R.M.K. ENGINEERING COLLEGE

(An Autonomous Institution)

R.S.M Nagar, Kavaraipettai, Gummidipoondi Taluk,Thiruvallur District,Tamil Nadu-601206

Affiliated to Anna University, Chennai/Approved by AICTE, NewDelhi/Accredited by NAAC with A+ Grade An ISO 21001:2018 Certified Institution / All the Eligible UG Programs are accredited by NBA, New Delhi

M.B.A MASTER OF BUSINESS ADMINISTRATION
REGULATIONS 2025
Curriculum 2025 (RATIFIED A.Y 2026-2027)
CHOICE BASED CREDIT SYSTEM

PROGRAMME EDUCATIONAL OBJECTIVES

The MBA Graduates of R.M.K. Engineering College will

PEO 1: Strategic leadership - Analyze complex business environments, craft strategies, and drive organizations toward sustainable growth and innovation.

PEO 2: Global Perspective and Decision-Making - Understand cultural diversity, global markets, and emerging economies for informed and effective decision-making.

PEO 3: Entrepreneurial Excellence: Apply skills to create and develop new business opportunities through excelling in skills to conceptualize, develop, and manage new businesses and ventures with creativity and risk mitigation.

PEO 4: Ethics and Social Responsibility: Practice the profession with ethics, integrity, leadership and social responsibility with a good understanding of the changing societal needs.

PROGRAMME OUTCOMES (POs)

On successful completion of the programme, MBA graduates will have the

PO1: Ability to apply the business acumen gained in practice.

PO2: Ability to understand and solve managerial issues.

PO3: Ability to communicate and negotiate effectively, to achieve organizational and individual goals.

PO4: Ability to understand one’s own ability to set achievable targets and complete them.

PO5: Ability to fulfill social out reach

PO6: Ability to take up challenging assignments

PROGRAMME SPECIFIC OUTCOMES (PSOs)

After the successful completion of the programme, the postgraduates will be able to:

Program Specific Outcomes are tailored to the particular vision and focus of the MBA program that emphasize leadership, innovation, and global competitiveness.

PSO1: Integration of Multidisciplinary Knowledge:
Synthesize concepts from finance, marketing, operations, human resources, and strategy to solve cross-functional organizational challenges.

PSO2: Innovative Solutions for management issues:
Apply advanced theories and leverage tools such as Artificial Intelligence, and Business Analytics to improve organizational efficiency

PSO3: Entrepreneurship and Business Innovation:
Identify market gaps, develop innovative business models, and effectively execute entrepreneurial ventures while managing business risks.

Mapping of POs/PSOs to PEOs

Contribution1: Reasonable 2: Significant 3: Strong

PEOs & POs

The M.B.A. Program outcomes leading to the achievement of the objectives are summarized in the following Table:

PROGRAMME EDUCATIONAL OBJECTIVES	PROGRAMME OUTCOMES					
	PO1	PO2	PO3	PO4	PO5	PO6
I	3	3	3	3	3	3
II	3	3	2	2	2	3
III	3	2	3	3	2	3
IV	2	2	3	3	3	3

PROGRAMME EDUCATIONAL OBJECTIVES	PROGRAMME SPECIFIC OUTCOMES		
	PSO1	PSO2	PSO3
I	3	3	3
II	3	3	3
III	3	3	3
IV	2	2	3

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M.B.A MASTER OF BUSINESS ADMINISTRATION
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SEMESTER I

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY COURSES								
1.	25BA101	Managerial Economics	PCC	3	3	0	0	3
2.	25BA102	Organisational Behaviour	PCC	3	3	0	0	3
3.	25BA103	Marketing Management	PCC	3	3	0	0	3
4.	25BA104	Human Resource Management	PCC	3	3	0	0	3
THEORY COURSES WITH LABORATORY COMPONENT								
5.	25BA105	Accounting for Financial Decisions	PCC	5	3	0	2	4
6.	25BA106	Information Systems Management	PCC	5	3	0	2	4
7.	25BA107	Business Statistics with R programming	FC	5	3	0	2	4
LABORATORY COURSES								
8.	25BA111	IT tools for Personal and Office Productivity	FC	2	0	0	2	1
TOTAL				**29**	**21**	**0**	**8**	**25**

SEMESTER II

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY COURSES								
1.	25BA201	Operations Management	PCC	4	3	1	0	4
2.	25BA202	Financial Management	PCC	4	3	1	0	4
3.	25BA203	Strategic Management	PCC	4	4	0	0	4
4.	25BA204	Business Research Methods	PCC	4	3	1	0	4
5.	25BA	Professional Elective– I	PEC	3	3	0	0	3
6.	25BA	Professional Elective– II	PEC	3	3	0	0	3
THEORY COURSES WITH LABORATORY COMPONENT								
7.	25BA205	Operations Research	PCC	5	3	0	2	4
8.	25BA206	Entrepreneurship & Design Thinking	PCC	5	3	0	2	4
LABORATORY COURSES								
9.	25BA211	Strategic Communication in the Digital Era	PCC	2	0	0	2	1
TOTAL				**34**	**25**	**3**	**6**	**31**

SEMESTER III

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY COURSES								
1.	25BA341	International Business Management	PCC	4	4	0	0	4
2.	25BA108	Indian Ethos and Business Ethics	PCC	3	3	0	0	3
3.		Professional Elective–III	PEC	3	3	0	0	3
4.		Professional Elective–IV	PEC	3	3	0	0	3
5.		Professional Elective–V	PEC	3	3	0	0	3
6.		Professional Elective–VI	PEC	3	3	0	0	3
7	25BA346	Non Functional Elective I	NEC	3	3	0	0	3
EMPLOYABILITY ENHANCEMENT COURSES (EEC)								
8.	25BA342	Capstone Project	EEC	8	0	0	8	4
9	25BA344	Summer Internship	EEC	12	0	0	12	6
10.	25BA345	Executive Communication	EEC	4	0	0	4	2
TOTAL				**46**	**22**	**0**	**24**	**34**

SEMESTER IV

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
EMPLOYABILITY ENHANCEMENT COURSES (EEC)								
1.	25BA400	Project Work	EEC	24	0	0	24	12
TOTAL				**24**	**0**	**0**	**24**	**12**

Category	I	II	III	IV	Credits
PCC	20	25	07	-	52
PEC	-	06	12	-	18
NEC	-	-	3	-	03
FC	05	-	-	-	05
EEC	-	-	12	12	24
Total	**25**	**31**	**34**	**12**	**102**

Foundation Courses (FC) / Professional Core Courses (PCC) / Professional Electives Courses (PEC) / Employability Enhancement Courses (EEC) / Non Functional Electives Courses (NEC)

Specialization	Functional Electives Courses	
Financial Management	25BA212	Financial Services
	25BA213	Financial Markets
	25BA301	Financial Derivatives
	25BA302	Security analysis and Portfolio Management
	25BA303	Venture capital and Entrepreneurship Financing
	25BA304	International Finance
Human Resource Management	25BA214	Industrial Relations and Labour Legislation's
	25BA215	HR Strategy And Development
	25BA305	HR Analytics
	25BA306	Reward and Compensation Management
	25BA307	International HRD
	25BA308	Knowledge Management
Marketing Management	25BA216	Services Marketing
	25BA217	Customer Relationship Management
	25BA309	Product and Brand Management
	25BA310	Digital Marketing
	25BA311	Marketing Analytics
	25BA312	Consumer Behaviour and Neural Marketing
Operations Management	25BA218	Introduction to Supply Chain Management
	25BA219	Introduction to Logistics Management
	25BA313	Materials Management
	25BA314	Services Operations Management
	25BA315	Project Management
	25BA316	Introduction to Supply Chain Analytics
Business Analytics	25BA220	Data Preprocessing And Analytics
	25BA221	Data mining and Decision sciences
	25BA317	Social media Web Analytics
	25BA318	E - Business Management
	25BA319	ERP
	25BA320	Business Analytics using python

