revenue Management and Optimization	6
Revenue maximization principles – Pricing decisions – Capacity allocation – Data modelin for revenue optimization – Real-life case modeling in Excel / Python.	
UNIT V- Operations Research Models with Advanced Excel Tools	6
This unit provides a comprehensive, application-oriented understanding of quantitative decision-making models supported by advanced spreadsheet analytics. It integrates core Operations Research (OR) techniques with practical implementation using Excel-based tools to develop data-driven managerial insights.	
TOTAL: 30 PERIODS	

LIST OF EXPERIMENTS:
1. Descriptive statistics 2. Hypothesis Testing-Parametric Tests 3. Hypothesis Testing -Non-Parametric Tests 4. Correlation & Regression 5. Forecasting 6. Portfolio Selection 7. Sensitivity Analysis& Risk Analysis 8. Revenue Management 9. Transportation & Assignment 10. Networking Models 11. Queuing Theory 12. Inventory Models

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	-	-	-	1	1	2	2
2	2	3	2	2	3	3	3	3
3	2	2	3	3	3	3	3	3
4	2	3	-	3	2	3	2	2
5	2	1	3	3	3	3	3	3
Avg.	2.00	2.25	2.67	2.75	2.40	2.60	2.60	2.60

III SEMESTER

PB25301	STRATEGIC MANAGEMENT	L	T	P	C
		4	0	0	4
COURSE OBJECTIVES	- To provide strategic management concepts and frameworks in dynamic business environments. - To develop skills in environmental analysis and competitive strategy formulation. - To learn strategy implementation and evaluation aligned with organizational goals - To promote business model innovation and strategic thinking. - To assess the impact of technological changes, globalization, and emerging business challenges on strategic management.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Explain the basic concepts of strategic management, environment analysis and competitive advantage.		K2		
CO2	Interpret corporate and business level strategies and the strategic management process.		K2		
CO3	Apply strategic frameworks and analytical tools like pestel and porter's five forces in strategy formulation.		K3		
CO4	Analyse internal and external environments to evaluate strategic alternatives and implementation.		K4		
CO5	Analyse organizational design, innovation and change management for achieving competitive advantage.		K4		
UNIT I - STRATEGIC FOUNDATIONS AND STAKEHOLDER ANALYSIS			12		

Concept of strategy and strategic management – strategic management process and hierarchy of strategy – mission, vision, objectives and goal setting – stakeholder analysis – corporate governance and social responsibility – strategic intent and ethical considerations – case analysis	
UNIT II – ENVIRONMENTAL AND COMPETITIVE ANALYSIS	12
External environment analysis using pestle and swot frameworks – industry and competitive analysis through porter’s five forces and strategic group mapping – globalization and industry structure – national competitive advantage and global Positioning – internal analysis of resources, capabilities, and core competencies – sustainable competitive advantage and entry barriers – case analysis	
UNIT III - Strategic Formulation at Corporate and Business Levels	12
Corporate-level strategies including stability, expansion, retrenchment, and combination – business-level strategies such as cost leadership, differentiation, and focus – strategic alliances, mergers and acquisitions, and vertical integration – strategic tools: ETOP strategic advantage profile, BCG matrix, GE nine cell, McKinney 7s, and gap analysis – balanced scorecard for strategic alignment and performance measurement – case analysis	
UNIT IV- STRATEGY IMPLEMENTATION AND ORGANIZATIONAL DESIGN	12
Strategy implementation framework and execution challenges – role of organizational structure and systems in strategy execution – resource allocation and strategic control systems – leadership, power, and politics in implementation – organizational design and structure–culture fit – managing strategic change, resistance, and conflict techniques in strategic evolution – case analysis	
UNIT V – INNOVATION, DISRUPTION, AND EMERGING STRATEGIC CHALLENGES	12
Strategic innovation and technology adoption in dynamic markets – digital business models, platform economy, and gig-based strategies – strategic issues in non-profit and social enterprises – innovation ecosystems and open innovation models – strategic agility, foresight, and scenario planning in volatile environments – strategic management challenges in post pandemic and global innovation contexts – case analysis	
TOTAL (L:45, T:15): 60 PERIODS	

TEXT BOOKS:

1. Hill, Schilling & Jones, Strategic Management: An Integrated Approach, Cengage, 14th Ed., 2024

REFERENCES:

1. Laffey A.G. & Martin R.L., playing to win: how strategy really works, HBR press, 2013
2. Gupta, GOL Lakota & Srinivasan, business policy and strategic management, phi, 2005
3. John Pearce & Richard Robinson, strategic management, Mc Graw hill, 14th ed., 2019
4. Azar kazmi, strategic management and business policy, Tata Mc graw-hill, 5th ed., 2024

E-resources:

- Mc Kinsey insights–strategy & corporate finance–<https://www.mckinsey.com>
- BCG perspectives–<https://www.bcg.com>
- Harvard business review strategy articles–<https://hbr.org>
- Coursera: strategic management by Copenhagen business school

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	3	3	2	2	2	3	2	3
2	3	3	3	2	2	3	3	3
3	3	3	3	3	2	3	3	3
4	3	2	3	3	2	3	3	3
5	2	3	3	3	3	3	3	3
AVG.	2.8	2.8	2.8	2.6	2.2	3.0	2.8	3

PB25302	INTERNATIONAL BUSINESS	L	T	P	C
		4	0	0	4
COURSE OBJECTIVES:	• To understand international business environment, trade theories, and global market dynamics. • To learn strategic approaches for cross-border business operations and market entry. • To gain knowledge of global functions like Production, Marketing, Finance, and HR. • To develop skills to manage cultural, legal, ethical, and strategic challenges in multinational contexts. • To understand conflict resolution, negotiation, and ethical decision making in international business.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Explain international business environment, trade theories and global operations.			K2	
CO2	Interpret market entry modes, international institutions and global functional systems.			K2	
CO3	Apply trade theories and entry strategies in multinational business situations.			K3	
CO4	Analyse globalization, trade policies and cross-cultural factors affecting global firms.			K4	
CO5	Analyse global strategies, hr practices and ethical challenges in multinational context.			K4	

UNIT I – INTRODUCTION TO INTERNATIONAL BUSINESS	12
Definition and drivers of international business – organizational issues in international business – changing environment of international business and country attractiveness – trends in globalization and emerging markets – effects and benefits of globalization – international institutions: basic principles and major achievements of UNCTAD, role of IMF, features of IBRD, and role and advantages of WTO	
UNIT II – INTERNATIONAL TRADE AND INVESTMENT THEORIES	12
Classical and modern trade theories: mercantilism, absolute advantage, comparative advantage, and Heckscher–Ohlin – foreign direct investment theories: product life cycle, eclectic paradigm, market power, and internalization theory – trade policy instruments including voluntary export restraints (VERS), administrative policies, anti-dumping measures, and balance of payments considerations	
UNIT III – GLOBAL MARKET ENTRY AND STRATEGIC CHOICES	12
Strategic compulsions for internationalization and global portfolio strategies – market entry modes such as exporting, licensing, franchising, joint ventures, and wholly owned subsidiaries – organizational structures and control mechanisms in global firms – performance evaluation and management of international operations	
UNIT IV – GLOBAL OPERATIONS AND FINANCIAL MANAGEMENT	12
Global production decisions– standardization versus differentiation and make-or-buy decisions – global supply chain issues and quality considerations – global marketing strategy including product development challenges, pricing, production, and channel management – foreign exchange determination systems with basic concepts, types of exchange rate regimes, and factors affecting exchange rates	
UNIT V – CROSS-CULTURAL AND HR MANAGEMENT	12
Selection and management of expatriate managers – managing across cultures through training, development, and compensation strategies – disadvantages of international business and sources and types of conflict – conflict resolution mechanisms and negotiation strategies – ethical issues in international business and ethical decision-making – digital transformation in global business and the growth of e-commerce in borderless economies – global sustainability and ESG imperatives – political risk, regulatory compliance, and geopolitical influences shaping international business strategies	
TOTAL (L:45, T:15): 60 PERIODS	

TEXT BOOKS:

1. K. Aswathappa, international business, Mc Graw hill, 7th ed., 2023
2. Charles w. l. hill & Arun Kumar Jain, international business, Mc Graw hill, 7th ed., 2024

REFERENCES:

1. Michael r. Czinkota et al., international business, Cengage learning, 9th ed., 2023
2. John d. Daniels, lee h. Radebaugh & Daniel p. Sullivan, international business, pearson, 17th ed., 2023

E-RESOURCES

- World trade organization – reports & updates
- International monetary fund publications
- World bank knowledge hub
- OECD international trade and investment

MAPPING OF COs WITH POs / PSOs

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	1	1	2	1	2	2
2	2	2	2	2	2	3	2	2
3	-	-	1	2	2	1	2	2
4	2	2	3	3	2	3	3	2
5	2	2	3	3	2	3	2	2
AVG.	2.00	2.00	2.00	2.20	2.00	2.20	2.20	2.00

PB25303	CAPSTONE SIMULATION – LABORATORY	L	T	P	C
		0	0	4	2
COURSE OBJECTIVES:	• To provide experiential learning through business simulations and strategic decision-making. • To understand integration of Marketing, Operations, Finance, and R&D in competitive environments. • To develop short-term and long-term strategies aligned with changing external conditions. • To enhance strategic thinking, analytical skills, performance measurement, and team collaboration. • To develop competency in metrics-driven management through the use of KPIs and performance analysis.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Apply strategic frameworks and performance metrics in simulation.			K3	
CO2	Analyse business assumptions, forecasts and functional strategies.			K4	
CO3	Evaluate tools like swot and porter’s five forces in decision-making.			K5	
CO4	Analyse competitive scenarios using tools like dupont analysis.			K4	
CO5	Evaluate strategic decisions to assess competitive advantage.			K5	

UNIT I – INTRODUCTION TO STRATEGIC SIMULATION	12
Course overview and business scenario with key variables – introduction to the simulation platform and interface navigation – practice rounds 1 and 2 for familiarization – basics of strategy formulation – developing the strategy road map covering objectives, scope, and competitive advantage – result analysis and doubt clarification	
UNIT II – STRATEGY FORMULATION AND GROWTH HORIZONS	12
Designing long-term, mid-term, and short-term strategies – comprehensive business analysis and integrated decision-making process – execution of actual round 1 – application of dupont analysis for performance insight – reflection on strategic decisions and growth horizon alignment	
UNIT III – BUSINESS ASSUMPTIONS AND DEMAND FORECASTING	12
Understanding the theory of business and identifying sound strategic assumptions – forecasting demand patterns and market behavior – execution of actual round 2 – decision making review and performance evaluation – tactical adjustments based on forecasting outcomes	
UNIT IV – STRATEGIC FRAMEWORKS AND COMPETITIVE ANALYSIS	12
Overview of key strategy frameworks including swot, porter’s five forces, and value chain analysis – application of frameworks within the simulation environment – execution of actual rounds 3 and 4 – competitive analysis, performance interpretation, and feedback loops for strategic improvement	
UNIT V – METRICS-BASED DECISION MAKING AND STRATEGIC REFLECTION	12
Use of performance metrics across marketing, operations, and finance – KPI setting, monitoring, and interpretation – execution of actual rounds 5, 6, 7, and final round 8 – impact analysis of metrics on business outcomes – mid-course corrections, strategic review, lessons learned, and linkage of simulation experience to real-world business strategy	
TOTAL: 60 PERIODS	

TEXT BOOK:

1.A. Thompson, Margaret Peter Af, John E. Gamble & A.J. Strickland III, Crafting and Executing Strategy, McGraw Hill, 23rd edition, 2022

REFERENCES:

1. Nikhil D. Jonathan & Preethi G, Participant Handbook – Capstone Simulation, KCT Press
2. Henry Mintzberg, Bruce Ahlstrand & Joseph Lempel, Strategy Safari, Pearson Education, 2nd edition, 2020
3. Harvard Business Review articles on business simulation and strategic thinking — not a single book, but articles frequently updated.
4. Pankaj Ghemawat, Commitment: The Dynamic of Strategy, Free Press

E- resources

- <https://www.strategy simulation.com> – simulation-based learning
- Harvard Business Publishing Education: <https://hbsp.harvard.edu>
- MIT Sloan Learning Edge: <https://mitsloan.mit.edu/learningedge/> ➤
- <https://www.duedashboard.com> – real-time KPI monitoring tools
- YouTube learning: "capstone business simulation strategy tutorials"

MAPPING OF COs WITH POs / PSOs								
POs						PS Os		
COs	1	2	3	4	5	1	2	3
1	2	1	1	-	2	1	2	2
2	2	2	2	2	2	3	2	2
3	-	-	1	2	2	1	2	2
4	2	2	3	3	2	3	3	2
5	2	2	3	3	2	3	2	2
AVG.	2.00	1.75	2.00	2.20	2.00	2.20	2.20	2.00

PB25R01	SUMMER INTERNSHIP	L	T	P	C
		0	0	4	2

SUMMER INTERNSHIP – MINIMUM OF 4 WEEKS OF INTERNSHIP

The report along with the company certificate should be submitted within the two weeks of the reopening date of 3rd semester. The report should be around 40 pages. The report should be sent to the controller of examinations by the HoD through the principal, before the last working day of the 3rd semester.

**PROGRAMME ELECTIVE COURSES–(PE)
FUNCTIONAL SPECIALISATIONS**

1. students can take three elective subjects from two functional specializations.