Specialization	Sector Elective Course	
Hospital and Healthcare Management	25BA222	Introduction to Hospital Management
	25BA223	Hospital Planning and Management
	25BA321	Strategic Marketing for Hospitals
	25BA322	Principles of Finance in Health sector
	25BA323	Legal Framework for Healthcare System
	25BA324	Health Care Analytics
	25BA325	Disaster Management in Medical Centers
	25BA326	Artificial Intelligence (AI) In Medical Care
Logistics Management	25BA224	Logistics Management
	25BA225	Materials Management
	25BA327	Warehouse Management
	25BA328	Transportation and Distribution Management
	25BA329	Reverse and Contract Logistics
	25BA330	Air Cargo Management
	25BA331	Port and Terminal Management
	25BA332	Global Transport Regulations and Legal framework
Supply Chain Management	25BA226	Supply Chain Management
	25BA227	Sourcing and Supply Management
	25BA333	Supply Chain Inventory Management
	25BA334	Supply Chain Analytics
	25BA335	Sustainable Supply Chain Management
	25BA336	Macro Economics and Supply chain
	25BA337	Supply Chain Digitization
	25BA338	Global Supply chain management

Non Functional Elective Courses
Fundamentals of Business Analytics, Digital Marketing, Psychometric Analysis

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	25BA342	Capstone Project	EEC	8	-	-	8	4
2.	25BA344	Summer Internship	EEC	12	-	-	12	6
3.	25BA345	Executive Communication	EEC	4	-	-	4	2
4.	25BA400	Project Work	EEC	24	-	-	24	12

SEMESTER - I

25BA101	MANAGERIAL ECONOMICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To introduce the Micro economic concepts
- To familiarize the students with the importance of economic approaches in managerial decision making
- To understand the applications of economic theories in business decisions
- To explore macroeconomic policies

UNIT I	DEMAND, SUPPLY AND EQUILIBRIUM	9

Economics – Definition - Microeconomics and Macroeconomics – Importance and scope of Microeconomics - Market Economies - Production Possibility Frontier - The Demand Curve Factors that Affect Demand- The Supply Curve- Factors that affect Supply Equilibrium-Divergence from the Equilibrium Price - Effects of changes in business environment on the equilibrium-Price Elasticity of Demand and Supply-Income Elasticity and Cross Price Elasticity Factors that affect the elasticity of demand-Taxes in the demand-supply Frame work. Buyers and Sellers surplus –Government Intervention in the market.

UNIT II	PRODUCTION AND COST	9

TheProductionFunction-BehaviorofAverageandMarginalProducts-LawofDiminishing Returns-Productivity in the Long Run - Scale and Scope of Production - Costs of Different types-Behaviorofaverageandmarginalcosts-Relationshipbetweencostsandproductivity-Costsin the long run.

UNIT III	MARKETS AND PRICING	9

Markets of Different types-Perfectly Competitive Market –Profits in a perfectly competitive Market-Perfect competition in the longrun – Monopoly -Profits in a monopolistic market-Sources of Monopoly Power - The Multi-product firms - Monopolistic Competition - Oligopoly - Different Models of Oligopoly - Why do markets Fail - Game Theory: a strategic understanding-Price discrimination; Peak load pricing; Bundling; Transfer pricing.

UNIT IV	MACRO-ECONOMICS AND NATIONAL INCOME	9

Macroeconomic issues and concepts – The Circular Flow of Income in closed and open economy - Measurement of GDP, Components of GDP, Real versus Nominal GDP, The GDP Deflator. The Consumer Price Index -Calculation of CPI, GDP deflat orver sus the CPI-Correcting economic variables for the effects of inflation, Uses and limitations of using national in come statistics.

UNIT V	MACRO ECONOMIC POLICIES	9

Objectives of Macroeconomic Policy, Different Approaches to Macroeconomic Policy Monetary Policy- Instruments and its effectiveness, Monetary Policy ,and Indian Economy Fiscal Policy-Meaning, Objectives, and Instruments of Fiscal Policy, Nexus between Monetary and Fiscal Policies; Influence of policies on business.

CONTEMPORARY TOPICS

Guest Lecture from industry experts on contemporary topics in market competition and strategic decision

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1:Illustrate how markets work, under the workings of supply ,demand, and equilibrium

CO2:Explain the production of goods and services and measures of productivity.

CO3:Elaborate on the pricing and selling decisions under different types of competitive pressures

CO4:Comprehend end basic macroeconomic concepts such as GDP, unemployment, inflation, interest rates and exchange rates, business cycles

CO5:Determine how economic trends and events will affect the firm's environment

TEXT BOOKS

1. Case, Karl E, Fair, Ray C.,and Oster, Sharon M (2020), Principles of Economics,13th Edition, Pearson Publication
2. David M. Krep (2019), Microeconomics for Managers, 2nd Edition
3. Dwivedi, D.N, (2018), Macroeconomics – Theory and Policy, 5th edition, Tata McGraw Hill Publications.
4. Sikdar,S.(2020), Principles of Macro Economics, 3rd Edition, OUP India
5. Wilkinson, Nick (2022), Managerial Economics, 2nd Edition, Cambridge University Press

REFERENCES

1. W.Bruce Allen, Neil A.Doherty, Keith Weigelt,Edwin Mansfield (2012), Managerial Economics: Theory, Applications, and Cases
2. Mankiw,Gregory, N. (2020), Principles of Macro Economics, 8th Edition, Cengage.
3. Dornbushch, Rudiger, Fischer Stanley, And Startz, Richard (2018) Macro economics,13th Edition, McGraw Hill Education.

<table>
<tr><td rowspan="2">25BA102</td><td rowspan="2">ORGANISATIONAL BEHAVIOUR</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>3</td><td>0</td><td>0</td><td>3</td></tr>
</table>

OBJECTIVES

The course will enable the learners to:

- Understand the basic concepts and functions of management and its application in organization.
- Use a basic knowledge of important theories relating to organizational behavior.
- Understand behavioural processes of individuals, groups and structure in organizations.
- Explore group dynamics and organizational dynamics.

UNIT I	**FUNDAMENTALS OF OB**	**6**

Concept of Management, Nature of Management, What Managers Do – Managerial functions and roles, Levels of Management, Effective Management – Managerial skills and competencies, Characteristics of Quality Managers. Meaning of Organizational Behaviour, Contributing disciplines, Challenges and opportunities, Organizational Behaviour Models – Individual, Groups and Organizational.

UNIT II	**INDIVIDUAL DYNAMICS**	**10**

Concept of Human Behaviour: Nature of People, Value of Person (Ethical Treatment). Personality: Definitions, Different types of Personality, Determinants of Personality – Matching Personality and Jobs. Perception: Definition, Factors influence perception, Person perception: Attribution theory, Errors, Shortcuts used in judgment, Importance of perception in Industry. Communication – Symbols, Network, and Direction of Communication Flow, Barriers to Effective Communication, Interpersonal Communication; Interpersonal Conflicts & Negotiations.