STREAM/SPECIALIZATION: FINANCIAL MANAGEMENT

PB25P01	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To understand financial markets – investment avenues – and portfolio management. • To learn security valuation using fundamental & technical analysis. • To analyse economy, industry, and company data for investment decisions. • To examine emerging trends in investment management, including ESG investing, AI-driven analytics, and robo-advisory services. • To evaluate portfolio performance using risk-adjusted measures and benchmarking techniques.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Understand the investment environment, fundamental and technical analysis, and portfolio construction and evaluation			K2	
CO2	Interpret investment concepts, industry and economic analysis, market indicators, portfolio theory, and pricing models			K2	
CO3	Apply analytical tools such as Markowitz model, single-index model, camp and apt in investment decision-making			K3	
CO4	Analyse financial statements, market indicators, diversification benefits, and risk-adjusted returns			K4	
CO5	Analyse investment strategies, portfolio models, and performance measurement techniques			K4	

UNIT I – INVESTMENT ENVIRONMENT AND BASICS	9
Financial and economic meaning of investment – characteristics and objectives – types of investment avenues – investment process – investment alternatives – choice and evaluation – concepts of risk and return – time value of money – valuation of bonds and stocks.	
UNIT II – FUNDAMENTAL ANALYSIS AND VALUATION TECHNIQUES	9
Economic analysis and forecasting – industry analysis: classification, lifecycle, structure – company analysis: financial statements and earnings forecasting – tools for valuation – investor ratios – graham and dodd model (problems) – qualitative and quantitative factors in valuation.	
UNIT III – TECHNICAL ANALYSIS AND MARKET INDICATORS	9
Basics of technical analysis – chart patterns – trend analysis – Dow theory – moving averages – indicators and oscillators: RSI, ROC, MACD – empirical testing – market efficiency hypothesis – behavioural finance overview – contrarian strategies – sentiment indicators – decision-making under uncertainty.	
UNIT IV – PORTFOLIO CONSTRUCTION AND ASSET PRICING MODELS	9
Risk diversification and return maximization – portfolio theory – Markowitz model – feasible and efficient frontier – single-index model – construction of optimal portfolios – multi-index models – portfolio diversification strategies – capm (problems) – assumptions – security market line (SML) – Capital Market Line (CML) – Arbitrage Pricing Theory (APT) – risk factors and factor models – portfolio revision – mutual funds: types and strategies – taxation and regulation.	
UNIT V – PORTFOLIO PERFORMANCE AND ANALYTICS	9
Portfolio evaluation methods: sharpe ratio – Treynor ratio – Jensen's alpha (problems) – riskadjusted returns – benchmarking and attribution analysis – modern trends in portfolio analytics – ESG investing – passive vs active management – ROBO-advisors and AI in portfolio decisions.	
Total: 45 PERIODS	

TEXT BOOKS:

1. Prasanna Chandra, *investment analysis and portfolio management*, Mc Graw hill, 6th ed., 2021
2. Frank k. Reilly & Keith c. Brown (with Sanford j. Leeds), *investment analysis and portfolio management*, Cengage learning, 12th ed., 2024

REFERENCES:

1. Donald e. Fischer & Ronald j. Jordan, *security analysis and portfolio management*, phi learning, 8th ed., 2011
2. S. Kevin, *security analysis and portfolio management*, phi learning, 2015
3. V. A. Avishan, *securities analysis and portfolio management*, Himalaya publishing house, 2013
4. Zvi bodie, Alex kane, Alan j. Marcus (with mohanty), *investments*, Mc Graw hill, 13th ed., 2023

E RESOURCES

- Investopedia: security analysis
- NSE India: investor education
- money control: market tools
- Bloomberg markets

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	3	1	2	-	2	2
2	1	2	1	3	3	2	2	2
3	2	3	1	3	2	3	3	2
4	2	3	2	3	3	3	3	2
5	2	1	2	3	2	3	2	2
Avg.	1.60	2.25	1.80	2.6	2.4	2.75	2.4	2.2

PB25P02	FINANCIAL MARKETS	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To understand the structure, components, and functioning of Indian financial markets. - To learn primary and secondary market mechanisms, trading procedures, and regulations. - To gain insight into forex markets, international instruments, and hedging strategies. - To develop knowledge of emerging trends: fintech, algorithmic trading, Esg, and global financial analytics. - To analyze international financial risks and the use of derivatives for risk management.				
COURSE OUTCOMES The students will be able to			KNOWLEDGE LEVEL		
CO1	Understand Indian financial system – markets, instruments, global trends		K2		
CO2	Interpret roles of participants, regulators, and market mechanisms		K2		
CO3	Apply knowledge of market operations, trading, and risk management		K3		
CO4	Analyse market structure, intermediaries, and international instruments		K4		
CO5	Analyse instruments, strategies, and regulations for optimal decisions		K4		

UNIT I – OVERVIEW OF FINANCIAL MARKETS IN INDIA	9
Indian financial system – market classification: capital, money, forex, derivatives – participants – RBI, SEBI, CCIL – government policies – financial instruments & innovation.	

UNIT II – PRIMARY CAPITAL MARKET	9
Structure & functioning – IPO process – pricing & book building – securities & issues – intermediaries: merchant bankers, banks, rating agencies – SEBI guidelines & investor protection.	
UNIT III – SECONDARY MARKET & TRADING MECHANISM	9
Stock exchanges: NSE, BSE, OTCEI – listing – Depositories – trading & settlement – market indices – FIIS, mutual funds, derivatives – SEBI regulation.	
UNIT IV – GLOBAL FINANCIAL ENVIRONMENT & INTERNATIONAL INSTRUMENTS	9
International finance evolution – bop – exchange rate regimes – PPP, IRP, FRP – global institutions: IMF, bis, world bank – Euro bonds – fix market & hedging – interest rate instruments.	
UNIT V – INTERNATIONAL RISK & MARKET INNOVATIONS	9
Country/political risk – credit evaluation – futures/options for risk – fintech, algorithmic trading – sustainable finance – ESG investments – regulatory trends.	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Bharati v. Pathak, <i>Indian financial system: markets, institutions and services</i>, Pearson, 6th ed., 2023 2. Christopher Vinay & peter Phillips, <i>financial institutions, instruments and markets</i> Graw hill, 9th ed., 2022	

REFERENCES:

1. Bharati v. Pathak, Indian financial system: markets, institutions and services, Pearson, 6th ed., 2023
 2. Anthony saunders & Marcia cornett (with otgo Erhemjamts), financial markets and institutions, Mc Graw hill, 8th ed., 2022
 3. L.m. Bhole, financial institutions and markets Graw hill –non-ewer edition located beyond the 6th ed., 2017
 4. Frank. Fabozzi & Franco Modigliani, capital markets: institutions, instruments and risk management, phi, 5th ed., 2024
-
5. Zvi bodie, Alex Kane & Alani. Marcus, investments, Mc Graw hill –current now as 13th ed., published 2023
 6. S.S. Soma shekaraiah, Indian financial system and markets, horizon publishers, 2021

E-RESOURCES:

- SEBI–Investor Education
- RBI Publications
- NSE India Learning
- BSE India Investor Zone
- Investopedia: Markets
- Money Control

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	1	1	2	1	2	1
2	1	2	2	2	2	2	2	2
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	1	3	3	3	3	3	3
Avg.	1.60	2.25	2.4	2.4	2.6	2.4	2.6	2.4

PB25P03	BANKING AND FINANCIAL SERVICES	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To provide a comprehensive understanding of the Indian banking system, regulatory frameworks, and banking operations. • To develop knowledge of fund-based and fee-based financial services, risk management, and asset pricing. • To understand modern banking technology, e-banking, fintech applications, and emerging trends. • To enable evaluation of bank performance and compliance with Indian and global regulations • To understand asset-based financial services, including NBFCs, leasing, hire purchase, mutual funds, and credit rating.				
COURSE OUTCOMES The students will be able to			KNOWLEDGE LEVEL		
CO1	Understand Indian banking system, financial services, and emerging trends			K2	
CO2	Interpret regulations, fund management, e-banking, and service frameworks			K2	
CO3	Apply Banking knowledge for credit appraisal, risk management, and financial solutions			K3	
CO4	Analyse Banking structure, technology, and financial services to evaluate performance			K4	
CO5	Analyse Banking and financial services for effectiveness and regulatory compliance			K4	
UNIT I – INDIAN BANKING SYSTEM AND REGULATORY ENVIRONMENT					
					9

Overview of Indian banking structure – public banks – private banks – cooperative banks – RBI act 1934/2006 – BR act 1949 – NI act 1881/2002 – CRR – SLR – NPA norms – bank financial statements – camel framework – Basel norms overview	
UNIT II – BANK FUNDS MANAGEMENT AND RISK ANALYSIS	9
Sources of funds – deposit products – loan management – credit appraisal – ALM practices – investment strategies – financial distress prediction models – interest rate risk – credit risk – forex risk – operational and market risks – NPA management – bank mergers – market entry	
UNIT III – TECHNOLOGY IN BANKING AND E-BANKING	9
NEFT – RTGS –imps – plastic money – e-wallets – UPI – e-banking services – cyber security risks – ATM cash forecasting – IT Act 2000 – RBI financial sector technology vision – fintech applications in banking	
UNIT IV – ASSET-BASED FINANCIAL SERVICES	9
Role of financial services – NBFC types and regulation – leasing – hire purchase – credit rating – mutual funds – Nav calculation – underwriting – case studies in leasing and mutual funds	
UNIT V – INSURANCE AND FEE-BASED SERVICES, EMERGING TRENDS	9
Insurance overview – insurance act 1938 – IRDA guidelines – life, health, general insurance – venture capital – bill discounting – factoring – merchant banking – SEBI regulation – digital banking – block chain – green banking – financial inclusion – ESG compliance – Neo banks – data analytics – case studies on bank transformation	
Total: 45 PERIODS	
TEXT BOOKS: 1. Bharati v. Pathak, <i>Indian financial system: markets, institutions and services</i>, pearson, 6th ed., 2022 2. Peter s. Rose & sylvia Hudgins, bank management & financial services Graw hill – as of now, the 10thed. (co-authored with marcia Erhemjamts) was published in 2024.	

REFERENCES:

1. Padmanabhan Suresh & Justin Paul, management of banking and financial services, Pearson, 4th ed., 2017
2. Meera Sharma, management of financial institutions, phi, 2010
3. Meykhana, financial services GRAW Hill, 11th ed., 2023
4. Guruswamy's., banking theory, law and practice, Tata Mc Graw hill, 6th ed., 2023

E-RESOURCES:

- SEBI official site
- IRDA–insurance regulatory and development authority of India
- NSE India learning academy
- Indian banks 'association–knowledge repository

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	1	1	1	1	2	2
2	1	2	2	2	2	2	2	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	2	3	3	3	3	3	3
Avg.	1.80	2.5	2.6	2.6	2.6	2.5	2.8	2.6

PB25P04	FINANCIAL DERIVATIVES		L	T	P	C
			3	0	0	3
COURSE OBJECTIVES:	- To provide foundational and applied knowledge of financial derivatives – forwards, futures, options, and swaps. - To equip learners with skills to hedge risk, analyze pricing models, and implement trading strategies. - To understand operational mechanisms, valuation techniques, and market structures in Indian and global derivative markets. - To integrate theoretical and practical aspects of derivatives for risk management – aligned with current trends and regulations. - To analyze hedging, speculation, and arbitrage strategies using derivatives.					
COURSE OUTCOMES The students will be able to					KNOWLEDGE LEVEL	
CO1	Understand derivative types, futures/options, swaps, regulations, and strategic risk management				K2	
CO2	Interpret risk management concepts, futures trading, option valuation, swaps, and market regulations				K2	
CO3	Apply derivative instruments, pricing models (Black-Scholes), and swap valuation for hedging/trading				K3	
CO4	Analyse futures, options, swaps, and Indian regulatory framework to assess risk and market behaviour				K4	
CO5	Analyse derivative instruments, pricing models, and strategies for risk, speculation, and arbitrage				K4	

UNIT I – INTRODUCTION TO DERIVATIVES AND RISK MANAGEMENT	9
Definition and scope of derivatives – classification: forwards, futures, options, swaps – cash vs futures market – OTC vs exchange-traded contracts – settlement types – types of traders – benefits and risks – hedging – speculation – arbitrage strategies	

UNIT II – FUTURES CONTRACTS AND TRADING MECHANISMS	9
Features and specifications – margining system – marking to market – delivery mechanism – hedging with futures – futures on securities, indices, commodities, currencies – spot forward-futures price relationship – basis risk	
UNIT III – OPTIONS MARKETS AND VALUATION	9
Call and put options – American and European styles – intrinsic and time value – options on stocks, indices, currencies, futures – pay-off profiles – option pricing: binomial model, black-Scholes model – option Greeks – futures vs options	
UNIT IV – SWAPS AND STRUCTURED DERIVATIVES	9
Overview of swaps – interest rate swaps – currency swaps – intermediaries and swap dealers – warehousing concept – swap valuation – bonds, – credit risk – default risk – structured products and hybrid derivatives	
UNIT V – INDIAN DERIVATIVES MARKETS AND STRATEGIC APPLICATIONS	9
Evolution of derivatives in India – regulatory framework: SEBI, RBI – NSE/BSE contracts – stock options – index futures – commodity and interest rate derivatives – clearing and settlement – portfolio hedging – trading strategies – delta/gamma hedging – volatility trading – derivatives analytics – case studies	
TOTAL: 45 PERIODS	
Text books: 1. John c. Hull, <i>options, futures and other derivatives</i>, pearson, 11th ed., 2021 2. M. Ranganathan & R. Madhumathi, <i>derivatives and risk management</i>, Pearson education, 2nd edition, 2022	

References:

1. S. I. Gupta, *Financial Derivatives: theory, concepts and practice*, phi learning, 2012
2. Keith Redhead, *Financial Derivatives: an introduction*, phi learning, 2011
3. René m. stulz, *risk management and derivatives*, Cengage learning, 3rd edition, 2019
4. David a. Dubofsky & Thomas w. miller jr., *options and financial futures: valuation and uses*, Mc Graw-Hill education, 6th edition, 2023
5. J. R. Varma, *derivatives and risk management*, Tata Mc Graw-Hill education, 2nd edition, 2020
6. National Stock Exchange of India / Bombay stock exchange official contract specifications & circulars

E-RESOURCES:

- National Stock Exchange of India – Derivatives market section
- Securities and Exchange Board of India – Derivatives guidelines & circulars
- Investopedia – Derivatives concepts & tutorials
- Bombay Stock Exchange – Derivatives section
- Moocs – Derivatives markets course on Swayam / national programme on technology enhanced learning (NPTEL)

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	1	1	1	1	2	2
2	1	2	2	2	2	2	2	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	2	3	3	3	3	3	3
Avg.	1.60	2.5	2.4	2.4	2.4	2.4	2.6	2.8

PB25P05	FINTECH AND SUSTAINABILITY	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To provide a comprehensive understanding of fintech innovations and their role in transforming financial services. - To explore sustainable finance, ESG frameworks, green fintech, and regulatory technologies. - To develop strategic thinking in deploying fintech solutions for environmental, social, and governance goals. - To integrate case studies and practical applications for ethical and sustainable finance. - To explore the role of technology and sustainability in shaping the future of the financial services industry.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Understand fintech, ESG, and sustainable finance trends				K2
CO2	Interpret fintech technologies and ESG for financial innovation				K2
CO3	Apply fintech and ESG frameworks to create innovative models				K3
CO4	Analyse fintech ecosystem and ESG applications for strategic decisions				K4
CO5	Analyse fintech solutions and sustainable finance for ethical decision-making				K4

UNIT I – FOUNDATIONS OF FINTECH AND FINANCIAL INNOVATION	9
Definition, history, evolution – key enablers and trends – fintech ecosystem: stakeholders, startups, regulators – financial innovation overview – traditional vs digital finance – digital identity and APIs	
UNIT II – TECHNOLOGY PILLARS OF FINTECH	9
Core technologies: block chain, AI, ML, Big data, IoT– smart contracts – and open banking – cyber security – data privacy – cloud computing in financial applications	

UNIT III – PRINCIPLES OF SUSTAINABLE FINANCE AND ESG	9
Sustainable finance: definitions, frameworks, need – ESG integration in investment – impact investing and green finance – regulatory push for ESG – SDGS and finance role	
UNIT IV – FINTECH SOLUTIONS FOR SUSTAINABILITY	9
Green fintech: carbon tracking apps, sustainable investing platforms – green bonds and block chain ESG instruments – digital financial inclusion – reg tech for ESG compliance – AI in sustainability analytics	
UNIT V – INDUSTRY USE CASES, CHALLENGES AND STRATEGIC DEPLOYMENT	9
Case studies: India stack, stellar, ant forest – inclusive finance and SME sustainability – climate fintech start-ups – tokenized carbon markets – fintech for disaster risk finance – global trends – challenges: regulation, green washing, tech barriers – policy frameworks – ethical and strategic deployment	
TOTAL: 45PERIODS	
TEXT BOOKS:	
1. Douglas w. Abner, Janos Barberies & ross p. Buckley, <i>the evolution of fintech</i>, university of Hong Kong faculty of law, 2023 2. Eugenio Campiglio Tal., climate change challenges for central banks and regulators, nature climate change, 2024.	
REFERENCES:	
1. Patrick Schoeffel, taming the beast: a scientific definition of fintech, journal of innovation management, 2023. 2. Olaf weber & Blair felt mate, sustainable banking: managing impact of financial institutions, university of Toronto press, 2024. 3. Simon Zedek & nick robins, fintech and sustainable development inquiry, 2024 4. Pranay Gupta & T. Mandy Tham, Fintech: the new DNA of financial services, De g press,2024. 5. Thomas Punchman, fintech: drivers and market developments, financial internet quarterly, 2024.	

E-RESOURCES:

- World bank – green finance & fintech reports / insights
- United nations environment programme finance initiative – sustainable finance frameworks & guidelines
- Nithi Aayog – fintech reports & policy documents
- Global sustainable investment alliance – global ESG investment trends report
- Monetary authority of Singapore – green fintech programs & innovation initiatives
- Organization for economic co-operation and development – ESG & fintech policy reports

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	1	1	1	-	2	1
2	1	2	2	3	2	2	3	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	2	3	3	3	3	3	3
Avg.	1.60	2.5	2.4	2.6	2.4	2.75	2.8	2.6

PB25P06	BEHAVIOURAL FINANCE	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To provide an understanding of psychological factors influencing financial decision-making and market behaviour. - To explore behavioural theories, cognitive biases, heuristics, and market anomalies affecting investor actions. - To analyse the role of arbitrage, managerial biases, and institutional constraints in financial markets. - To develop the ability to apply behavioural insights in investment strategies, corporate finance decisions, and fintech applications. - To analyse managerial behaviour, investor sentiment, and deviations from rational decision-making in financial contexts.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Understand behavioural finance concepts, EMH limitations, and investor psychology				K2
CO2	Interpret behavioural paradoxes, cognitive biases, and market anomalies				K2
CO3	Apply behavioural theories and arbitrage concepts in financial decision-making				K3
CO4	Analyse managerial behavioural aspects and deviations from traditional finance models				K4
CO5	Analyse behavioural influences on market efficiency and develop rational financial strategies				K4

UNIT I – FOUNDATIONS OF BEHAVIOURAL FINANCE	9
Introduction to behavioural finance – role of security prices – efficient market hypothesis and its limitations, EMH failing, EMH in supply-demand framework – investment decisions under uncertainty, equilibrium expected return model – expected utility theory – introduction to neoclassical economics – return predictability and market anomalies – limitations to arbitrage.	

UNIT II – BEHAVIOURAL THEORIES AND DECISION FRAMEWORKS	9
Game theory and behavioural paradoxes: Nash equilibrium, Keynesian beauty contest, prisoner's dilemma – monty hall, St. Petersburg, Allais and Ellsberg paradoxes – prospect theory – behavioural portfolio theory – SP/a theory – historical evolution of rational thought: pascal to Fermat to Friedman to savage.	
UNIT III – COGNITIVE BIASES AND HEURISTICS IN FINANCE	9
Heuristics and decision shortcuts – investor biases: overconfidence, anchoring, representativeness – Bayesian decision-making – emotional and cognitive biases – forecasting errors – group behaviour and herding – behavioural investing styles.	
UNIT IV – ROLE OF ARBITRAGEURS AND MARKET BEHAVIOUR	9
Concept and classifications of arbitrage – long-short strategies – noise trader risk – transaction and short-selling costs – fundamental vs technical arbitrage – destabilizing informed trading – market anomalies and arbitrage limitations.	
UNIT V – INDUSTRY USE CASES, CHALLENGES AND STRATEGIC DEPLOYMENT	9
Firm behaviour under behavioural constraints – market timing and catering theory – managerial biases and agency conflicts – behavioural aspects in capital structure and dividend decisions – pricing bubbles and asset mispricing – behavioural finance in regulation, fintech, robo-advisory, and ESG investing.	
TOTAL: 45 PERIODS	
TEXT BOOKS	
1. Andrei Schleifer, <i>inefficient markets: an introduction to behavioural finance</i> , oxford university press, 2024.	
REFERENCES	
1. Daniel Kahneman, Paul Slavic & Amos Tversky, <i>Judgment under uncertainty: Heuristics and Biases</i>, Cambridge university press, 2024. 2. Meir Statman, <i>behavioural finance: the second generation</i>, CFA institute research foundation, 2024.	

3. James Moutier, *the little book of behavioural investing: how not to be your own worst enemy*, Wiley, 2024.
4. Michael M. Pompeian, *behavioural finance and wealth management: how to build investment strategies that account for investor biases*, Wiley, 2024.
5. Richard h. Thaler, *misbehaving: the making of behavioural economics*, w. W. Norton & company, 2024

E-RESOURCES:

- Behavioural finance resources – CFA institute
- Research papers – social science research network (behavioural economics section)
- Nobel prize lectures – Nobel prize lectures by Daniel Kahneman and Richard h. Thaler
- Articles – Harvard business review on behavioural strategy
- Video lectures – yale university / open yale courses (prof. Robert j. Shiller)
- Academic search – google scholar (behavioural finance literature)

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	1	1	1	1	2	2
2	1	2	2	2	2	2	2	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	2	3	3	3	3	3	3
AVG.	1.80	2.5	2.6	2.6	2.6	2.5	2.8	2.6

STREAM/SPECIALIZATION: MARKETING MANAGEMENT

PB25P07	RETAIL MARKETING	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To provide a comprehensive understanding of global and Indian retail marketing trends and formats. - to develop knowledge on strategic retail decisions related to location, merchandising, pricing, and operations. - To understand shopper behaviour, customer relationship management, and retail analytics. - To analyse contemporary retail innovations, sustainability practices, and digital transformation in retailing. - To analyse retail strategies, technological innovations, and sustainable practices for achieving competitive advantage in the retail sector.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Understand retail trends, formats, operations, shopper behaviour and innovations		K2		
CO2	Interpret retail business models and strategic decision areas		K2		
CO3	Apply retail marketing and operational tools for effective retail management		K3		
CO4	Analyse retail performance, shopper insights and competitive retail environment		K4		
CO5	Analyse retail strategies and innovations for sustainable competitive advantage		K4		
UNIT I – RETAILING ENVIRONMENT AND TRENDS			9		

Overview of global retailing – emerging retail formats – challenges and opportunities – retail trends in India – growth drivers – socio-economic and technological influences – government policies and FDI in retail.	
UNIT II –RETAIL FORMATS AND BUSINESS MODELS	9
Classification of retail formats – organized vs unorganized retail – specialty stores, supermarkets, hypermarkets, departmental stores and malls – role of MNCS – franchising and private labels – online retailing, omni channel formats and retail entrepreneurship.	
UNIT III – STRATEGIC RETAIL DECISIONS	9
Retail location analysis – store layout and atmospherics – retail Positioning and image – service quality management – pricing strategies – retail supply chain management – category management – merchandise planning – vendor selection and buying.	
UNIT IV –RETAIL OPERATIONS AND SHOPPER BEHAVIOUR	9
Visual merchandising – space planning – inventory management – retail accounting and audits – technology in retail operations – advertising and promotions – MIS and analytics – shopper profiling, segmentation and buying behaviour – CRM and loyalty management.	
UNIT V – CONTEMPORARY RETAIL INNOVATIONS AND SUSTAINABILITY	9
E-commerce and mobile commerce – sustainable and ethical retailing – retail innovations: automation, RFID, smart shelves, cashier-less stores – experiential retailing – meta verse shopping – challenges in Indian retail – future trends and strategic retail transformation.	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Michael levy, Barton a. Weitz & Ajay pandit, <i>retail management</i>, Tata Mc Graw-Hill education, 10th edition, 2024. 2. Ramakrishnan & y. R. Srinivasan, <i>Indian retailing: text and cases</i>, oxford university press, 4th edition, 2024.	

REFERENCES:

1. Chetan Bajaj, Rajnish Tewari & Nidhi Srivastava, *retail management*, oxford university press, 4th edition, 2024.
2. Swapna Pradhan, *retailing management: text and cases*, Tata Mc Graw-Hill education, 7th edition, 2024.
3. Ogden, *integrated retail management*, Biztantra, 4th edition, 2024.
4. Patrick m. Dunne & Robert f. Lush, *retailing*, Thomson learning, 5th edition, 2024.
5. Dr. Jaspreet Kaur, *customer relationship management*, cogent learning solutions, 2nd edition, 2024.

E-RESOURCES:

- Retail management course – national programme on technology enhanced learning (NPTEL)
- Industry body insights – retailers association of India (rai)
- Articles and case insights – Harvard business review (retail section)
- Retail industry discussions – retail wire
- Retail trends blog – shoplifty blog
- Global retail statistics – Statista retail data

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	1	-	2	1	2	2
2	2	2	2	2	2	3	2	2
3	-	-	1	2	2	1	2	2
4	2	2	3	3	2	3	3	2
5	2	2	3	3	2	3	2	2
AVG.	2.00	1.75	2.00	2.20	2.00	2.20	2.20	2.00

PB25P08	CONSUMER BEHAVIOUR AND NEURAL MARKETING	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To provide a comprehensive understanding of consumer decision making and behavioural influences. • To analyse psychological, sociological, cultural and technological factors shaping consumer behaviour. • To develop the ability to apply consumer insights in marketing strategy and Positioning. • To introduce neuro marketing concepts, tools and ethical considerations in modern marketing practice. • To analyse consumer psychology, cognitive processes, and neural responses involved in consumption and choice behaviour.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Understand consumer behaviour concepts, internal and external influences			K2	
CO2	Interpret consumer decision models and socio-cultural dynamics			K2	
CO3	Apply behavioural and neuromarketing tools in marketing decisions			K3	
CO4	Analyse consumer psychology, decision processes and neural responses			K4	
CO5	Analyse neuromarketing applications and ethical implications in marketing strategy			K4	

UNIT I – FOUNDATIONS AND RESEARCH IN CONSUMER BEHAVIOUR	9
Understanding consumer behaviour – consumption concepts and consumer orientation – evolution and relevance of consumer behaviour – research approaches: interpretive and quantitative – influence of technology, demographics and economic factors on consumer behaviour.	

UNIT II – INTERNAL DRIVERS OF CONSUMER BEHAVIOUR	9
Motivation and consumer needs – perception and information processing – learning theories and consumer experiences – attitudes, beliefs and cognitive responses – personality traits – consumer self-concept and lifestyle influences.	
UNIT III – EXTERNAL INFLUENCES AND DECISION-MAKING MODELS	9
Social class and culture – cross-cultural consumer insights – family life cycle and household decision-making – reference groups and opinion leadership – role of communication and social media – traditional vs contemporary consumer behaviour models – individual vs industrial buying behaviour – consumer decision process – innovation adoption and diffusion.	
UNIT IV – INTRODUCTION TO NEUROMARKETING AND CONSUMER NEUROSCIENCE	9
Consumer neuroscience concepts and applications – brain mapping in marketing – neuro marketing vs traditional marketing research – Conscious Vs Unconscious decision processes – ethical issues and limitations.	
UNIT V – NEUROMARKETING TOOLS, SENSORY BRANDING AND APPLICATIONS	9
Attention and sensory mechanisms – Eye tracking and biometric tools – Emotional triggers and memory encoding – sensory branding – case studies in Neuro marketing campaigns and business impact.	
Total: 45 PERIODS	
Text books: 1. Leon g. Schiffman, s. Ramesh Kumar & joseph wise BLit, <i>consumer behaviour</i>, Pearson education, 12th edition, 2024. 2. Ramanuja Majumdar, <i>consumer behaviour – insights from Indian market</i>, phi learning, 2nd edition, 2024.	

References:

1. Barry j. Basin, eric g. Harris & Ashutosh Mohan, *consumer behaviour – a south Asian perspective*, Cengage learning, 2nd edition, 2024.
2. Michael r. Solomon & Cristal Antonia Russell, *consumer behaviour: buying, having and being*, Pearson education, 14th edition, 2024.
3. David I. Loudon & albert j. Della bitta, *consumer behaviour*, Mc Graw-Hill education, 5th edition, 2024.
4. Paul e. Peter & Jerry c. Olson, *consumer behaviour and marketing strategy*, Tata Mc Graw-Hill education, 8th edition, 2024.

E-resources:

- Consumer behaviour course – national programme on technology enhanced learning (I)
- Articles and case insights – Harvard business review (consumer insights section)
- Market data & consumer outlook – Statista
- Shopper behaviour reports – google think with google
- Industry reports – McKinney & company consumer behaviour trends

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	2	2	2	1	2	1
2	2	2	3	3	3	2	3	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	3	3	3	3	3	3	3
Avg.	1.8	2.75	2.80	2.80	2.80	2.4	2.8	2.6

PB25P09	SERVICES MARKETING	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES	- To develop an understanding of the distinctive nature and scope of services marketing. - To analyse service design, service quality, delivery systems and strategic marketing decisions. - To apply service marketing tools across various service industries and digital platforms. - To build capabilities in customer experience management, loyalty creation and service innovation. - To analyse service quality gaps, pricing decisions, demand–supply management, and customer feedback mechanisms.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Understand service characteristics, marketing environment, quality concepts and customer experience	K2			
CO2	Interpret service marketing mix, delivery systems and industryspecific strategies	K2			
CO3	Apply service design tools, CRM practices and communication strategies	K3			
CO4	Analyse service quality gaps, pricing decisions, demand–supply management and feedback mechanisms	K4			
CO5	Analyse service marketing strategies and loyalty programs across service sectors	K4			

UNIT I – Foundations of Services Marketing and Service Economy	9
Definition and characteristics of services – Nature and scope of services – Service economy evolution – Global and Indian service sector trends – Distinction between products and services – Service classification – Growth drivers and challenges in services marketing.	
UNIT II – Service Marketing Environment and Strategic Decisions	9

Service marketing opportunities – Segmentation, targeting and Positioning in services – Expanded marketing mix (7Ps) – Environmental analysis – Role of technology in service delivery – Emerging global trends in services marketing.	
UNIT III – Service Design and Quality Management	9
Service design and blueprinting – Service lifecycle management – GAP model of service quality – SERVQUAL measurement – Customer feedback systems – New service development – Quality Function Deployment (QFD) in services.	
UNIT IV – Service Delivery, Pricing and Communication	9
Designing service delivery systems – Service marketing triangle – Pricing strategies and methods – Demand and supply management – Integrated service communication strategies – Use of digital media and AI in service promotion.	
UNIT V – Industry Applications, Customer Experience and Loyalty	9
Service marketing strategies in healthcare, tourism, hospitality, education, logistics, entertainment, online services and public utilities – CRM and personalization – Use of analytics – Service encounters – Customer satisfaction and complaint recovery – Customer experience design – Loyalty and advocacy – Future trends in services marketing.	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Christopher H. Lovelock & Jochen Wirtz, <i>Services Marketing: People, Technology, Strategy</i>, World Scientific / Pearson Education, 9th Edition, 2023. 2. R. Srinivasan, <i>Services Marketing: The Indian Context</i>, PHI Learning, 4th Edition, 2025.	

REFERENCES:

1. J. E. G. Bateson & K. Douglas Hoffman, *Services Marketing: Concepts, Strategies and Cases*, Cengage Learning, 6th Edition, March 2023.
2. Valarie A. Zeithaml, Mary Jo Bitner, D. Dwayne Gremlin & Ajay Pandit, *Services Marketing: Integrating Customer Focus Across the Firm*, Mc Graw-Hill Education, 8th Edition, 2024.
3. Christian Greenrooms, *Service Management and Marketing: Managing the Service Profit Logic*, Wiley, 4th Edition, 2016.