UNIT III	**ATTITUDE AND LEARNING**	**10**

Attitude: Meaning, Characteristics and components of Attitude, Attitude and Behavior, Attitude Formation–Attitude, Job Satisfaction. Learning: Meaning, Characteristics, and Process of learning. Theories of Learning: Classical Conditioning, Operant Conditioning. Learning and Organizational Behaviour Modification. Motivation: Nature of Motivation, Process of Motivation, Traditional & Contemporary theories on Motivation; Motivation application in Organization setup.

UNIT IV	**GROUP DYNAMICS**	**9**

Understanding the group behaviour, Types of Groups: Formal Group, Informal Group; Stages of group development. Group dynamics and Group cohesiveness. Group decision-making. Team: Types of Team, Team Building and Managing Effective Team, Team structure.

UNITV	**ORGANIZATIONALDYNAMICS**	**10**

Organization Structure, Forms of Organization Structure; Organizational Climate, Organizational Culture: meaning, how employees learn organizational culture. Organizational Change: Concept, resistance to change, managing resistance to change. Leadership– Theories, Styles. Managing Stress: concept, causes of stress and coping strategies. Insights from Indian ethos.

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in organizational behavior.

TOTAL:45 PERIOD

COURSE OUTCOMES

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

CO1: Identify the different levels of analysis in organisational behaviour.

CO2: Analyse the factors contributing to individual behavior in the organization.

CO3: Apply the concepts of attitude and learning of individuals to solve problems in organisations.

CO4: Analyse the different factors contributing to effectiveness of groups and teams. CO5: Examine the suitability of organizational structure, organizational culture and leadership for an organization.

TEXT BOOKS

1. L.M. Prasad (2020), Principles and Practice of Management, 20th Edition, Sultan Chand & Sons, New Delhi.
2. Timothy A. Judge, Stephen P. Robbins (2017), Organizational Behaviour, 17th Edition, Pearson Education Limited, Upper Saddle River

REFERENCES

1. Harold Koontz, Heinz Weihrich, Mark V. Cannice (2020), Essentials of Management -An International, Innovation and Leadership Perspective, 11th Edition.
2. Udai Pareek and Sushama Khanna (2018), Understanding Organizational Behaviour (4th Edition), Oxford Publishing.
3. Stephen P.Robbins(2018),Organizational Behaviour (18thEdition)

25BA103	MARKETING MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Familiarize students with the world of marketing.
- Give insights into how the various elements of marketing associate and interact with each other to create Value for the Customers.
- Create and implement effective marketing strategies through the application of core marketing concepts, tools, and analytical skills.
- Provide students with an understanding of marketing opportunities and competitive challenges associated with the digital trend.

UNIT I	UNDERSTANDING MARKETING WORLD	9

Defining Marketing for the New Realities – The Scope of Marketing – Core Marketing Concepts – Marketing Environment; Selling Vs Marketing; Company Orientation toward the Marketplace; Marketing Mix. Understanding Consumer Behaviour, Consumer Buying Decision Process, Types of Consumer Buying Behaviour, Introduction and Classification of Services – Growth of Service Sector – Service Delivery Gaps.

UNIT II	SEGMENTATION, TARGETING AND POSITIONING MODEL	9

Segmentation – Bases for Segmenting Consumer Markets – Geographic Segmentation – Demographic Segmentation – Psychographic Segmentation – Behavioral Segmentation – Market Targeting; Effective Segmentation Criteria – Evaluating and Selecting the Market Segments - Positioning. Setting Product Strategy – Product Classification, Product Levels, Product Line and Mix Concept, Product Life Cycle and New Product Development – Introducing New Market Offerings – Building Loyalty – Brand Communities – Win-Backs – Cultivating Customer Relationships – Customer Relationship Management.

UNIT III	PRICING, VALUE CHAIN AND CUSTOMER VALUE	9

Developing Pricing Strategies and Programs – Understanding the Value Chain and its Relevance to Marketing – Managing Customer Value; The Value Delivery Process – The Value Chain – Building Customer Value, Satisfaction, and Loyalty – Measuring Customer Life Time Value and Retaining Customers.

UNIT IV	DISTRIBUTION AND PROMOTION	9

Designing and Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics. Designing and Managing Integrated Marketing Communications – Managing Mass Communications: Advertising, Sales Promotions, Events and Experiences and Public Relations.

UNIT V	DIGITALMARKETING	9

E-Commerce - Managing Digital Communications: Online-Social Media – Mobile; Managing Personal Communications: Direct – Database Marketing – Personal Selling. Online Marketing - Advantages and Disadvantages - Online Marketing Communication Options- Social Media Marketing – E-Word of Mouth–Forms and Creating;Mobile and App Based

CONTEMPORARY TOPICS

Case Analysis; Guest Lectures; Contemporary Issues and Challenges of Marketing in Digital Era.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Understand key marketing concepts, principles, and frameworks.

CO2: Design and implement effective marketing strategies, including segmentation, targeting, and Positioning (STP).

CO3: Analyze pricing strategies, value chain concepts, and customer relationship approaches to enhance customer value and loyalty.

CO4: Develop the ability to evaluate and design Pricing strategies

CO5: Design suitable distribution channels and promotional strategies.

TEXT BOOKS

1. Kotler,P.,Keller,K.L.,Chernev.A.,Sheth.J.N.,Shainesh.G.,(2022),Marketing Management, 16th Edition.
2. Hair,J.F.,Lamb,C.W.,McDaniel,C.(2018),MKTG,UnitedStates: Cengage Learning.

REFERENCES

1. Hartley,S.W.,Kerin,R.A.(2021),Marketing,15thEdition,UnitedStates:McGraw- Hill Education.
2. Harris,L.C.,He,H.,Armstrong,G.,Piercy,N.,Kotler,P.T.(2019), Principlesof Marketing, 8thEdition,United Kingdom:Pearson Education.

<table>
<tr><td rowspan="2">25BA104</td><td rowspan="2">HUMAN RESOURCE MANAGEMENT</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>3</td><td>0</td><td>0</td><td>3</td></tr>
</table>

OBJECTIVES

The course will enable the learners to:

- Provide students with comprehensive knowledge and understanding of Human Resource Management by exploring the contemporary HR environment and current trends in the field.
- Equip students with both conceptual and practical understanding of key HR functions, including recruitment and selection, job design and analysis, training and development, and performance appraisal.
- Develop students' knowledge of essential HR areas such as employee compensation, industrial relations, workplace safety, and health management.
- Facilitate deeper insights into the evolving role of HR managers and their strategic importance in managing people within dynamic and changing business environments.

UNIT I	**INTRODUCTION TO HUMAN RESOURCE MANAGEMENT**	**6**

Overview, Meaning and Definitions of HRM, Nature, Scope and Objectives of HRM, Evolution of HRM, Functions of HRM, Roles and responsibility of HR Manager, Important current trends in HR.

UNIT II	**HR PLANNING, RECRUITMENT AND SELECTION**	**9**

Meaning, Objectives, Importance and Significance of HR Planning, Processes of HR Planning. Job Analysis – Job description and job specification. Recruitment – Purposes, Process and Sources of Recruitment. Selection – Importance and processes of selection, Types and uses of Tests in selection, Interview – Types and Methods of Selection Interview. Importance and Process of employee Induction/Orientation.

UNIT III	**TRAINING AND DEVELOPMENT**	**9**

Overview of Human Resource Development and Training and Development: Meaning, Objectives and Importance of training, Methods of Training, Assessment of training needs, Process of training. Purposes, Bases and types of Promotion, Transfer, Demotion and Separation.

UNIT IV	**PERFORMANCE MANAGEMENT SYSTEM AND COMPENSATION MANAGEMENT**	**12**

Overview of performance management system: The Applications of Performance Management, Managing Organizational Performance. Performance Appraisal – Meaning, Objectives and uses of performance appraisal, Different methods of appraising employee performance. Career Management: Career succession planning and development. Overview of Compensation Management: Meaning and Definition of compensation, wage. Factors/Criteria in determining pay rates/Wage and Salary. Mechanism and Methods of Wage and Salary determination in India. Competency-Based Pay, Money and Motivation: An Introduction. Insurance Benefits, Retirement Benefits, Personal Services and Family-Friendly Benefits, Flexible Benefits Programs.

UNIT V	**INDUSTRIAL RELATIONS**	**9**

Concept of Industrial Relations: Meaning, Importance, Objectives and main aspects of industrial relations. Causes of poor IR and Developing of sound IR. Theoretical Perspectives on Industrial Relations. Parties to Industrial relations – Nature of Trade Unions – Problems of Trade Union – Measures to Strengthen Trade Union. Industrial Dispute: Meaning of ID, Different forms and types of industrial dispute, Causes for Industrial Disputes, Procedures for settlement of Industrial Disputes.

CONTEMPORARY TOPICS

Guest Lecture from Industry

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Identify the key functions of HRM and HR Planning processes and learn how to manage HR in the organization.

CO2: Analyse the sources for attracting, recruiting and selecting the right talent.

CO3: Assess the training needs and organize the training and development programs.

CO4: Evaluate the different performance management systems, and appreciate the best practices in appraising the employee performance.

CO5: Analyse the dynamics of industrial relations and develop the ability to settle industrial disputes at the workplace.

TEXT BOOKS

1. Gary Dessler, BijuVarkkey,(2020),Human Resource Management,15thedition,Pearson Education.

REFERENCES

1. S.S.Khanka(2019), Human Resource Management, S.Chand&CompanyLtd.,New De
2. C.B.Mamoria&V.S.P.Rao (2018),PersonnelManagement(TextandCases), Himalaya Houses Pvt. Ltd., Mumbai.
3. Aswathappa K (2021), Human Resource Management:Text and Cases, Tata McGraw-Hil

<table>
<tr><td rowspan="2">25BA105</td><td rowspan="2">ACCOUNTING FOR FINANCIAL DECISIONS</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>3</td><td>0</td><td>2</td><td>4</td></tr>
<tr><td colspan="6">OBJECTIVES
The course will enable the learners to:
• To provide students with the knowledge of prepare, analyze and interpret financial statements.
• To provide students with the process of Depreciation and Inventory valuation.
• To provide students with the knowledge of cost concepts for preparing the cost statement and break-even analysis.
• To provide students with the knowledge of preparing budgets and analyze the cost variances.</td></tr>
<tr><td>UNIT I</td><td colspan="4">FINANCIAL STATEMENTS & ANALYSIS</td><td>9</td></tr>
<tr><td colspan="6">Nature & objectives of Financial Statements, Uses & Limitations of Financial Statements, Stakeholders of financial statements, Income Statement, Balance Sheet, Cash Flow Statement, Sources of financial information. Tools and techniques of financial statement analysis, Ratio Analysis, Comparative Statement, Common Size Statement, Du-Pont Analysis, Concepts of Industrial sickness & financial distress.</td></tr>
<tr><td>UNIT II</td><td colspan="4">DEPRECIATION AND INVENTORY VALUATION</td><td>9</td></tr>
<tr><td colspan="6">Depreciation – causes – importance – methods of depreciation: Straight Line Method, Diminishing Balance Method, Sum of Years' Digits Method, Units of Production Method.
Inventory valuation – meaning – objectives – inventory valuation techniques: FIFO, LIFO, simple average and weighted average methods.</td></tr>
<tr><td>UNIT III</td><td colspan="4">COST ACCOUNTING</td><td>9</td></tr>
<tr><td colspan="6">Basic Concepts of Cost Accounting, Objectives, importance and Advantages of Cost Accounting, Cost Centre, Cost Unit, Elements of Cost, Preparation of Cost Sheet. Marginal Costing – Meaning, Fixed Cost, Variable Cost, Applications, Advantages and Limitations, Contribution, P/V Ratio, Break-Even Point (BEP), Graphical Chart, Margin of Safety, Angle of incidence.</td></tr>
<tr><td>UNIT IV</td><td colspan="4">BUDGETARYCONTROLANDVARIANCEANALYSIS</td><td>9</td></tr>
<tr><td colspan="6">Budget and Budgeting – Meaning, Importance, Advantages and Disadvantages, Types of Budgets; Budgets and Budgetary Control. Variance Analysis – Material Variance – Cost Variance – Labour Variance.</td></tr>
<tr><td>UNIT V</td><td colspan="4">DIGITALACCOUNTINGPRACTICES</td><td>9</td></tr>
<tr><td colspan="6">Digital techniques for accounting – Automation, Data analytics, Cloud technology, Block chain and cyber security.</td></tr>
</table>

LAB COMPONENTS
PERIODS **30**

Lab 1: Introduction to Tableau - Application for Business Insights
Lab 2: Integrating Balancesheet Data - All Sectors
Lab 3: Creating Interactive Dashboard for financial insights
Lab 4: Integration of Depreciation dataset
Lab 5: Creating Interactive Dashboard for Depreciation Schedules
Lab 6: Zoho Books - Application for Inventory system
Lab 7: Power BI - Preparing Cost Sheet
Lab 8: Power BI - Marginal Costing - Whatif Scenario Analyis
Lab 9: Power BI - Budget Analysis and Visualization
Lab 10: AI tools for Accounting

TOTAL: 75 PERIODS

COURSEOUTCOMES
Upon completion of the course, the students will be able to:

CO1: Prepare and analyze financial statements, including income statements, balance sheets, and cash flow statements, and interpret their results for decision-making purposes. **CO2**: Apply various methods of depreciation (e.g., straight-line, reducing balance) and inventory valuation techniques (e.g., FIFO, LIFO, weighted average) in accordance with accounting standards.

CO3: Prepare cost statements and perform break-even analysis to determine cost behavior, profitability, and business efficiency.

CO4: Develop different types of budgets (e.g., cash budget, flexible budget) and analyze cost variances to assess deviations and improve cost control.

CO5: Use digital accounting practices and techniques.

TEXT BOOKS

1. N.P.Srinivasan & M.Sakthivel Murugan,"Accounting for Management" 5th Edition, 2019,
2. S. Chand & Company Ltd., New Delhi.
3. Maheshwari SN, Maheshwari Suneel K, Maheshwari Sharad K (CA), "Principles of Management Accounting", 2021, Sultan Chand & Sons.
4. Tulsian P.C,2018,Financial Accounting, 1/e, Pearson Education
5. M.Y.Khan & P.K.Jain, 2019, Management Accounting, Tata McGraw Hill, 8th edition.
6. Catherine Stenzel and Joe Stenzel ,2019, From Cost to Performance Management, John Wiley & Sons.