E-RESOURCES:

- Service Management Articles & Tools – Mind Tools
- Future Service Strategy Insights – Service Futures
- Marketing Knowledge Hub – Marketing Profs
- Online Course – Services Marketing Essentials on Coursera
- Case Studies & Strategy Articles – Harvard Business Review (Service Strategy Section)

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	–	2	2	2	1	2	1
2	2	2	3	3	3	2	3	3
3	2	3	3	3	3	3	3	3
4	2	3	3	3	3	3	3	3
5	2	3	3	3	3	3	3	3
Avg.	1.8	2.75	2.80	2.80	2.80	2.4	2.8	2.6

PB25P10	SALES AND DISTRIBUTION MANAGEMENT		L	T	P	C
			3	0	0	3
COURSE OBJECTIVES:	- To develop an understanding of the nature, scope and importance of sales management and personal selling. - To enable learners to evaluate sales forecasting, budgeting decisions and sales force management practices. - To provide knowledge on designing effective sales territories, channel structures and distribution strategies. - To familiarize students with logistics and supply chain components influencing distribution performance. - To expose learners to the integration of digital technologies, ecommerce logistics and emerging trends in sales and distribution.					
COURSE OUTCOMES The students will be able to					KNOWLEDGE LEVEL	
CO1	Explain fundamentals of sales management, personal selling, distribution channels, logistics and technology integration.				K2	
CO2	Interpret selling techniques, sales motivation, channel design and logistics processes.				K2	
CO3	Apply sales forecasting, budgeting, sales force and channel management concepts.				K3	
CO4	Analyse sales performance, compensation systems, channel conflicts and supply chain effectiveness.				K4	
CO5	Analyse sales and distribution strategies to improve organizational performance				K4	

UNIT I – Fundamentals of Sales Management and Personal Selling	9
Sales management – Nature, scope and importance – Sales management Positions – Theories and strategies in personal selling – Steps in the selling process – Relationship selling – Sales forecasting and budgeting decisions – Online selling: potential, merits and demerits – Emerging digital platforms in sales – Use of CRM systems in personal selling.	

UNIT II – Sales Organization, Territories and Sales Force Management	9
Designing sales territories – Establishing sales quotas – Sales organization structures – Sales force recruitment and selection – Training and development – Motivating the sales force – Compensation systems – Performance evaluation and control – Ethical issues in sales management.	
UNIT III – Distribution Management and Channel Design	9
Introduction to distribution management – Need and scope – Types and levels of marketing channels – Retailing and wholesaling – Channel design and selection – Channel conflict and coordination – Trends in omni-channel marketing.	
UNIT IV – Logistics and Supply Chain Management	9
Scope and components of logistics – Inventory management of finished goods – Warehousing and material handling – Modes of transportation and role in supply chain – Technology in logistics: Bar coding, RFID and IoT in tracking.	
UNIT V – Integration of Sales, Channels and Technology	9
Sales and distribution alignment – Strategic use of IT in sales and distribution – E-commerce logistics – Last-mile delivery challenges – Case studies from Indian and global markets.	
TOTAL : 45 PERIODS	
TEXT BOOKS: 1. Krishna K. Havaladar & Vasant M. Cavale, <i>Sales and Distribution Management: Text and Cases</i> , Mc Graw Hill, 4th Edition, 2023.	

REFERENCES:

1. 1. S. L. Gupta, *Sales and Distribution Management: Text and Cases – An Indian Perspective*, Excel Books, 2nd Edition, 2021.
2. Penglai Venugopal, *Sales and Distribution Management – An Indian Perspective*, Sage Publications, 2nd Edition, 2022.
3. Richard R. Still, Edward W. Cundiff & Norman A. P. Giovani (with Sandeep Puri), *Sales Management – Decisions, Strategies and Cases*, Pearson Education, 7th Edition, 2024.
4. P. K. Sinha & D. P. Uniyal, *Managing Retailing*, Oxford University Press India, 4th Edition, 2025.

E-Resources:

- Service Management Articles & Tools – Mind Tools
- Future Service Strategy Insights – Service Futures
- Marketing Knowledge Hub – Marketing Profs
- Online Course – Services Marketing Essentials on Coursera
- Case Studies & Strategy Articles – Harvard Business Review (Service Strategy Section)

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	1	1	2	1	2	2
2	2	2	2	2	2	3	2	2
3	-	-	1	2	2	1	2	2
4	2	2	3	3	2	3	3	2
5	2	2	3	3	2	3	2	2
Avg.	2.00	1.75	2.00	2.20	2.00	2.20	2.20	2.00

PB25P11	PRODUCT AND BRAND MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To develop understanding of product development process and product life cycle management. • To enable learners to understand branding concepts, brand identity and brand equity creation. • To provide knowledge on strategic brand building, portfolio management and global branding practices. • To familiarize students with digital branding, experiential marketing and integrated brand communication. • To expose learners to brand valuation methods, performance measurement and emerging branding trends.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Explain concepts of product development, branding fundamentals and brand strategy.			K2	
CO2	Interpret brand Positioning, extension strategies, marketing mix and valuation metrics.			K2	
CO3	Apply new product development processes, portfolio management and IMC tools.			K3	
CO4	Analyse product life cycle, brand performance, digital campaigns and global branding practices.			K4	
CO5	Analyse product ideas, brand strategies and valuation methods for sustaining brand equity.			K4	

UNIT I – Product Development and Lifecycle Management	9
New product development process – Idea generation to commercialization – Types of innovation – Product life cycle stages – Product plans – Product strategy alignment with corporate vision – Role of product managers – Strategic tools for lifecycle extension – Introduction to brand management – Brand management process – Brand choice decisions and models.	
UNIT II – Branding Fundamentals and Identity Formation	9
Foundations of branding – Concepts of brand, branding and brand equity – Elements of branding – Brand identity and image – Brand Positioning models – Brand personality and differentiation strategies – Success factors of brand management – Brand communication and storytelling – Brand valuation – Brand tracking and monitoring.	
UNIT III – Strategic Brand Building and Management	9
Brand architecture – Brand extension strategies – Revitalizing declining brands – Brand portfolio management – Managing brands across categories and geographies – Indian and global branding practices – Cross-cultural branding dynamics.	
UNIT IV – Digital and Experiential Branding	9
Digital branding strategies – social media and influencer marketing – Managing brand experience over time – Co-branding and strategic alliances – Internal branding and employee brand ambassadors – Branding scorecards and performance indicators.	
UNIT V – Marketing Mix, Brand Communication and Future Trends	9
Marketing mix decisions – Brand pricing strategies – Product distribution systems – Retail and service branding – Brand promotion and advertising – Public relations and event branding – Industrial and international product branding – Integrating IMC – Brand performance measurement – Financial valuation of brands – Sustainable branding – Meta verse and AI powered branding – Case studies on brand transformations.	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Michael Levy, Barton A. Weitz & Ajay Pandit, <i>Retail Management</i> , Tata Mc Graw-Hill Education, 10th Edition, 2024.	

REFERENCES:

1. Kevin Lane Keller, A. M. G. Parameswaran & Isaac Jacob, *Strategic Brand Management*, Pearson Education India, 5th edition, 2020.
2. T. K. Panda, *Product and Brand Management*, Oxford University Press, **2016**.
3. U. C. Mathur, *Product and Brand Management*, Excel Books, **2012**.

E-Resources:

- Brand strategy insights – Branding Strategy Insider
- Global brand valuation reports – Interbrand
- Branding case studies and articles – Harvard Business Review
- Brand management online courses – Coursera
- Product & brand success story videos – Harvard Business

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	1	1	2	1	2	2
2	2	2	2	2	2	3	2	2
3	-	-	1	2	2	1	2	2
4	2	2	3	3	2	3	3	2
5	2	2	3	3	2	3	2	2
Avg.	2.00	1.75	2.00	2.20	2.00	2.20	2.20	2.00

STREAM/SPECIALIZATION: HUMAN RESOURCE MANAGEMENT

PB25P13	KNOWLEDGE MANAGEMENT AND INNOVATION	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To develop an understanding of the nature, scope and importance of sales management and personal selling. • To enable learners to evaluate sales forecasting, budgeting decisions and sales force management practices. • To provide knowledge on designing effective sales territories, channel structures and distribution strategies. • To familiarize students with logistics and supply chain components influencing distribution performance. • To expose learners to the integration of digital technologies, e-commerce logistics and emerging trends in sales and distribution.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Explain knowledge management concepts, knowledge types and innovation.	K2			
CO2	Apply KM strategies and leadership practices to support organizational learning.	K3			
CO3	Design KM frameworks and knowledge sharing systems.	K3			
CO4	Analyse the role of AI, analytics and collaborative technologies in KM.	K4			
CO5	Analyse KM practices and innovation frameworks for knowledge-sharing culture	K4			

UNIT I – Foundations of Knowledge and Innovation	9
Knowledge economy and evolution from data to information to knowledge – Types of knowledge and drivers of knowledge management – Intellectual capital and knowledge society – Introduction to innovation with types and levels of innovation – Knowledge management in virtual teams and real-world case studies	
UNIT II – Strategic Alignment of Knowledge and Innovation	9
Integration of knowledge management with strategic management – Creating KM awareness and articulation – Strategic evaluation and agile alignment practices – Leadership for KM and role of Chief Knowledge Officer (CKO) – Building learning organizations – KM metrics and performance measurement systems	
UNIT III – Designing KM Architecture and Frameworks	9
Knowledge audit and gap analysis – Business environment analysis for KM – Formation of KM teams and system blueprint design – Tactical KM approaches including portals and Communities of Practice (CoPs) – Capturing, storing, and sharing organizational knowledge – Implementation challenges and best practices	
UNIT IV – Technologies for Knowledge Management	9
Intranet, groupware, and collaborative intelligence tools – Web 2.0, portals, and social media integration – Knowledge security and ethical considerations – Artificial intelligence applications in KM – Role of data analytics in knowledge discovery – Selection and evaluation of KM platforms and packages	
UNIT V – Knowledge Sharing, Innovation Culture, and Emerging Practices	9
Reward and recognition systems for knowledge sharing – Change management for KM adoption – Creating a knowledge-sharing culture and continuous improvement – KM maturity models and KM-led innovation frameworks – Benchmark KM success stories from India and global organizations – Design thinking principles, cross-functional collaboration, idea incubation, knowledge co-creation, and future trends in sustainable knowledge ecosystems	
TOTAL (L:45): 45 PERIODS	
TEXT BOOKS:	
1.Alkir, K., Knowledge Management in Theory and Practice, MIT Press, 4 th Ed.,2023	

REFERENCES:

1. Jennex, Eugene Murray (Ed.), Knowledge Management, Innovation, and Entrepreneurship in a Changing World, IGI Global,
- Madan Mohan Rao, Knowledge Management Tools and Techniques, Elsevier Inc., 2007
2. Morabito, Sack & Bate, Designing Knowledge Organizations: A Pathway to Innovation Leadership, John Wiley & Sons, 2018
3. Fernandez, Gonzalez & Sabharwal, Knowledge Management, Pearson, 2007
4. <https://www.hbr.org>– Article on KM, innovation and organizational
1. Peter Drucker, HB Ron Knowledge Management, Harvard Business Review Press, 1995

E RESOURCES

- <https://www.apqc.org>– Best practices in knowledge management
- <https://www.kmworld.com> – KM trends, tools and thought leadership
- <https://www.coursera.org> – Online courses on Knowledge Management (by U. of Melbourne, TU Delft, etc.)

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	-	-	-	-	-	-	-
2	2	2	1	2	3	2	2	3
3	2	3	2	3	3	3	2	3
4	2	3	3	3	3	3	3	3
5	2	1	2	3	2	2	2	2
Avg.	1.80	2.25	2.0	2.75	2.75	2.5	2.75	2.75

PB25P14	INDUSTRIAL RELATIONS AND LABOUR LEGISLATIONS	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To provide an understanding of the concept, scope, and significance of industrial relations and the role of trade unions in organizations. - To examine the legal framework governing industrial disputes, labour welfare, and dispute resolution mechanisms in India. - To familiarize students with labour legislations related to wages, working conditions, and employee rights. - To develop knowledge about employment regulations, compensation laws, and workforce equality provisions. - To analyse employment regulations, compensation laws, and equality provisions that influence workforce management and organizational policies.				
COURSE OUTCOMES The students will be able to				KNOWLEDGE LEVEL	
CO1	Explain the concepts of industrial relations, trade unions, and their role in maintaining industrial harmony.			K2	
CO2	Apply knowledge of industrial dispute resolution mechanisms and labour welfare provisions to workplace situations.			K3	
CO3	Interpret and apply labour laws related to wages and working conditions in organizational contexts.			K2	
CO4	Analyse employment regulations, compensation laws, and equality provisions affecting workforce management.			K4	
CO5	Analyse social security laws, labour reforms, and compliance mechanisms for effective HR and legal management.			K4	

UNIT I – Industrial Relations and Trade Unions	9
Concept, scope, and objectives of industrial relations – Importance and approaches to IR – Indian industrial relations system – Trade Union Act, 1926 covering definitions, objectives, functions, registration procedures, rights and responsibilities – Issues and challenges in trade unionism – Employee relations in IT and emerging sectors	
UNIT II – Industrial Disputes and Labour Welfare	9
Industrial Disputes Act, 1947 and causes and types of industrial disputes – Strikes and lockouts – Dispute resolution mechanisms– Strategies for promoting industrial peace –	

Labour welfare measures with statutory and voluntary provisions – Welfare funds – Labour issues in the informal and gig economy	
UNIT III – Legal Framework: Wages and Working Conditions	9
Genesis and principles of labour legislation in India – Factories Act, 1948 – Minimum Wages Act, 1948 – Payment of Wages Act, 1936 – Payment of Bonus Act, 1965 – Implications for workforce analytics and wage modelling	
UNIT IV – Legal Framework: Employment, Training and Compensation	9
Industrial Employment (Standing Orders) Act, 1946 – Apprentices Act, 1961 – Equal Remuneration Act, 1976 – Payment of Gratuity Act, 1972 – Employee Compensation Act, 2013 – Workforce diversity, equity, and fairness considerations in labour analytics	
UNIT V – Social Security, Employee Protection and Emerging Compliance Trends	9
Employees’ Provident Fund and Miscellaneous Provisions Act, 1952 – Employees’ State Insurance Act, 1948 – Maternity Benefit Act, 1961 – Contract Labour (Regulation and Abolition) Act, 1970 – Child Labour (Regulation) Act, 1986 – Digitalization of labour law compliance – Labour Codes and reforms and Industrial Relations Code – Role of HR analytics and technology in grievance redressal, compliance monitoring, and legal reporting	
Total (L:45): 45 PERIODS	
Text Book: 1. S.C.Srivastava, Industrial Relations and Labour Laws, Vikas Publishing House, 8th Revised Ed., 2022	
References: 1. C.B. Memorial & S. Mamoria (with P. Subba Rao), Dynamics of Industrial Relations, Himalaya Publishing House, 16th Ed., 2023 2. C. B. Mamoria & S. Mamoria, Dynamics of Industrial Relations, Himalaya Publishing House, 16th Ed., 2023 3. P.K. Padhi, Labour and Industrial Laws, PHI Learning, 5th Ed., 2024 4. Taxmann, Labour Laws with Code on Wages, etc., 2025 Edition	
E Resources ➤ Ministry of Labour and Employment, Government of India–https://labour.gov.in ➤ ILO Legal Database–https://www.ilo.org/dyn/natlex ➤ PRS India Labour Code Tracker–https://prsindia.org ➤ EPFO India–https://www.epf india.gov.in ➤ National Institute of Labour Economics Research and Development–https://www.nilerud.org	

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	2	1	2	2	2	2
2	2	3	2	2	2	2	3	2
3	3	3	2	2	2	3	3	2
4	2	3	3	2	2	2	3	3
5	2	3	3	3	3	2	3	3
Avg.	2.2	2.8	2.4	2.0	2.2	2.2	2.8	2.4

PB25P15	NEGOTIATION AND CONFLICT MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To demonstrate conceptual knowledge of negotiation fundamentals, strategies, types of conflict, and approaches to conflict resolution. - To interpret negotiation principles, strategic bargaining techniques, and the sources of interpersonal and organizational conflict. - To develop the ability to apply negotiation strategies, ethical principles, and conflict mapping techniques in resolving disputes effectively. - To analyse negotiation power dynamics, causes of organizational conflict, and their impact on workplace productivity and costs. - To evaluate negotiation strategies, conflict resolution models, and the ethical use of digital tools in modern conflict management practices.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate conceptual knowledge of negotiation fundamentals, strategies, types of conflict and resolution approaches.			K2	
CO2	Interpret negotiation principles, strategic bargaining approaches and sources of interpersonal and organizational conflict.			K2	
CO3	Apply negotiation strategies, ethical principles and conflict mapping techniques to resolve disputes.			K3	
CO4	Analyse negotiation power dynamics, organizational conflict causes and cost implications on workplace productivity.			K4	
CO5	Analyse negotiation strategies, resolution models and ethical use of digital tools in conflict management.			K4	

UNIT I – Fundamentals of Negotiation	9
Nature and characteristics of negotiation – Dimensions and structure – Negotiation norms and values – Types of negotiation – Negotiation process – Role of perception and preparation – Communication and influence – Key negotiation techniques – Contemporary issues in negotiation.	
UNIT II – Negotiation Strategies and Ethics	9

Planning for negotiation – Strategic and tactical approaches – Distributive and integrative bargaining – Sources and use of negotiation power – Cross-cultural negotiation nuances – Ethical considerations and dilemmas in negotiation.	
UNIT III – Introduction to Conflict Management	9
Definition and nature of conflict – Types and sources of conflict – Process and structural conflict models – Conflict domains and emerging trends – Conflict mapping and tracking – Relationship between conflict and performance – Advantages and disadvantages of workplace conflict.	
UNIT IV – Managing Interpersonal, Group and Organizational Conflicts	9
Personality and individual differences – Interpersonal and team-based conflict – Organizational conflict – Conflict with subordinates and superiors – Techniques for resolving group conflict – Conflict strategies in diverse teams and matrix structures.	
UNIT V – Conflict Resolution Models and Digital Workplace Dynamics	9
Frameworks and classical conflict resolution models – Environmental and gender-based conflicts – Role of leadership in conflict resolution – Mediation and arbitration techniques – Assessing and managing cost of conflict – Remote work and virtual negotiation – Technology-enabled conflict resolution – AI tools for negotiation support – Digital ethics and emotional intelligence – Global case studies and trends in hybrid organizations.	
TOTAL: 45 PERIODS	
Text Books: Lewicki, R.J., Saunders, D.M., & Barry, B. (2024). <i>Negotiation</i> . Mc Graw-Hill Education.	
References: 1. Spangle, M. & Isenhardt, M.W. (2008). <i>Negotiation: Communication for Diverse Settings</i>. Sage. 2. Singh, B.D. (2008). <i>Managing Conflict and Negotiation</i>. Excel Books. 3. Rahim, M.A. (2015). <i>Managing Conflict in Organizations</i> (4th Ed.). Transaction Publishers. 4. Oliver, D. (2010). <i>How to Negotiate Effectively</i>. Kogan Page.	
E-Resources:	

- Harvard Program on Negotiation
- MIT Conflict Management Resources
- Mediate.com – Online Conflict Resolution Tools
- Chartered Institute of Arbitrators (CI Arb)

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	-	1	1	1	1	2	2
2	2	3	2	3	2	1	2	2
3	2	3	-	2	3	2	3	2
4	2	-	1	2	2	2	1	2
5	2	-	1	2	2	2	1	2
Avg.	1.80	3.00	1.25	2.00	2.00	1.60	1.80	2.00

PB25P16	REWARD AND COMPENSATION MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To demonstrate conceptual knowledge of compensation systems, labour markets, employee benefits, and reward management models. - To interpret wage determination processes, labour market dynamics, and compensation analytics in organizational contexts. - To develop the ability to apply compensation theories in designing effective and competitive reward programs. - To analyse labour market trends, performance metrics, and compensation structures for informed decision-making. - To evaluate reward strategies to ensure internal equity, external competitiveness, alignment with organizational goals, and statutory compliance.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Demonstrate knowledge of compensation systems, labour markets, benefits, and reward models.		K2		
CO2	Interpret wage determination, labour dynamics, and compensation analytics.		K2		
CO3	Apply compensation theories to design reward programs.		K3		
CO4	Analyse labour trends, performance metrics, and compensation structures.		K4		
CO5	Analyse reward strategies for alignment, equity, and compliance.		K4		
UNIT I – Foundations of Compensation and Reward Systems				9	
Compensation: definition, objectives and principles – Compensation design and strategy – Concepts of reward management – Theories of wage determination – Wage structures and types – Wage boards and wage policy in India – Compensation decisions and benchmarking – Trends and innovations in reward systems in India.					
UNIT II – Labour Market Economics and Compensation				9	
Labour market concepts: macroeconomic and micro economic perspectives – Unemployment and labour supply-demand models – Implications of neoclassical theory for compensation – Trade-offs in compensation design – Economic valuation of employee contributions – Labour market trends and global mobility.					

UNIT III – Employee Benefits and Reward Programs	9
Nature and types of employee benefits – Statutory and voluntary benefits in India – Deferred compensation plans – non-monetary benefits – Meaning and elements of reward – Designing reward systems – Reward approaches – Distinction between compensation and reward – Impact on employee motivation.	
UNIT IV – Performance-Based Compensation Models	9
Performance Management System (PMS) – Performance indicators, standards and metrics – Competency-based pay – Performance modeling – Gain sharing plans – Team-based rewards – Enterprise incentive schemes – ESOPs – Profit sharing mechanisms – Linkage between performance and reward.	
UNIT V- Executive, Sales Compensation and Analytics in Reward Management	9
Executive compensation: components, theories and design models – Fixed versus variable pay – Executive incentive programs – Sales compensation structures – Administration and motivational techniques – Sales force incentives – Compensation in MNCs and global reward systems. Digital compensation management systems – Compensation dashboards – Analytics in pay equity, benchmarking and predictive modeling – AI in compensation design – International trends in pay transparency – Ethics and governance in reward management.	
TOTAL (L:45): 45 PERIODS	
TEXT BOOKS:	
1. Armstrong, M. & Murlis, H. (2023). <i>Handbook of Reward Management Practice</i> (7th Ed.). Kogan Page.	
REFERENCES:	
1. Henderson, R.I. (2007). <i>Compensation Management in a Knowledge-Based World</i> . Prentice Hall.	
2. Martocchio, J.J. (2025). <i>Strategic Compensation: A Human Resource Management Approach</i> (11th Ed.). Pearson.	
3. Thorpe, R. & Homan, G. (2000). <i>Strategic Reward Systems</i> . Prentice Hall.	

4. Lawler III, E.E. (2000). *Rewarding Excellence: Pay Strategies for the New Economy*. Jossey-Bass.
5. Flannery, T.P., Hofrichter, D.A. & Platten, P.E. *People, Performance and Pay*. Free Press.

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	-	2	1	1	1	2	1
2	3	2	1	2	2	2	2	2
3	2	1	3	2	2	2	2	2
4	1	1	1	2	2	2	1	2
5	1	1	1	2	2	2	1	2
Avg.	1.80	1.25	1.60	1.80	1.60	1.80	1.60	1.80

PB25P17	INTERNATIONAL HUMAN RESOURCE MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To demonstrate conceptual knowledge of International Human Resource Management (IHRM) foundations, global HR strategies, staffing approaches, and emerging HR trends. - To interpret IHRM models, cultural dimensions, and global workforce challenges influencing international HR practices. - To develop the ability to apply global staffing strategies, HR policies, training and development systems, and international compensation practices. - To analyse global HR practices, cross-cultural factors, and international performance management systems. - To evaluate global staffing, employee development, compensation strategies, and sustainable HRM practices in a multinational context.				
COURSE OUTCOMES The students will be able to			KNOWLEDGE LEVEL		
CO1	Demonstrate knowledge of IHRM foundations, global strategies, staffing, and HR trends.			K2	
CO2	Interpret IHRM models, cultural factors, and global workforce challenges.			K2	
CO3	Apply global staffing, HR policies, training, and compensation strategies.			K3	
CO4	Analyse global HR practices, cultural impacts, and performance systems.			K4	
CO5	Analyse staffing, development, compensation, and sustainable HRM practices			K4	

UNIT I – Foundations of International HRM	9
Definition and importance of IHRM – Evolution of HRM in global settings – Models of IHRM: Matching Model, Harvard Model, Contextual Model, 5P Model, European Model – IHRM policies – Standardization versus localization of HR practices in multinational corporations – Strategic role of IHRM in global decision making.	
UNIT II – Global Strategy and Cultural Context	9
Internationalization and global business strategies – Strategic orientation of IHRM – IHRM in cross-border mergers and acquisitions – International joint ventures and alliances – Building competitive advantage through HRM – Cultural diversity and its impact on global HR strategies.	

UNIT III – Global Staffing and Talent Acquisition	9
Staffing approaches: ethnocentric, polycentric, Regio centric and geocentric – Role of expatriates, inpatriates and non-expatriates – International recruitment and selection methods – Talent mobility and employer branding – Challenges in cross-border staffing.	
UNIT IV – Training, Development and Performance Management	9
Expatriate training programs: components and types – Training for host country nationals – Repatriation process – Trends in international training and development – Performance appraisal systems in global settings – Cultural dimensions in performance evaluation.	
UNIT V- International Compensation and Contemporary Issues in IHRM	9
Components of global compensation packages – Approaches to international compensation: balance sheet, localization, lump sum, cafeteria and global pay – Challenges in compensation design – International labour standards – Taxation and social security issues – Gender equity and pay parity. Digital tools in IHRM – Role of AI in global HR practices – International talent analytics – Diversity, equity and inclusion practices – Sustainable HRM in global organizations – Case studies on cross-cultural conflicts and HR innovation.	
TOTAL: 45 PERIODS	
TEXT BOOKS:	
1.DOWLING, P., FESTING, M. & ENGLE, A. (2024). <i>INTERNATIONAL HUMAN RESOURCE MANAGEMENT</i> (8TH ED.). CENGAGE.	
REFERENCES:	
1. Tarique, I., Briscoe, D. & Schuler, R. (2023). <i>International Human Resource Management</i>. Routledge. 2. Harzing, A.W. & Pinnington, A. (2023). <i>International Human Resource Management</i> (5th Ed.). Sage. 3. Brewster, C., Sparrow, P., Vernon, G. & Houlds worth, E. (2023). <i>International HRM</i> (4th Ed.). Kogan Page. 4. Tayeb, M.H. (2021). <i>International Human Resource Management</i> (3rd Ed.). Oxford.	

5. Rao, P.L. (2022). *International Human Resource Management: Text and Cases* (3rd Ed.). Excel Books.

E-Resources:

- SHRM Global HR Resources
- Harvard Business Review (HBR)
- ILO Labour Standards Portal
- CIPD Global HR Practice IHRM Research & Analytics Resources

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	-	1	-	1	1	2	1
2	2	1	1	2	2	3	2	2
3	2	2	1	3	2	2	2	2
4	1	-	2	2	2	1	2	2
5	1	-	2	2	2	1	2	2
Avg.	1.40	1.50	1.40	2.25	1.80	1.60	2.00	1.80

PB25P18	MANAGING HR IN THE DIGITAL AGE	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To understand digital HR transformation and emerging HR technologies. - To apply AI, analytics, and digital tools in HR functions and decision-making. - To analyse workforce transformation, ethics, and future trends in digital HR. - To apply AI, analytics, and digital tools in HR functions and decision-making. - To analyse workforce transformation, ethics, and future trends in digital HR.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Outline digital HR transformation concepts and HR technologies to understand their strategic role in organizations			K2	
CO2	Apply AI, ML, SMAC, and HR analytics to improve HR functions using digital tools			K3	
CO3	Analyse the impact of digital HR on workforce, culture, and data privacy to assess organizational changes through cases			K4	
CO4	Apply agile HR practices and hybrid work models to enhance workforce adaptability in practical scenarios			K3	
CO5	Analyse digital HR practices on well-being and inclusivity to support effective HR decisions based on trends			K4	

UNIT I – Introduction to Digital HR Transformation	9
Definition and scope of digital HR transformation – Evolution of HR technology – Drivers and enablers of digital HR – Strategic importance of HR in digital business transformation – Role of HR leaders in managing digital change – Challenges and opportunities in digitalizing HRM	
UNIT II – Emerging Technologies and Digital Trends in HR	9

Key technologies in digital HR and SMAC (Social, Mobile, Analytics, Cloud) – Applications of Artificial Intelligence and machine learning in recruitment, performance appraisal, and engagement – Role of big data and HR analytics in decision-making – Predictive HR and workforce insights – Ethical challenges and technology-related risks	
UNIT III – Implications of Digital HR on Work and People	9
Benefits and drawbacks of digital HR transformation – Automation and its impact on job roles – Job displacement, redeployment, and workforce redesign – Data privacy, security, and surveillance concerns – Impact on organizational culture, employee trust, and the psychological contract in digital workplaces	
UNIT IV –HR Interventions and Strategic Adaptability	9
Designing flexible work models with virtual work spaces and hybrid teams – Upskilling and reskilling strategies for digital readiness – Agile HR practices and adaptive workforce planning – Building a culture of learning, innovation, and collaboration – Data-driven decision-making and ethical governance in HR technology	
UNIT V – Well-being, Inclusivity, and Future of Digital HR	9
Digital well-being covering psychological, physical, and social dimensions – Work-life integration in technology-enabled environments – Designing inclusive and accessible digital workplaces – Organizational support systems for employee well-being – HR’s role in digital sustainability, future of work and Industry 5.0, block chain and metaverse applications, and global and Indian best practices in digital HR transformation	
TOTAL (L:45): 45 PERIODS	
Text Book: 1. Michael Armstrong, <i>Armstrong’s Handbook of Strategic Human Resource Management</i>, Kogan Page, 8th Ed., 2023. 2. Dipak Kumar Bhattacharyya, <i>HR Analytics: Understanding Theories and Applications</i>, Sage Publications, 2nd Ed., 2022.	
References: 1. Mondal, S.R., Di Virgilio, F., & Das, S. <i>HR Analytics and Digital HR Practices: Digitalization Post COVID-19</i>, Springer, 2021	

2. Waddell, D.D. Digital HR: A Guide to Technology-Enabled Human Resources, SHRM, 2018

E Resources

- CIPD: People Analytics and Technology in HR: <https>
- Udemy/Coursera Courses: Digital HR, HR Analytics using Python/Excel

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
CO1	3	2	–	2	–	2	2	2
CO2	3	3	2	–	2	3	2	3
CO3	2	3	2	3	–	3	2	3
CO4	2	3	3	2	–	2	3	2
CO5	2	2	3	3	3	2	3	3
Avg.	2.4	2.6	2.5	2.5	2.33	2.4	2.4	2.6

STREAM / SPECIALIZATION: OPERATIONS MANAGEMENT

PB25P19	SUPPLY CHAIN AND LOGISTIC MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To develop a holistic understanding of supply chain fundamentals and strategic roles in a competitive business environment. - To enable learners to analyze and design efficient supply chain networks considering uncertainty, risk pooling, and global integration. - To impart knowledge on planning demand, inventory, and supply with cost-effective logistics and agile solutions. - To build competencies in leveraging IT, analytics, and AI tools for data-driven supply chain decisions aligned with Industry 4.0 and global trends - To analyse supply chain performance across various dimensions such as networks, inventory systems, transportation, and logistics operations.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Explain principles, strategic importance, and drivers of supply chain management.			K2	
CO2	Interpret relationships among sourcing, network design, inventory, logistics, and technologies.			K2	
CO3	Apply sourcing, forecasting, logistics models, and technologies in supply chain decisions.			K3	
CO4	Analyse supply chain performance including networks, inventory, logistics, and transport.			K4	
CO5	Analyse sourcing, inventory, logistics, and technology alternatives for optimization.			K4	

UNIT I – Fundamentals of Supply Chain Management	9
Supply Chain – Definition – Evolution – Role in Economy – Enablers and Drivers of Supply Chain Performance – Decision Phases – Supply Chain Strategy and Competitive Advantage – Key Performance Metrics – Strategic Fit – Global Trends	

UNIT II – Strategic Sourcing and Network Design	9
Make vs Buy Decision – Core vs Non-Core Processes – Sourcing Strategy – Supplier Selection and Development – Worldwide Sourcing – Distribution Network Design – Online and Offline Channels – Network Design Framework – Impact of Uncertainty – Risk Pooling	
UNIT III – Demand Planning and Inventory Management	9
Supply Chain Inventory Types – Cycle Inventory – Safety Inventory – Short Life-Cycle Products – Multi-Item and Multi-Location Inventory – Revenue Management – Demand Forecasting – Technology in Demand Planning – Supply-Demand Synchronization	
UNIT IV – Logistics Strategy, Transportation and Global Logistics	9
Logistics Definition and Scope – Value Chain and Customer Service – Logistics Functions and Network – Logistics Outsourcing – 3PL to 6PL Models – Distribution Channel Strategy – Role of Logistics in Competitive Advantage – Service Provider Selection – Transport Systems – Modal Characteristics – Containerization – Freight Management – Incoterms – International Logistics – Green Logistics – Reverse Logistics	
UNIT V – Packaging, Technology Trends and Performance Analytics	9
Packaging Design and Cost – Industrial vs Consumer Packaging – Unitization – Smart Packaging – Supply Chain and Logistics Technologies – AI – Advanced Analytics – IoT – Intelligent Automation – RPA – Block chain – E-Logistics Systems – Performance Measurement Tools – Total Logistics Cost – Strategic Planning – Digital Twins and Immersive Technologies	
TOTAL (L:45): 45 PERIODS	
TEXT BOOKS:	
<i>Management: Strategy, Planning, and Operation</i> , Pearson Education, 7th Ed., 2023.	
REFERENCES:	
1. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. <i>Designing and Managing the Supply Chain</i> , Tata Mc Graw-Hill, 4th Ed., 2021.	
1. Shah, J. <i>Supply Chain Management: Text and Cases</i> , Pearson Education, 2nd Ed., 2020.	