REFERENCE BOOKS

1. Larry M.Walther, 2020, Financial Accounting, Create Space Independent Publishing Platform, Luxemberg
2. M.C.Shukla,T.S.GrewalandS.C.Gupta, 2019, Advanced Accounting, S.Chand&Co., New Delhi
3. N.M.Singhvi, Ruzbeh J.Bodhanwala, 2018, Management Accounting–Text and cases, 3rd edition PHI Learning.
4. AshishK. Battacharya, 2019, Introduction to Financial Statement Analysis, Elsevier

25BA106	INFORMATION SYSTEMS MANAGEMENT	L	T	P	C
		3	0	2	4

OBJECTIVES

The course will enable the learners to:

- To understand the fundamental concepts of information systems, organizational structures, and business processes.
- To explore different types of information systems and their role in business integration and decision-making.
- To study the architecture, design, development, and evaluation of information systems.
- To introduce enterprise technologies and system development approaches including ERP, SCM, CRM, and SAD.

UNIT I	BASIC CONCEPTS OF INFORMATION SYSTEM	9

Role of data and information, Organization structures, Business Process, Systems Approach and introduction to Information Systems.

UNIT II	TYPES OF IS	9

Resources and components of Information System, integration and automation of business functions and developing business models. Role and advantages of Transaction Processing System, Management Information System, Expert Systems and Artificial Intelligence, Executive Support Systems and Strategic Information Systems.

UNIT III	ARCHITECTURE & DESIGNOFIS	9

Architecture & Design of IS Architecture, development and maintenance of Information Systems, Centralized and Decentralized Information Systems, Factors of success and failure, value and risk of IS.

UNIT IV	DECISION MAKING PROCESS	9

Decision Making Process – Programmed and Non-Programmed decisions, Decision Support Systems, Models and approaches to DSS.

UNIT V	ERP & SAD	9

Introduction to Enterprise Management technologies, Business Process Re-engineering, Total Quality Management and Enterprise Management System viz. ERP, SCM, CRM and E-commerce. Introduction to SAD – System Analysis and Design. Models and Approaches of Systems Development.

LAB COMPONENT
30PERIODS

- Lab 1: Basic Data Entry, Data Filtering, Sorting, and Formula Applications in MS Excel
- Lab 2: Creating Dynamic Dashboards Using Pivot Tables, Charts, and Visualization Tools
- Lab 3: Introduction to ERP – Financial Transactions, Inventory Management, and Sales Processes
- Lab 4: Optimization Techniques Using Excel Solver for Resource Allocation and Production Planning
- Lab 5: Developing a Basic Information System Using Google Forms, Google Sheets, and Google Sites
- Lab 6: Importing and Analyzing Large Datasets for Interactive Reports and Charts

TOTAL:75 PERIODS

COURSEOUTCOMES

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

CO1: Understand the concepts of information systems.

CO2: Identify and differentiate types of IS (Transaction Processing Systems, MIS, DSS, Expert Systems, and Strategic IS) and explain their roles in decision-making and business automation.

CO3: Examine the architecture, development, and maintenance of centralized and decentralized Information Systems, and assess factors contributing to their success or failure.

CO4: Analyze decision-making processes for programmed and non-programmed decisions and demonstrate the use of Decision Support Systems (DSS) for business problem-solving.

CO5: Describe enterprise management concepts, including ERP, SCM, CRM, and e-Commerce, and evaluate their role in improving business processes.

TEXT BOOKS

1. Management Information Systems, Effy Oz, Thomson Learning / Vikas Publications.
2. Management Information Systems, James A. O'Brien, Tata McGraw-Hill.

REFERENCE BOOKS

1. Laudon, K.C. & Laudon, J.P. (2022), Management Information Systems: Managing the Digital Firm, 17th Edition, Pearson.
2. Turban, E., Pollard, C., & Wood, G. (2018), Information Technology for Management: On-Demand Strategies for Performance, Growth, and Sustainability, Wiley.

25BA107	BUSINESS STATISTICS WITH R PROGRAMMING	L	T	P	C
		3	0	2	4

OBJECTIVES

The course will enable the learners to:

- To introduce fundamental statistical concepts relevant to managerial decision-making.
- To familiarize students with data collection, presentation, and interpretation techniques.
- To enable students to apply descriptive statistics for summarizing business data.
- To provide a basic understanding of correlation, regression, and probability in business contexts.

UNIT I	INTRODUCTION TO STATISTICS AND DATA TYPES	9

Meaning and Scope of Statistics in Business-Importance in Managerial Decision-Making-Types of Statistics: Descriptive vs. Inferential-Types of Data: Qualitative vs. Quantitative-Scales of Measurement: Nominal, Ordinal, Interval, Ratio.

UNIT II	DATA COLLECTION, CLASSIFICATION & PRESENTATION	9

Sources of Data: Primary & Secondary-Methods of Data Collection: Survey, Observation, Interviews-Classification and Tabulation of Data-Diagrammatic and Graphical Presentation: Bar Chart, Pie Chart, Line Graph, Histogram, Ogive (Concept Only)-Frequency Distribution (Simple understanding only)

UNIT III	MEASURES OF CENTRAL TENDENCY AND DISPERSION	9

Meaning and Purpose of Central Tendency-Mean, Median, Mode – Concept, Merits and Demerits- Dispersion: Meaning and Significance-Range, Quartile Deviation, Mean Deviation, Standard Deviation (Only Interpretation)-Coefficient of Variation – Business Applications.

UNIT IV	CORRELATION AND REGRESSION ANALYSIS	9

Concept and Uses of Correlation in Business-Types: Positive, Negative, and Zero Correlation-Simple Introduction to Karl Pearson's and Spearman's Correlation (No Problems)-Regression – Concept of Line of Best Fit-Simple Interpretation of Regression in Business.

UNIT V	CORRELATION AND REGRESSION ANALYSIS	9

Basic Concepts of Probability-Simple Events and Sample Space (Concept only)-Business Applications of Probability (e.g., decision trees, risk)-Index Numbers: Meaning, Types – CPI, WPI-Time Series: Trend Analysis and Business Applications.

LAB COMPONENTS **PERIODS 30**

Lab Experiment 1: Download and install R-Programming environment and install basic packages using install.packages() command in R.

Lab Experiment 2: Learn all the basics of R-Programming (Data types, Variables, Operators etc.)

Lab Experiment 3: Implement R-Loops with different examples.

Lab Experiment 4: Learn the basics of functions in R and implement with examples.

Lab Experiment 5: Implement different String Manipulation functions in R.

Lab Experiment 6: Create a data set and do statistical analysis on the data using R

Lab Experiment 7: Create pie charts and bar charts using R.

TOTAL:75 PERIODS

COURSE OUTCOMES

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

CO1: Understand basic statistical concepts and their role in business decisions.
CO2: Collect, classify, and present business data using simple tools.
CO3: Apply measures of central tendency and dispersion to analyze data.
CO4: Interpret correlation and regression outputs for managerial use.
CO5: Recognize the relevance of probability and index numbers in decision-making.

TEXT BOOKS

1. Levin, R. I., & Rubin, D. S. (2017). *Statistics for management* (7th ed.). Pearson Education.
2. Gupta, S. P. (2020). *Statistical methods* (45th ed.). Sultan Chand & Sons.
3. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2020).
4. *Statistics for business and economics* (14th ed.). Cengage Learning.
5. Sharma, J. K. (2021). *Business statistics* (5th ed.). Vikas Publishing House.
6. Berenson, M. L., Levine, D. M., &Szabat, K. A. (2021). *Basic business statistics: Concepts and applications* (14th ed.). Pearson.