2. Ballou, R.H. *Business Logistics and Supply Chain Management*, Pearson Education, 6th Ed., 2022.
3. David, P. *International Logistics*, Biztantra, 2nd Ed., 2017.
5. Christopher, M. *Logistics & Supply Chain Management*, Pearson, 6th Ed., 2016.

E-RESOURCES:

- MIT Supply Chain Management Micro Masters
- Coursera – Supply Chain Analytics (Rutgers)
- SCM World Resources
- Harvard Business Review – Supply Chain Articles
- INFORMS Journal on Applied Analytics

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	1	2	1	1	1	2
2	3	2	1	1	2	2	2	3
3	2	2	2	1	3	2	2	1
4	2	1	1	2	1	1	3	2
5	3	2	2	1	2	1	2	1
Avg.	2.4	1.6	1.4	1.4	1.8	1.4	2.0	1.8

PB25P20	QUALITY MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES	- To provide foundational knowledge on the evolution, significance, and scope of quality management in modern organizations. - To expose students to the philosophies, principles, and contributions of leading quality thinkers and global practices. - To equip learners with statistical tools, Six Sigma, and process capability analysis for quality improvement. - To develop proficiency in applying practical quality tools like FMEA, QFD, benchmarking, and Taguchi methods. - To promote understanding of quality management systems (ISO standards), audits, and total quality culture.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of quality fundamentals, TQM, SPC, tools, QMS, and stakeholder roles.			K2	
CO2	Interpret relationships among TQM principles, SPC, tools, ISO standards, and quality roles.			K2	
CO3	Apply TQM, SPC, and tools like FMEA and QFD for process and quality improvement.			K3	
CO4	Analyse quality data, tools, systems, and stakeholder performance for problem-solving.			K4	
CO5	Analyse quality practices, SPC methods, ISO standards, and supplier strategies.			K4	

UNIT I – Evolution and Fundamentals of Quality	9
Definition of Quality – Need and Evolution – Perspectives of Quality – Total Quality Concepts – Product and Service Quality Dimensions – Quality Design (Input–Process–Output) – Customer Focus – Customer Perception and Retention – Cost of Quality – Role of Top Management	
UNIT II – Philosophies and Global Principles of Quality Management	9
Contributions of Quality Gurus: Deming, Crosby, Juran, Feigenbaum, Ishikawa, Taguchi, Shigeo Shingo, Oakland, Masaaki Imai – Japanese 5S – Quality Circles – 8D Methodology – TQM Culture – Implementation Challenges	
UNIT III – Statistical Quality Control and Reliability Management	9

Statistical Process Control – Control Charts (Variables and Attributes) – Process Capability Analysis – Six Sigma – DMAIC Framework – Reliability (Series and Parallel Systems) – Product Life Cycle Curves – Business Process Improvement (BPI) – Total Productive Maintenance (TPM) – Terotechnology	
UNIT IV – Tools and Techniques for Quality Enhancement	9
Seven Traditional Quality Tools – New Management Tools – Benchmarking – Poka-Yoke – Failure Mode and Effect Analysis (FMEA: Design, Process, Documentation) – Quality Function Deployment (QFD) – House of Quality – Taguchi Methods – Signal-to-Noise Ratio – Tolerance Design	
UNIT V –Quality Management Systems, Audits and Stakeholder Involvement	9
ISO 9000 and ISO 9004 Standards – QS 9000 – ISO 14000 – Documentation and System Elements – Quality Audits – Guidelines for Performance Improvement – Organizational Culture for Quality – Overcoming TQM Barriers – Employee Empowerment – Motivation, Reward and Recognition – Team Dynamics – Performance Appraisal for Quality – Supplier Selection, Evaluation and Rating – Supplier Partnerships – Collaborative Quality Planning – Role of Technology in Quality Integration	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Bester field, D.H. et al. <i>Total Quality Management</i>, Pearson Education, 6th Ed., 2023. 2. Panneer selvam, R. & Siva sankaran, P., <i>Quality Management</i>, PHI Learning, 2nd Ed., 2022.	
REFERENCES: 1. Poornima M. Charanti math, <i>Total Quality Management</i>, Pearson, 3rd Ed., 2020. 2. Montgomery, D.C., <i>Introduction to Statistical Quality Control</i>, Wiley, 8th Ed., 2020. 3. Bureau of Indian Standards, <i>IS/ISO 9004:2018 – Guidelines for Performance Improvements</i>. 4. Hoyle, D., <i>ISO 9000 Quality Systems Handbook</i>, Routledge, 8th Ed., 2023.	

E-RESOURCES:

- ASQ Quality Resources
- MIT Open Courseware – Quality Management
- NPTEL – Total Quality Management
- Coursera – Six Sigma and Process Improvement
- Harvard Business Review – Quality Management Articles
- IS/ISO Guidelines from BIS

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	1	1	3	2	1	2
2	3	2	3	2	2	2	2	3
3	1	1	2	1	2	1	2	1
4	2	1	2	2	1	2	3	2
5	1	2	1	3	2	1	2	1
Avg.	1.8	1.4	1.8	1.8	2.0	1.6	2.0	1.8

PB25P21	MATERIALS MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To understand the fundamentals of materials management, including procurement, inventory control, warehousing, and MRP/ERP systems. - To examine the integration of planning, sourcing, inventory, warehousing, and digital systems in materials flow management. - To develop the ability to apply inventory models, MRP systems, and procurement techniques for efficient material management. - To analyse materials planning systems, inventory policies, procurement practices, and warehouse operations. - To evaluate materials management strategies and sourcing decisions for cost efficiency and operational optimization.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of materials management, MRP/ERP, inventory, procurement, warehousing, and performance metrics.			K2	
CO2	Interpret relationships among planning, inventory, sourcing, warehousing, and digital systems.			K2	
CO3	Apply MRP systems, inventory models, and procurement strategies for efficient material flow.			K3	
CO4	Analyse planning systems, inventory policies, procurement, and warehousing efficiency.			K4	
CO5	Analyse materials strategies, inventory models, and sourcing decisions for optimization.			K4	

UNIT I- INTRODUCTION TO MATERIALS MANAGEMENT AND PLANNING SYSTEM	9
Overview of Materials Management – Role in Operations and Profitability – Operating Environment – Aggregate Planning (Need, Strategies, Costs, Approaches) – Master Scheduling – Manufacturing Planning and Control Systems – MRP and ERP Systems – Production Plan Development	
UNIT -II MATERIALS RECRUITMENT PLANNING AND CAPACITY CONTROL	9
MRP and MRPII Concepts – Bill of Materials (BOM) – Resource Requirement Planning (RRP) – Capacity Management – Scheduling of Orders – Production Activity Control – Material Codification – Information Systems in Planning	
UNIT III – INVENTORY MANAGEMENT AND CONTROL	9
Inventory Objectives – Deterministic and Probabilistic Models – Retail Discounting Model – News vendor Model – Inventory Control Policies – Safety Stock and Reorder Levels – Multi-Echelon Inventory – EOQ – Inventory Classification (ABC, VED, FSN) – Technology in Inventory Tracking	
UNIT IV – PURCHASING ,PROCUREMENT AND WAREHOUSING MANAGEMENT	9
Purchasing Principles – Establishing Specifications – Supplier Selection – Price Determination – Forecasting – Mixed and Seasonal Buying Strategies – Global Sourcing – Purchasing under Uncertainty – Capital Equipment Procurement – Demand Management and Negotiations – Warehouse Functions and Types – Storage Layout – Store Procedures and Documentation – Materials Receipt and Inspection – Stock Verification and Accounting	
UNIT V – STORE OPERATIONS, TECHNOLOGY AND PERFORMANCE MANAGEMENT	9
Obsolescence and Surplus Management – Scrap Disposal – Value Analysis – Transportation and Traffic Coordination – ERP in Materials Management – Digital Tools and IoT in Supply Systems – Operational Efficiency – Lean Practices in Inventory and Warehousing – Cost Effectiveness – KPIs for Materials Management – Productivity and Performance Measurement Frameworks	

TOTAL: 45 PERIODS

TEXT BOOKS:

1. Arnold, J.R.T., Chapman, S.N., & Clive, L.M. *Materials Management*, Pearson, 7th Ed., 2023.

REFERENCES:

1. Datla, A.K. *Materials Management: Procedure, Text and Cases*, PHI Learning, 3rd Ed., 2020.
2. Ballou, R.H., & Srivastava, S.K. *Business Logistics and Supply Chain Management*, Pearson, 6th Ed., 2022.
3. Garg, A.K. *Production and Operations Management*, Tata Mc Graw Hill, 4th Ed., 2023.
4. Chary, S.N. *Production and Operations Management*, Tata Mc Graw Hill, 4th Ed., 2022.

E-RESOURCES:

- NPTEL – Materials Management and Logistics
- MIT Open Course Ware – Operations and Supply Chain
- Coursera – Operations Management Specialization
- ISCEA – Certified Materials Manager Resources

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	2	2	1	2	1	3
2	3	1	1	2	2	2	2	2
3	1	2	3	1	3	2	3	3
4	2	1	1	2	1	1	2	1
5	3	2	2	1	3	1	3	2
Avg.	2.2	1.4	1.8	1.6	2.0	1.6	2.2	2.2

PB25P22	SERVICES OPERATIONS MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To develop a comprehensive understanding of service operations and their unique characteristics across sectors. - To understand the concepts of service operations, service design, quality management, facility layout, demand management, and globalization in service industries. - To examine key service concepts such as service blueprinting, quality models, facility location decisions, and demand management strategies. - To develop the ability to apply service design tools, quality improvement techniques, and demand management strategies in service operations. - To analyse service processes, quality performance, facility layouts, and demand patterns for operational improvement.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of service operations, design, quality, layout, demand management, and globalization.			K2	
CO2	Interpret service concepts like blueprinting, quality models, facility location, and demand strategies.			K2	
CO3	Apply service design tools, quality techniques, and demand management strategies.			K3	
CO4	Analyse service processes, quality, layout, and demand patterns for improvement.			K4	
CO5	Analyse service models, quality programs, and capacity strategies for performance.			K4	

UNIT I – Foundations of Service Operations	9
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Nature and Growth of Service Sector – Importance in Economy – Service Characteristics – Service Package – Classification of Services – Service-Dominant Logic – Open Systems View – Strategic Service Vision – Competitive Environment – Generic Strategies – Winning Customers – Role of IT in Services – Service Firm Competitiveness Stages	
UNIT II – Service Design and Service Encounter	9
New Service Development – Design Elements – Service Blueprinting – Generic Process Structures – Service Encounter Triad – Service Orientation – Service Profit Chain – Front Office and Back Office Interface – Service Decoupling – Technology in Service Delivery – Automation – E-Commerce – Self-Service Innovations	
UNIT III – Service Quality and Performance Improvement	9
dimensions of Service Quality – Service Quality Gap Model – SERVQUAL – Walk through Audits – Quality by Design – Service Recovery and Guarantees – Productivity Improvement – Data Envelopment Analysis (DEA) – Quality Tools – Bench-marking – Six Sigma and Other Quality Programs	
UNIT IV – Service Facility Layout and Location Optimization	9
Supporting Facilities and Service scopes – Facility Design and Layout – Process Analysis for Services – Service Facility Location – Evaluation Techniques (Metropolitan Metric, Euclidean, Centre of Gravity) – Retail Location Modelling – Set Covering Problems – Vehicle Routing and Scheduling Techniques	
UNIT V – Capacity, Demand Management and Service Growth	9
Demand Management Strategies – Capacity Management Tactics – Supply Management – Operations Planning and Control – Yield Management – Service Inventory Models (Retail Discounting Model, News vendor Model) – Queuing Systems and Psychology of Waiting – Digital Queue Management – Growth Strategies – Franchising – Expansion Models – Internationalization of Services – Cross-Cultural Challenges – Global Service Standards – Service Sustainability and Innovation	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Fitzsimmons, J.A., Fitzsimmons, M.J., & Bordoloi, S. <i>Service Management – Operations, Strategy, Information Technology</i>, Mc Graw-Hill Education, 9th Ed., 2024	
REFERENCES:	

1. Matters, R.D. *Successful Service Operations Management*, Cengage Learning, 3rd Ed., 2021.
2. Haksever, C., & Render, B. *Service Management*, Pearson Education, 3rd Ed., 2022.
3. Johnston, R., & Clark, G. *Service Operations Management*, Pearson, 4th Ed., 2020.
4. Lovelock, C., & Wirtz, J. *Services Marketing: People, Technology, Strategy*, Pearson Education, 9th Ed., 2023.

E-RESOURCES:

- MIT Open Courseware – Service Operations
- NPTEL – Service Operations Management
- Coursera – Service Management (University of London)
- Harvard Business Review – Service Excellence Articles

MAPPING OF COs WITH POs / PSOs

MAPPING OF COs WITH POs / PSOs								
COs	POs					PSOs		
	1	2	3	4	5	1	2	3
1	1	1	1	2	1	3	1	2
2	3	1	2	1	2	2	2	1
3	2	2	3	1	3	2	3	3
4	2	1	1	3	1	1	1	2
5	1	2	2	1	3	1	2	1
Avg.	1.8	1.4	1.8	1.6	2.0	1.8	1.8	1.8

PB25P23	LEAN SIX SIGMA AND BUSINESS EXCELLENCE	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES	- To familiarize learners with DMAIC, DMADV, Lean, TPM, and BPR methodologies for organizational excellence. - To equip students with practical tools for process improvement, productivity enhancement, and quality control. - To introduce benchmarking, business excellence models, and balanced scorecard for performance measurement. - To develop the ability to apply Lean tools, DMAIC methodology, and BPR techniques for real-world process improvement initiatives. - To analyse process performance by identifying waste, variation, bottlenecks, and evaluating TPM metrics for operational effectiveness.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of Six Sigma, Lean, TPM, BPR, and business excellence frameworks.			K2	
CO2	Interpret relationships among Lean, Six Sigma, TPM, and business excellence models.			K2	
CO3	Apply Lean tools, DMAIC, and BPR frameworks in real-world process improvement.			K3	
CO4	Analyse processes, waste, variation, and TPM metrics for performance improvement.			K4	
CO5	Analyse quality frameworks using benchmarking and balanced scorecard.			K4	

UNIT I – Introduction to Six Sigma and Quality Improvement Frameworks	9
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Six Sigma Philosophy – Characteristics and Objectives – DMAIC and DMADV Methodologies – Six Sigma Roles and Responsibilities – Control Plans – Monitoring and Sustaining Improvements – Case Examples from Service and Manufacturing	
UNIT II – Lean Manufacturing and Total Productive Maintenance (TPM)	9
Toyota Production System (TPS) – Types of Waste – Lean Principles – Just-In-Time (JIT) – Cellular Manufacturing – 5S – SMED – Lean Purchasing and Logistics – Lean Roles – Lean Culture and Transformation Road map – Lean Economics – TPM House and Pillars – OEE (Overall Equipment Effectiveness) – Sixteen Types of Losses – Integration of TPM and TQM – 8D Methodology – Employee Involvement and Cross-Functional Teams – TPM Implementation Strategy	
UNIT III – Business Process Excellence and Re engineering	9
Business Processes and Process Management – Business Process Reengineering (BPR) Framework and Life cycle – Principles of Reengineering – Benchmarking – Implementation Challenges – Business Excellence Models (EFQM, Malcolm Baldrige) – Balanced Scorecard Perspectives.	
UNIT IV – Lean Six Sigma Integration and Applications	9
Synergy between Lean and Six Sigma – Selection of Improvement Projects – Industry Case Studies (Healthcare, Education, Logistics, etc.) – Hands-on Application of DMAIC Tools – Continuous Improvement – Kaizen Culture	
UNIT V – Practical Implementation and Continuous Improvement	9
Group Project – Real-Time Process Improvement (Campus/Academic Domain) – Identification of Improvement Area – Root Cause Analysis – Application of TQM / Lean / Six Sigma Tools – Implementation – Final Presentation and Documentation – Review and Mentoring.	
TOTAL: 45 PERIODS	
TEXT BOOKS:	
1. George, M., Rowlands, D.Maxey, J., & Price, M. <i>Lean Six Sigma Pocket Tool book</i> , Mc Graw-Hill, 2005.	
REFERENCES:	
1. Ohno, Taiichi, <i>Toyota Production System: Beyond Large-Scale Production</i> , Productivity Press, 2019.	
2. Harry, M., & Schroeder, R., <i>Six Sigma: The Breakthrough Management Strategy</i> , Doubleday, 2006.	

3. Womack, J.P., & Jones, D.T., *Lean Thinking*, Free Press, 2nd Ed., 2003.
4. Hammer, M., & Campy, J., *Reengineering the Corporation*, Harper Business, Revised Ed., 2009.

E-RESOURCES:

- MIT Open Course Ware – Quality & Lean Systems
- Coursera – Six Sigma Yellow Belt & Lean Six Sigma Specialization
- American Society for Quality (ASQ) Learning Center
- Six Sigma Knowledge Portal
- Lean Enterprise Institute

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	1	2	1	2	2	3
2	1	1	2	2	3	2	1	2
3	2	2	3	1	3	1	3	3
4	1	3	1	2	1	2	1	3
5	3	2	1	3	2	1	2	2
Avg.	1.8	2.0	1.6	2.0	2.0	1.6	1.8	2.6

PB25P24	PROJECT MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To enable learners to manage projects from initiation to completion within time and cost constraints. • To introduce tools such as PERT/CPM, resource allocation, and risk management techniques. • To understand the fundamentals of project management, including project planning, scheduling, execution, control, and evaluation. • To examine the project life cycle, Work Breakdown Structure (WBS), scheduling tools, Earned Value Management (EVM), and organizational structures. • To develop the ability to apply project planning, budgeting techniques, and conflict resolution strategies in project environments.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of project management fundamentals, planning, scheduling, control, and evaluation.			K2	
CO2	Interpret project life cycle, WBS, scheduling tools, EVM, and organizational structures.			K2	
CO3	Apply planning, budgeting, PERT/CPM, and conflict resolution techniques.			K3	
CO4	Analyze risks, resources, team dynamics, and project performance metrics.			K4	
CO5	Analyze project outcomes, control systems, and management practices.			K4	

UNIT I – Fundamentals of Project Management	9
Project Management – Definitions and Goals – Project Life Cycle Phases – Project Environment – Role of Project Management in Business – Project Manager Roles and Selection – Skills and Responsibilities – Stakeholder Management – Ethical Considerations	
UNIT II – Project Planning, Budgeting and Risk Analysis	9
Project Planning Process – Work Breakdown Structure (WBS) – Cost Estimation and Budgeting – Schedule Forecasting – Risk Identification and Assessment – Risk Response Planning – Tools and Techniques for Cost Control and Risk Mitigation	
UNIT III – Project Scheduling and Resource Allocation	9
Scheduling Tools – PERT and CPM Networks – Time Estimates – Critical Path Analysis – Project Crashing and Resource Optimization – Resource Loading and Leveling – Goldratt’s Critical Chain Method – Project Scheduling Simulation	
UNIT IV – Organization Design, Team Management and Project Control	9
Organizational Structures (Functional, Matrix, Projectized) – Project Teams and Roles – Conflict Sources – Conflict Resolution Strategies – Communication and Negotiation – High-Performing Teams – Monitoring Progress – Project Control Process – Internal vs External Control – Earned Value Management (EVM) – Performance Indices – Forecasting Outcomes – Reporting and Documentation – Quality Assurance and Audit	
UNIT V – Project Evaluation and Completion	9
Project Success Factors – Evaluation Models – Administrative Closure – Lessons Learned – Knowledge Capture – Post-Project Analysis – Success and Failure Criteria – Best Practices in Project Termination – Continuous Improvement	
TOTAL: 45 PERIODS	
TEXT BOOKS:	
1. Kerzner, H. <i>Project Management: A Systems Approach</i> , 13th Ed., Wiley, 2022. 2. Panneerselvam, R., & Senthil Kumar, P. <i>Project Management</i> , PHI Learning, 2nd Ed., 2019.	
REFERENCES:	
1. Gido, J., & Clements, J. <i>Successful Project Management</i> , 8th Ed., Cengage Learning, 2021. 2. Maylor, H. <i>Project Management</i> , 4th Ed., Pearson Education, 2010.	

3. Samuel, J.M., et al. *Project Management*, Wiley India, 2017.

E-Resources:

- PMI – Project Management Institute
- NPTEL – Project Management
- MIT Open Course Ware – Project Management
- Coursera – Fundamentals of Project Planning and Management

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	2	1	2	1	2	2	3
2	3	2	1	3	2	1	1	2
3	2	2	2	1	3	2	1	3
4	2	1	2	2	1	1	3	2
5	3	1	3	1	2	2	2	1
Avg.	2.2	1.6	1.8	1.8	1.8	1.6	1.8	2.2

Stream/Specialization: BUSINESS ANALYTICS AND SYSTEMS

PB25P25	DATA MINING AND DECISION SCIENCE	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To enable learners to apply analytical thinking and modern data techniques in solving managerial problems. • To introduce data mining concepts and decision science models for business analytics applications. • To develop capability to build decision support systems using predictive and prescriptive analytics. • To develop the ability to apply data mining techniques and optimization methods in real-world managerial scenarios. • To analyse analytical outputs, risks, and uncertainties for effective data-driven decision-making.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Demonstrate conceptual knowledge of data mining processes and decision science models.			K2	
CO2	Interpret analytical models and evaluation metrics to understand business problems.			K2	
CO3	Apply data mining and optimization techniques in managerial scenarios.			K3	
CO4	Analyse analytical outputs and risks for data-driven decisions.			K4	
CO5	Analyse effectiveness of analytical models for strategic applications.			K4	
UNIT I – Foundations of Data Mining and Methodologies				9	

Introduction to Data Mining – Knowledge Discovery Process – Applications in Business Functions – Text Mining – Web Mining – Process Mining – Spatial Mining – Data Warehousing and Data Marts – Integration with BI Tools and OLAP – Data Mining Models – CRISP-DM – SEMMA – Domain-Specific Frameworks.

UNIT II – Evaluation Metrics, Classification and Clustering

9

Predictive Accuracy Metrics: RMSE, MAE, MAPE – Confusion Matrix – ROC Curve and AUC – Validation Techniques: Hold-Out, K-Fold Cross Validation, Bootstrapping – Model Selection Criteria – Supervised Learning – Decision Trees – Logistic Regression – Discriminant Analysis – K-Nearest Neighbour – Clustering Techniques: K-Means and Hierarchical Clustering – Association Rule Mining – Market Basket Analysis.

UNIT III – Time Series Models and Decision Science Optimization

9

Time Series Forecasting: ARIMA and Holt-Winters – Multivariate Regression – Overview of Decision Science – Decision Making under Certainty and Uncertainty – Linear Programming – Transportation Model – Assignment Model – Goal Programming – Solver Tools in Excel / R.

UNIT IV – Simulation, Risk Modelling and Decision Analysis

9

Monte Carlo Simulation – Queuing Models – Risk Analysis – Expected Value and Decision Tree Analysis – Sensitivity Analysis – Real Options – Business Scenario Planning.

UNIT V – Managerial Applications, Ethics and Emerging Trends

9

Applications in Marketing, Finance, Operations and Strategy – Adaptive and Real-Time Business Intelligence – Augmented Analytics – Ethics in Data Usage – Explainable AI (XAI) – Future of Decision Intelligence in Businesses – Capstone Case Discussion.

TOTAL: 45 PERIODS

TEXT BOOKS:

1. Jiawei Han, Micheline Kamber & Jian Pei (2022). *Data Mining: Concepts and Techniques*. Morgan Kaufmann.

REFERENCES:

1. Galit Shmueli et al. (2023). *Data Mining for Business Analytics*. Wiley.
2. James R. Evans (2022). *Business Analytics: Methods, Models and Decisions*. Pearson.
3. Ravindran, Phillips & Solberg (2021). *Operations Research: Principles and Practice*. Wiley.
4. Powell & Baker (2020). *Management Science: The Art of Modeling with Spreadsheets*. Wiley.
5. Efraim Turban & Ramesh Sharda et al. (2023). *Business Intelligence: A Managerial Perspective*. Pearson.
6. Winston, W.L. (2020). *Operations Research: Applications and Algorithms*. Cengage.

E-Resources:

- <https://www.kdnuggets.com>
- <https://www.analyticsvidhya.com>
- <https://archive.ics.uci.edu/ml>
- <https://www.coursera.org>
- <https://www.edx.org>

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	1	-	-	1	1	1	-
2	2	2	1	2	3	1	2	2
3	2	3	2	3	3	1	2	2
4	2	2	3	2	2	3	2	2
5	2	2	2	2	2	3	2	2
Avg.	2.0	2.0	2.0	2.25	2.20	1.80	1.80	2.0

PB25P26	DEEP LEARNING	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To provide a comprehensive foundation in deep learning architectures and artificial intelligence frameworks for intelligent decision-making. • To enable students to design, optimize and evaluate deep neural networks for real-world business applications. • To develop understanding of intelligent systems, knowledge representation, generative AI and Large Language Models. • To examine neural network design principles, optimization strategies, and ethical implications of AI systems. • To analyse neural architectures, generative models, and agentic AI systems for supporting strategic decision-making.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
C01	Demonstrate conceptual knowledge of deep learning architectures, intelligent systems and AI frameworks.			K2	
C02	Interpret neural network design principles, optimization strategies and ethical AI implications.			K2	
C03	Apply deep learning training techniques, heuristic problem-solving and prompt engineering in business tasks.			K3	
C04	Analyze neural architectures, generative models and agentic AI impacts for strategic decisions.			K4	
C05	Analyze optimization strategies, generative AI effectiveness and AI governance mechanisms.			K4	

UNIT I – Deep Learning Fundamentals and Training Strategies	9
Introduction to Deep Learning – Neural Network Design – Forward and Back propagation – XOR Problem – Activation Functions – Loss Functions – Hidden Layers – Architecture Tuning – Regularization Techniques – Challenges in Neural Network Training – Learning Rate Schedules – Gradient Descent Variants: SGD, Adam, RMS Prop – Weight Initialization – Hyper parameter Tuning – Batch Normalization – Dropout – Transfer Learning – Enterprise-Level Model Training – Applications in Business Environments.	
UNIT II – Intelligent Systems and Knowledge Modeling	9
Understanding Intelligent Agents – Search and Problem Solving: Heuristic Methods, Exhaustive Search, State-Space Search – Game-Based Learning (Tic-Tac-Toe) – Knowledge Representation: Semantic Networks, Frames, Ontologies – Business Rule Automation – Strategic Planning Models.	
UNIT III – Generative AI Architectures and Deep Models	9
Generative Adversarial Networks (GANs) – Variational Auto encoders (VAEs) – Convolutional Neural Networks (CNNs) – Recurrent Neural Networks (RNNs) – Long Short-Term Memory Networks (LSTMs) – Applications in Image Generation, Forecasting and Process Automation.	
UNIT IV – Large Language Models and Business NLP	9
Introduction to Large Language Models – GPT Series – Prompt Engineering – NLP Pipelines for Text and Speech – Text Summarization – Machine Translation – Chatbots and Virtual Assistants – Responsible Use of LLMs – Bias Mitigation Techniques – Industry Case Studies.	
UNIT V – Agentic AI and Business Innovation	9
Agentic AI Concepts – Autonomous Goal-Oriented Systems – Task Decomposition and Execution – AI Governance – Explainable AI (XAI) – Business Applications: Marketing Personalization, AI-Driven Decision Making, Fraud Detection – Ethical Frameworks for Agentic Systems.	
TOTAL: 45 PERIODS	

TEXT BOOKS:

1. Ian Goodfellow, Yoshua Bengio & Aaron Courville (2016). *Deep Learning*. MIT Press.

REFERENCES:

1. Stuart Russell & Peter Norvig (2020). *Artificial Intelligence: A Modern Approach*. Pearson.
2. François Chollet (2025). *Deep Learning with Python*. Manning.
3. Deepak Khemani (2013). *A First Course in Artificial Intelligence*. Mc Graw Hill.
4. Saroj Kaushik (2011). *Artificial Intelligence*. Cengage Learning India.
5. Elaine Rich, Kevin Knight & Shivashankar B. Nair (2008). *Artificial Intelligence*. Mc Graw Hill.