REFERENCE BOOKS

1. Gupta, C. B., & Gupta, V. (2021). *An introduction to statistical methods* (24th ed.). Vikas Publishing House.
2. Black, K. (2019). *Business statistics: For contemporary decision-making* (10th ed.). Wiley India.
3. Tulsian, P. C., & Vishal, P. (2019). *Quantitative techniques: Theory and problems*. Pearson Education.
4. Aczel, A. D., &Sounderpandian, J. (2018). *Complete business statistics* (7th ed.). McGraw Hill Education.
5. Nagar, A. L., & Das, R. K. (2022). *Basic statistics* (2nd ed.). Oxford University Press.

25BA111	IT TOOLS FOR PERSONAL AND OFFICE PRODUCTIVITY	L	T	P	C
		0	0	2	1

OBJECTIVES

The course will enable the learners to:

- To understand the basic features and functionalities of MS Word, PowerPoint, and Excel.
- To develop skills in creating and formatting documents, presentations, and spreadsheets.
- To learn the principles of writing professional and personal emails with proper etiquette.
- To gain introductory knowledge of Artificial Intelligence, its types, and applications.

UNIT I	PERSONAL PRODUCTIVITY SOFTWARE :MSWORD	2

MS Office: Basic Concepts – Features – Equation Editor. MS Word: Introduction to Word – Formatting Documents – Inserting MS Objects.

UNIT II	MS POWER POINT	2

MS PowerPoint: Basic Concepts – Creating/Saving/Closing Presentation – Formatting – Inserting Clipart – Transition Effects – Animation Effects.

UNIT III	WORKINGWITH MS-EXCEL	2

Excel: Create Worksheets – Apply Custom Data Formats and Layouts – Creating Tables – Perform Operations with Formulas and Functions – Create Charts and Objects – Create Advanced Formulas.

UNIT IV	EMAILETIQUETTES	2

Writing professional Emails – Writing Personal Mails – Etiquettes.

UNIT V	INTRODUCTIONAI	2

Introduction – Types of AI – ANI, AGI, ASI – Narrow, General, Super AI, Examples – AI Problems – Applications of AI in various industries.

TOTAL: 10 PERIODS

COURSEOUTCOMES

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

CO1: Demonstrate proficiency in creating and formatting professional documents using MS Word, including the integration of objects and the use of advanced features like the Equation Editor.

CO2: Design and deliver impactful presentations using MS PowerPoint by applying advanced formatting, transitions, animations, and multimedia elements.

CO3: Apply advanced MS Excel functionalities, including custom formatting, formula creation, and charting, to solve data-driven problems and streamline workflows.

CO4: Develop and apply professional and personal email-writing skills with proper etiquette, ensuring clarity, courtesy, and effectiveness in communication.

CO5: Explain the fundamental concepts, types, and applications of Artificial Intelligence (AI) across industries, while analyzing key challenges in the field.

TEXT BOOKS

1. *Microsoft Office Step by Step (Office 2021 and Microsoft 365)*, Joan Lambert & Curtis Frye, Heuristics for Software Engineering, 2022.
2. Vishnu P. Singh, *MS Office 2013 (Revised Edition)*.

REFERENCE BOOKS

1. Paul McFedries, *Microsoft Excel Formulas and Functions (Office 2021 and Microsoft 365)*, 1st Edition.
2. Danny Rubin, *Wait, How Do I Write This Email?*
3. John Lewis, *Business Email Writing: 99+ Essential Message Templates – Unstoppable Communication Skills at Work*, 2023.
4. Liam Caton, *A Complete Guide to AI for Business*.

SEMESTER II

25BA201	OPERATIONS MANAGEMENT	L	T	P	C
		3	1	0	4

OBJECTIVES

The course will enable the learners to:

- Provide a broad introduction to the field of Operations Management.
- Explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to competitive advantage
- Providing insights on aggregate and capacity planning
- Making the schedule and determine the time of an operation or project

UNIT I	INTRODUCTION TO OPERATIONS MANAGEMENT	12

Definition of Production and Operations Management-Interrelationship with other functions - Products and Services-Value Analysis-Production & Operations Strategy for Competitive Advantage; Types of Production System.

UNIT II	FACILITY LOCATION AND FACILITY LAYOUT	12

Introduction, steps in location selection and factors affecting- selection of region, community and site selection, Factor rating method, Break-even Method, Load-distance Method, Practical Problems related to locational analysis. Facility Layout: Factors affecting facility layout, objectives of a good layout, types of layout -product, process, fixed position, cellular, combined layouts

UNIT III	AGGREGATE PLANNING AND MAINTENANCE MANAGEMENT	12

Aggregate Planning and S&OP, Material Requirements Planning (MRP) and ERP, Just-in Time. Maintenance: Objectives of Maintenance-Types of Maintenance-Breakdown Maintenance, Preventive Maintenance, Predictive Maintenance, TPM.

UNIT IV	PLANNING THE STRATEGIC USE OF RESOURCES	12

Sales Forecasting, Forecasting System, Qualitative Methods of Forecasting method, Quantitative method of Forecasting - Regression analysis, Time series, moving average, exponential smoothing.

UNIT V	PROJECT MANAGEMENT	12

Project Scheduling, Network Diagrams, Critical path method to find the expected completion time of a project, determination of floats in networks, PERT networks, determining the probability of completing a project, predicting the completion time of project.

CONTEMPORARY TOPICS

Guest lecture by industry experts, Emerging trends in Operations

TOTAL : 60 PERIODS

COURSE OUTCOMES

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

CO1: Implement strategic level decision of Operations Management to get competitive advantages.

CO2: Identify and plan production and operations activities such as product and process design, facility location selection, layout.

CO3: Formulate the maintenance strategy to reduce loss.

CO4.Apply forecasting methods to plan for resources

CO5. Make the schedule and determine the time of an operation or project.

TEXT BOOKS

1. William J. Stevenson (2022), Operations Management by McGraw-Hill, 13th Edition,
2. Production and Operations Management by Panneerselvam R; Publisher: Prentice Hall of India.

REFERENCES

1. Operations Management by Norman Gaither and Greg Frazier (2017), Cengage, 9th Edition
2. Operations Management by Jay Heizer and Barry Render (2017), Pearson 12th Edition
3. Evans, James R | Anderson, David R | Sweeney, Dennis J | Williams, Thomas A, Applied production and operations management. by. Edition: 3rd ed
4. Jeffrey K. Like(2004), The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer (General Finance & Investing)

25BA202	FINANCIAL MANAGEMENT	L	T	P	C
		3	1	0	4

OBJECTIVES

The course will enable the learners to:

- Gain knowledge of principles and concepts used in financial decision making
- Be able to find out the best course of action among several financial options
- Learn to value different financial products
- Gain the understanding to apply financial concepts and principles in overall management of an employee.

UNIT I	FINANCIAL MANAGEMENT - OVERVIEW	12

Definition of Finance, decision areas of Finance, Finance within an organisation, Finance and related disciplines, Forms of Business organisations, Goals of Financial management, Stockholder-Manager conflicts; Stockholder-Debt holder conflicts, Balancing shareholder interests and the interests of society Time Value of Money: Future Values, Present Values, Interest rates, Computation of EMI, Annuity, Annuity Due, Perpetuity, Even and Uneven cash flows. Financial Assets: Bonds and their valuation, Risk and rates of return, Stocks and their valuation.

UNIT II	COST OF CAPITAL	12

Cost of Capital: Sources of Finance, Cost of Capital- Meaning, importance; Measurement of Specific Costs-Cost of Debt-Cost of Equity, Cost of Preference Shares-Cost of Retained earnings; Computation of Overall Cost of Capital. -Weighted Average Cost of Capital, Marginal Cost of Capital.

UNIT III	CAPITAL BUDGETING	12

Principles and Techniques Nature of Capital Budgeting - Data Requirement- identifying Relevant Cash Flows - Evaluation Techniques and Capital Budgeting Practices in India. Capital Budgeting-Additional Aspects Net Return Value - Internal Rate of Return - Profitability Index Methods-A Comparison - Project Selection Under Capital Rationing - and Inflation and Capital Budgeting, Analysis of Risk and Uncertainty in Capital Budgeting
Description and Measurement of Risk; and Risk Evaluation Approaches.

UNIT IV	CAPITAL STRUCTURE AND LEVERAGE ANALYSIS	12

Capital Structure: Theories; Net Income Approach; Net Operating Income (NOI) Approach; Modigliani-Miller (MM) Approach; and Traditional Approach. Capital structure and Firm valuation Leverages: Operating, Financial and combined leverages, In difference point,
EBIT- EPS Analysis and Practical applications

UNIT V	WORKING CAPITAL MANAGEMENT	12

Approaches, Types, Significance, Operating cycle, Estimation of working capital needs, Management of Inventories, Management of Cash (Various theoretical models), Management of Receivables and Marketing securities.

CONTEMPERORY ISSUES

Guest Lecture from industry experts on Corporate finance related practices

TOTAL: 60 PERIODS

COURSE OUTCOMES

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

CO1: Understand the foundational concepts of finance, including its role within an organization and its relation to other disciplines and to apply concept of the Time Value of Money (TVM)

CO2:Assess the cost of capital from various sources, including debt, equity, preference shares, and retained earnings, and compute the overall cost of capital for organizations.

CO3: Utilize capital budgeting techniques such as NPV, IRR, and profitability index to make informed investment decisions under conditions of risk, uncertainty, and inflation.

CO4: Analyze capital structure theories and their implications for firm valuation and decision-making, and explore leverage effects using EBIT-EPS analysis.

CO5: Develop effective working capital management strategies by estimating needs and managing inventories, cash, receivables, and marketable securities using theoretical model

TEXT BOOKS

1. Khan, M.Y & Jain, P.K.: Financial Management; Tata McGraw Hill, New Delhi, 2008.
2. Pandey, I. M.: Financial Management; Vikas Publishing House, New Delhi, 2005.
3. Chandra, Prasana: Financial Management; Tata McGraw Hill, New Delhi, 2008.

REFERENCES

1. Brealey and Meyers: Principles of Corporate Finance: Tata McGraw Hill, New Delhi, 2008.
2. Keown, Martin, Petty and Scott (Jr): Financial Management: Principles and Applications; Prentice Hall of India, New Delhi, 2002.
3. Gitman, L.J: Principles of Managerial Finance; Addison Wasley, 2009.
4. Vanhorne, James C: Financial Management and Policy; Prentice Hall of India, New Delhi, 2002.
5. Kishore Ravi, M: Financial Management; Taxman, 2006.

<table>
<tr><td rowspan="2">25BA203</td><td rowspan="2">STRATEGIC MANAGEMENT</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>4</td><td>0</td><td>0</td><td>4</td></tr>
<tr><td colspan="6">OBJECTIVES
The course will enable the learners to:
• To understand the strategic management process and its relevance to organizational vision, mission, and goal setting.
• To analyze external industry environments using competitive tools like Porter’s Five Forces and key success factors.
• To evaluate internal resources and capabilities through SWOT, value chain analysis, and competitive strategies.
• To learn the formulation, implementation, and control of strategies tailored to specific business contexts and ethical practices.</td></tr>
<tr><td>UNIT I</td><td colspan="4">THE STRATEGIC MANAGEMENT PROCESS</td><td>12</td></tr>
<tr><td colspan="6">Meaning and Nature of Strategic Management, Its importance and relevance - Characteristics of Strategic Management - The Strategic Management Process - Relationship between a Company Strategy and its Business Model. The Strategic Process - Strategy formulation: Developing Strategic vision and Mission for a company - Setting Objectives: Strategic Objectives and Financial Objectives - Balanced score card, Company Goals and Company Philosophy - The hierarchy of Strategic Intent: Merging the Strategic Vision Objectives and Strategy into a Strategic Plan.</td></tr>
<tr><td>UNIT II</td><td colspan="4">INDUSTRY AND COMPETITIVE ANALYSIS</td><td>12</td></tr>
<tr><td colspan="6">Analyzing a company’s External Environment-The Strategically relevant components of a company’s external environment - The Methods of Industry and Competitive Analysis - Porter’s dominant economic features: Competitive Environment Analysis & Porter’s five force model - Industry driving forces-key success factors, concept and implementation.</td></tr>
<tr><td>UNIT III</td><td colspan="4">EVALUATING COMPANY RESOURCES & COMPETITIVE CAPABILITIES</td><td>12</td></tr>
<tr><td colspan="6">Analyzing a company’s resources and competitive position - Analysis of the company’s present strategies - SWOT Analysis, Value chain Analysis & Bench marking. Strategy & Competitive Analysis - Generic Competitive Strategies: Low cost, Differentiation, Best cost , Focused Strategies - Strategic alliances, Collaborative partnerships, Mergers and acquisition,-Joint Ventures Strategies, Outsourcing Strategies, International Business level strategies.</td></tr>
<tr><td>UNIT IV</td><td colspan="4">MATCHING STRATEGY TO COMPANY’S SITUATION</td><td>12</td></tr>
<tr><td colspan="6">Formulating long term and Grand Strategies - Tailoring Strategy to fit specific Industry and company situation - Long term objectives for Grand Strategies- Innovation, Integration and diversification: Conglomerate Diversification, Retrenchment, Restructuring and turnaround - GE nine cell planning grid and BCG Matrix.</td></tr>
<tr><td>UNIT V</td><td colspan="4">IMPLEMENTATION AND CONTROL</td><td>12</td></tr>
<tr><td colspan="6">Strategy Implementation: Operationalizing strategy, Annual Objectives - Developing Functional strategies, Developing and communicating concise policies. - Institutionalizing the strategy: Structure, Leadership and Culture. - Ethical Process and corporate social responsibility. Strategic control guiding and evaluating strategies - Establishing Strategic controls, Operational Control Systems - Monitoring performance and evaluating deviations
- Challenges of strategy Implementation.</td></tr>
</table>

CASES IN STRATEGIC MANAGEMENT

Strategy in single Business Companies - Strategy in Diversified Companies -Mergers & Acquisitions as Business Strategy - Implementing and Executing Strategy.

TOTAL 60 PERIODS

COURSE OUTCOMES

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

CO1: Understand the strategic management process and formulate a company's vision, mission, and objectives.

CO2: Analyze external environments using tools like Porter's Five Forces to assess competition and key success factors.

CO3: Evaluate internal resources using SWOT, value chain analysis, and benchmarking to develop competitive strategies.

CO4: Align strategies with industry conditions using tools like the BCG matrix for diversification and turnaround.