E-RESOURCES:

- <https://www.deeplearning.ai>
- <https://www.coursera.org/specializations/deep-learning>
- <https://www.kaggle.com/learn/intro-to-deep-learning>
- <https://www.tensorflow.org>
- <https://towardsdatascience.com>
- <https://www.solver.com>

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	1	-	-	-	1	-	-
2	3	2	3	1	2	-	1	2
3	3	3	3	2	3	2	2	2
4	2	2	1	3	2	2	2	2
5	2	2	2	3	2	2	2	2
Avg.	2.20	2.00	2.25	2.25	2.25	1.75	1.75	2.00

PB25P27	SOCIAL MEDIA WEB ANALYTICS	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	• To understand social media ecosystems, digital audiences, and online behavior. • To apply community building, engagement strategies, and web analytics tools. • To analyze social media performance, ethics, and data-driven digital strategies • To prepare ethical research reports and evaluate emerging trends in business research and business analytics. • To analyse qualitative and quantitative data using suitable statistical tools and software for meaningful interpretation.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Understand business research concepts, research process, and role of theory in scientific inquiry		K2		
CO2	Apply research design, measurement scales, and ensure validity and reliability of research instruments		K3		
CO3	Apply data collection methods, questionnaire design, and sampling techniques in research studies		K3		
CO4	Analyze qualitative and quantitative data using appropriate statistical tools and software		K4		
CO5	Prepare ethical research reports and evaluate emerging trends in business research and analytics		K4		
UNIT I – Understanding Social Media Ecosystem				9	
Evolution of online communities and history and growth of social media – Comparison between social media and traditional media – Social media audiences, goals, and motivations – Influencer culture, idea diffusion, and virality – Theories of social ties and technological determinism					

UNIT II – Community Building and Digital Insurance	9
Building and nurturing digital communities – Social media science and promotion strategies – Cross-platform integration and digital public relations – Activism, identity formation, and social media in business and marketing – User engagement patterns and digital influence strategies	
UNIT III – Ethics ,Policies and Impact Measurement	9
Social media policies, etiquette, and privacy considerations – Ethics of emerging technologies and future trends – Basics of tracking and campaign measurement – Customized reporting, extracting insights, and behavioural Observations for strategic evaluation	
UNIT IV – Web Analytics and Search Behaviour	9
Introduction to web analytics and data collection methods – KPI planning, business and qualitative analysis – Strategic components of analytics and web metrics – SEO principles, user-generated content, and web traffic analysis – Navigation, usability, mobile platforms, RSS feeds, and understanding search behavior	
UNIT V – Visual Insights and Strategic Applications	9
Data visualization for social media insights – Real-time analytics dashboards and campaign optimization – Multichannel integration and social listening tools – AI-driven social analytics and performance benchmarking – Strategy redesign using visual and analytical intelligence	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Tracy L. Tuten & Michael R. Solomon, <i>Social Media Marketing</i>, Sage Publications, 4th Ed., 2023. 2. Marshall Sponder, <i>Social Media Analytics: Effective Tools for Building, Interpreting, and Using Metrics</i>, Mc Graw Hill, 2nd Ed., 2021.	
REFERENCES: 1. Jim Sterne, <i>Social Media Metrics: How to Measure and Optimize Your Marketing Investment</i>, Wiley, 2nd Ed., 2010. 2. Gohar F. Khan, <i>Social Media Analytics: Techniques and Insights for Extracting Business Value</i>, Springer, 1st Ed., 2015.	
E RESOURCES ➤ https://analytics.google.com/–GoogleAnalytics Platform	

➤ <https://hootsuite.com/>–SocialMedia Management Tool

MAPPING OF COs WITH POs / PSOs								
COs	POs					PSOs		
	1	2	3	4	5	1	2	3
CO1	3	2	–	2	–	2	2	2
CO2	3	3	2	–	2	3	2	3
CO3	2	3	2	3	–	3	2	3
CO4	2	3	2	3	–	3	2	3
CO5	2	3	3	3	3	3	3	3
Avg.	2.4	2.8	2.25	2.75	2.33	2.8	2.2	2.8

PB25P28	E-BUSINESS MANAGEMENT	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES	- To understand the fundamentals, evolution, and strategic importance of e-Business and e-Commerce. - To examine the technology infrastructure, web systems, and cloud-based platforms that enable digital business. - To explore business applications, digital marketing tools, and customer engagement strategies in online commerce. - To develop knowledge of electronic payment systems, cyber security, and block chain technologies for secure digital transactions. - To analyze legal, ethical, and emerging trends in e-Business, including AI, analytics-driven strategies, and sustainable digital commerce practices.				
COURSE OUTCOMES			KNOWLEDGE LEVEL		
The students will be able to					
CO1	Explain the concepts, evolution, and business models of e-Business and e-Commerce.		K2		
CO2	Apply internet protocols, web systems, and cloud-based infrastructure to support e-Business operations.		K3		
CO3	Analyse digital marketing, E-CRM, and customer engagement strategies in online business.		K4		
CO4	Analyse electronic payment systems, cyber security mechanisms, and block chain applications for secure e-Business transactions.		K3		
CO5	Analyse legal, ethical, and emerging trends in e-Business, including AI-powered commerce, platform models, and sustainable practices.		K4		

UNIT I –Fundamentals of E-Business and E-Commerce	9
Definition and evolution of e-Business – Differences between e-Business and e-commerce – Economic drivers, myths, and advantages – E-Business models – Web 2.0 and social commerce (S-Commerce) – Role of mobile commerce and social media in business strategies	
UNIT II – Technology Infrastructure and Web Systems	9
Internet and World Wide Web protocols – FTP and traditional EDI versus Internet EDI – Intranet and extranet systems – Web server basics and hosting services – E-Business architecture – Digital touch points and API-based connectivity – Cloud integration and platform strategies	
UNIT III –Business Applications and Customer Engagement	9
Consumer-oriented e-Business and e-tailing strategies – Digital marketing tools including email, affiliate, and display advertising – E-CRM systems and online service platforms – E-governance applications – Web auctions, virtual communities, and social media marketing – Business-oriented e-Business models	
UNIT IV – Payments and Cyber security in E-Business	9
Electronic payment systems including e-Cash, e-Cheques, and micro payments – Payment protocols and cryptography basics – Network and data security mechanisms – Authentication and authorization – Secure Socket Layer (SSL) technologies – Role of block-chain in secure digital payments	
UNIT V – Legal, Ethical, and Emerging Trends in E-Business	9
Cyber laws in India and global context – Contracts, warranties, consumer protection, and taxation policies – Privacy challenges, encryption, and intellectual property rights – Ethical use of customer data and digital identity compliance – AI-powered commerce, analytics-driven customer insights, platform-based business models, Hyper automation and digital-first strategies – E-Business in MSMEs, rural markets, and green sustainable commerce	
TOTAL : 45 PERIODS	
Text Book: 1. Harvey M. Deitel et al. — E-Business and E-Commerce for Managers, Pearson, original 2011 edition	

2. Bharat Bhasker—Electronic Commerce: Framework, Technologies and Applications, Mc Graw Hill, 2020

References:

1. Efraim Turban, David King, Jae Kyu Lee, Ting-Peng Liang & Deborrah C. Turban — Electronic Commerce: A Managerial and Social Networks Perspective, Springer Texts in Business and Economics, 9th Ed., 2018
2. Gary P. Schneider—Electronic Commerce, Cengage Learning, 12th Ed., 2022
3. Kamlesh K. Bajaj & Debjani Nag—E-Commerce: The Cutting Edge of Business, TMH, 2019
4. S. Jaiswal—Doing Business on the Internet: E-Commerce(E-Business), Galgotia Publications,

E Resources

- <https://www.shopify.com/learn-E-commerce> star tup guides
- <https://www.bigcommerce.com/articles/-E-Businessoperations&trends>
- <https://www.entrepreneur.com/-Digital> entrepreneurship case studies

MAPPING OF COs WITH POs / PSOs								
COs	POs					PSOs		
	1	2	3	4	5	1	2	3
1	2	2	2	1	2	2	2	2
2	2	3	2	2	2	2	3	2
3	3	3	3	2	2	3	3	3
4	3	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3	3
Avg.	2.6	2.8	2.6	2.2	2.4	2.6	2.8	2.6

PB25P29	ENTERPRISE RESOURCE PLANNING	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES	- To understand the fundamentals, evolution, and strategic role of ERP systems in integrating enterprise-wide business processes - To examine the functional modules of ERP systems and business process reengineering (BPR) for organizational efficiency. - To analyze the ERP implementation methodologies, planning, vendor selection, and change management practices. - To evaluate Post-implementation support, performance measurement, and ERP maintenance strategies. - To explore emerging ERP technologies including cloud ERP, AI-enabled ERP, analytics dashboards, and next-generation enterprise platforms.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Explain the concepts, evolution, and benefits of ERP systems in enterprise integration.			K2	
CO2	Apply knowledge of ERP functional modules and business process integration in organizational contexts.			K3	
CO3	Analyze ERP implementation methodologies, vendor selection, and change management strategies.			K4	
CO4	Analyze ERP system performance, Post-implementation maintenance, and organizational impact.			K4	
CO5	Analyze emerging ERP technologies and trends such as cloud ERP, AI integration, and advanced analytics for business transformation.			K4	
UNIT I – Foundations of ERP Systems				9	
ERP introduction and evolution of enterprise systems – Benefits and risks of ERP adoption – Technology infrastructure supporting ERP – Role of ERP in business integration – Warehouse management systems and					
Unit II –ERP Functional Modules and Solutions				9	
Overview of ERP software solutions and business process reengineering (BPR) – Project management in ERP implementation – Core functional modules including finance, HR, sales,					

and production – Organizational data, master data management, and document flow – Integration capabilities across business functions	
Unit III –ERP Implementation Methodology	9
ERP planning and evaluation – Vendor and software selection – ERP implementation life cycle – Implementation methodologies such as ASAP, AIM, and Sure Step – Training and change management – Data migration strategies – Stakeholder roles including consultants, vendors, and employees	
Unit IV –Post-Implementation Review and Maintenance	9
ERP support and maintenance mechanisms – Measuring ERP success and performance metrics – ERP audit processes – Key success and failure factors – Organizational impact of ERP systems – Upgrades, patches, and version management for continuous improvement	
Unit V – Emerging Technologies, Add-on sand ERP Trends	9
Extended ERP systems integrating CRM, SCM, and business intelligence – Cloud ERP, web-enabled ERP, and mobile ERP solutions – Role of artificial intelligence and augmented reality in ERP – Real-time ERP applications and case studies – ERP adoption for MSMEs, sustainable ERP practices, and future trends including SAP S/4HANA, Oracle Fusion, Microsoft Dynamics 365 – ERP analytics dashboards and visualization	
TOTAL : 45 PERIODS	
TEXT BOOK: 1.Rajesh Ray–Enterprise Resource Planning, Mc Graw Hill, 2 nd Ed.,2022	
REFERENCES: 1. Alexis Leon, A.K. Leon &V.K. Garg – Enterprise Resource Planning, Mc Graw Hill Education (India), 4th Ed., 2019 2. Simha R. Magal & Jeffrey Word –Integrated Business Processes with ERP Systems, Wiley, 3rd Ed., 2018 3. Vinod Kumar Garg & N.K. Venkatakrishnan –ERP: Concepts and Practice, PHI Learning, 2 nd Ed., 2021 4. Thomas Davenport –Mission Critical: Realizing the Promise of Enterprise Systems, Harvard Business Review Press, Revised Ed., 2018	

E Resources

- <https://help.sap.com>–SAP ERP Documentation and Learning Hub
- <https://www.oracle.com/erp/>–OracleERPCloudResources
- <https://docs.microsoft.com/en-us/dynamics365/>–Microsoft Dynamics 365 ERP
- <https://www.erpnext.com/>–Open-Source ERP Tutorials
- <https://www.coursera.org/learn/enterprise-systems>–Enterprise System Management (Free Course)

MAPPING OF COs WITH POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	2	2	2	1	2	2	2	2
2	2	3	2	2	2	2	3	2
3	3	3	3	2	2	3	3	3
4	3	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3	3
Avg.	2.6	2.8	2.6	2.2	2.4	2.6	2.8	2.6

PB25P30	BUSINESS ANALYTICS USING PYTHON	L	T	P	C
		3	0	0	3
COURSE OBJECTIVES:	- To equip students with Python programming skills for business analytics and managerial decision-making - To enable learners to clean, manipulate, analyze and visualize business data using Python libraries. - To develop competency in descriptive, predictive and machine learning analytics techniques. - To foster analytical thinking, automation capability and ethical data handling in business environments. - To develop the ability to apply Python libraries such as pandas, NumPy, Matplotlib, and scikit-learn for data cleaning, transformation, and predictive analytics.				
COURSE OUTCOMES				KNOWLEDGE LEVEL	
The students will be able to					
CO1	Demonstrate knowledge of Python fundamentals, data handling, visualization and analytics.			K2	
CO2	Interpret Python constructs for data pre-processing, visualization and machine learning.			K2	
CO3	Apply Python libraries for data cleaning, visualization and predictive analytics.			K3	
CO4	Analyze datasets using EDA and evaluate predictive model outcomes.			K4	
CO5	Evaluate machine learning models and visualization methods for business insights.			K4	

UNIT I – Python Fundamentals and Data Handling	9
Introduction to Python – Data Types – Lists, Tuples, Dictionaries – Control Structures – Loops and Functions – Working with Files – String Operations – Python in Business Context – Use Cases in Marketing, Finance and HR – NumPy for Numerical Data – Pandas for Tabular Data – Data Import and Export (CSV, Excel, APIs) – Handling Missing Values – Filtering, Grouping	

and Aggregation – Data Transformation and Encoding – Data Cleaning in Business Applications.	
UNIT II – Data Visualization and Dash boarding	9
Introduction to Matplotlib and Sea born – Visualization Techniques: Bar Charts, Line Graphs, Pie Charts, Histograms and Heat maps – Business Dashboards using Plotly – Visualization of KPIs and Business Metrics – Interactive Graphs – Automating Charts and Reports for Business Decision Support.	
UNIT III – Descriptive and Predictive Analytics	9
Exploratory Data Analysis (EDA) – Business Summary Statistics – Correlation and Covariance – Linear Regression – Logistic Regression – Model Interpretation – Business Use Cases: Customer Churn Prediction, Loan Default Analysis and Sales Forecasting.	
UNIT IV – Machine Learning Models for Business Insights	9
Supervised and Unsupervised Learning Concepts – Decision Trees – K-Nearest Neighbour (KNN) – Clustering Techniques: K-Means and Hierarchical Clustering – Model Evaluation Metrics – Cross-Validation Techniques – Business Applications: Market Segmentation, Classification and Fraud Detection.	
UNIT V – Business Applications, Ethics and Case Studies	9
Python for Business Process Automation – Basics of Text Analytics – Introduction to Natural Language Processing (NLP) – Business Decision Dashboards – Ethical Use of Data and Artificial Intelligence – AI Governance in Business – Case Studies from Retail, BFSI and Healthcare Analytics.	
TOTAL: 45 PERIODS	
TEXT BOOKS: 1. Wes McKinney (2017). <i>Python for Data Analysis</i> . O'Reilly Media.	
REFERENCES:	

1. Aurélien Géron (2019). *Hands-On Machine Learning with Scikit-Learn, Keras and TensorFlow*. O'Reilly.
2. Reema Thareja (2017). *Python Programming using Problem Solving Approach*. Oxford University Press.
3. Ankur A. Patel (2020). *Data Science for Business with Python*. Packet.
4. Harvard Business Review (2022). *Data Science in Business – Case Compilation*.

E-RESOURCES:

- <https://www.kaggle.com/learn/python>
- <https://www.w3schools.com/python>
- <https://www.analyticsvidhya.com>
- <https://scikit-learn.org>
- <https://www.coursera.org/specializations/python-data-analysis>

Mapping of COs with POs / PSOs								
POs						PSOs		
COs	1	2	3	4	5	1	2	3
1	1	-	-	1	1	1	1	2
2	2	2	2	2	2	2	2	2
3	2	1	2	3	2	1	2	2
4	2	1	3	2	2	2	2	2
5	2	1	3	2	2	2	2	2
Avg.	1.80	1.25	2.50	2.00	1.80	1.60	1.80	2.00