CO5: Implement and monitor strategies through functional policies, leadership, and control systems.

TEXT BOOKS

1. Roy Dilip, 'Strategic Management', Gyan Publishing House, New Delhi, 1997.
2. Prasad R, 'Strategic Management Concepts and Cases' Published by ICFAI, Nagarjuna Hill, Hyderabad, India, 1st Edn., 2003.
3. Cherunilam Francis, 'Strategic Management', Himalaya Publishing House, Mumbai.

REFERENCES

1. Thompson Arthur & Jr. A.J. Strickland III, 'Strategic Management Concepts and Cases' 10th Edn., Irwin McGraw-Hill, 1998.
2. L Thompson John, 'Strategic Management Awareness and Change', 3rd Edn., 1997.
3. R. David Fred, 'Concepts of Strategic Management', 6th Edn., United States of America 1997

25BA204	BUSINESS RESEARCH METHODS	L	T	P	C
		3	1	0	4

OBJECTIVES

The course will enable the learners to:

- To understand the fundamentals of scientific enquiry, research constructs, and the structured research process.
- To learn various research designs based on application, methodology, and area of research.
- To apply appropriate sampling and experimental techniques for effective research planning and execution.
- To develop skills in hypothesis testing, statistical analysis, and interpretation of research data using parametric and non-parametric techniques.

UNIT I	PROBLEM DEFINITION	12

Nature and purpose of scientific enquiry; Parameters of research; Definition of construct and variables; Introduction to Research; Research Process; Steps in Research Process

UNIT II	RESEARCH DESIGN	12

Concepts and type of research design, Design of research on the basis of applicationpure and applied. Design of research on the basis of Techniques/Methodology-Exploratory and Descriptive. Descriptive Research-Qualitative and Quantitative. Quantitative-Field Studies, Field experiments and laboratory experiments

UNIT III	DESIGN OF RESEARCH ON THE BASIS OF AREA OF RESEARCH	12

Research design-Basic Principles- Need of research design -- Features of good design- Important concepts relating to research design-Observation and Facts, Laws and Theories, Prediction and explanation, Induction, Deduction, Development of Models. Developing a research plan - Exploration, Description, Diagnosis, and Experimentation. Determining experimental and sample designs.

UNIT IV	STATISTICAL HYPOTHESES AND TEST OF SIGNIFICANCE	12

Procedure for testing of hypothesis. Determining levels of significance. Type I and Type II errors ANOVA: One Way, Two Way, Three Way, Four Way, Five Way. Chi square test and its application. Students ‘t’ distribution; Non-parametric statistical technique (Chi-Square Test, Binomial Test, Runs Test, One-Sample Kolmogorov-Smirnov Test) Parametric statistical tests, Correlation and Regression Analysis

UNIT V	TABULATION AND ANALYSIS OF DATA	12

Selection of appropriate statistical techniques; Interpretation: Statistical data analysis.Advance techniques in analyzing associative data.

CASE ANALYSIS

Identification, analysis and development of case. Report Writing. Application of Statistical Software in Research Using SPSS.

TOTAL: 60 PERIODS

COURSE OUTCOMES

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

CO1: Understanding of Business Research Fundamentals

CO2: Knowledge of Research Design and Methodology

CO3: Competence in Data Collection Methods

CO4: Ability to Analyze and Interpret Data.

CO5:Application of Business Research in Decision Making.

TEXT BOOKS

1. Srivastava, Shenoy and Sharma, (2001): Quantitative Techniques for Managerial Decision: New Delhi.
2. .Hair, (2000): Marketing Research: Tata McGraw Hill, New Delhi.
3. Cooper, D. R., & Schindler, P. S. (2023). Business Research Methods (14th ed.). McGraw Hill.
4. Kothari, C. R., & Garg, G. (2019). Research Methodology: Methods and Techniques (4th ed.). New Age International.
5. Paneerselvam, R. (2023). Research Methodology (3rd ed.). PHI Learning.
6. Malhotra, N. K. (2024). Marketing Research: An Applied Orientation (8th Global ed.). Pearson.

REFERENCE BOOKS

1. David A. Aaker, (2000): Marketing Research: John Wiley and Sons, USA.
2. Luck and Rubin, (2001): Marketing Research: Prentice Hall of India, New Delhi.
3. Tull and Hawkins, (2001): Marketing Research Management and Method: 6th Ed., Prentice Hall of India, New Delhi.
4. Marketing Research: Text and Cases : Boyd, Westfall & Stasch (7th edition).

25BA205	OPERATIONS RESEARCH	L	T	P	C
		3	0	2	4

The course will enable the learners to:

- To understand the principles, methodology, and applications of Operations Research in decision-making and optimization.
- To develop linear programming models and apply graphical and simplex methods for solving optimization problems.
- To solve problems related to decision theory, transportation, assignment, sequencing, and game theory.
- To apply project management techniques like CPM and PERT for effective project planning, scheduling, and control.

UNIT I	DEVELOPMENT OF OR & LINEAR PROGRAMMING	9

Origin & development of OR, Different phases of OR study, Methodology of OR, Scope and limitations of OR, OR in decision making, Applications of OR. Linear programming: Linear Programming Problem (LPP), Generalized LPP- Formulation of LPP, Guidelines for formulation of linear programming model, Assumption, Advantages, Limitations, Linear Programming problem (LPP), optimal and feasible Solutions by graphical method (minimization and maximization), Simplex method.

UNIT II	DECISION THEORY	9

Decision Theory: Introduction, Decision under uncertainty- Maxmin &Minmax, Decision under Risk- Expected Value, Simple decision tree problems. (Only theory). Job Sequencing- ‘n’ jobs on 2 machines, ‘n’ jobs on 3 machines, ‘n’ jobs on ‘m’ machines. Sequencing of 2 jobs on ‘m’ machines. (Theory and Problems)

UNIT III	TRANSPORTATION PROBLEMS	9

Formulation of transportation problem, types, initial basic feasible solution using North-West Corner Rule (NWCR), Least Cost Method (LCM) and Vogel’s Approximation method (VAM). Optimality in Transportation problem by Modified Distribution (MODI) method. Unbalanced T.P. Maximization T.P. Degeneracy in transportation problems, application of transportation problem. (Theory and Problems).

UNIT IV	GAME THEORY	9

Theory of Games: Definition, Pure Strategy problems, Saddle point, Max-Min and Min-Max criteria, Principle of Dominance, Solution of games with Saddle point. Mixed Strategy problems (Graphical and algebraic methods). Assignment Problem: Formulation, Solutions to assignment problems by Hungarian method, Special cases in assignment problems, unbalanced, Maximization assignment problems. (Theory and Problems)

UNIT V	PROJECT MANAGEMENT	9

Introduction, Construction of networks, Structure of projects, phases of project management-planning, scheduling, controlling phase, work breakdown structure, project control charts, network planning (Theory only) Critical path method to find the expected completion time of a project, determination of floats in networks, PERT networks, determining the probability of completing a project, predicting the completion time of project; (Theory and Problems)

LABORATORY COMPONENT 30

1. **Linear Programming (LP) and Optimization**
   - **Objective:** Solve real-world business problems like resource allocation, production scheduling, and supply chain optimization.
   - **Exercise:** Formulate and solve an LP problem using the Simplex method for maximizing profits or minimizing costs.
   - **Tool:** Excel Solver, Python (with PuLP or SciPy), MATLAB.
2. **Transportation and Assignment Problems**
   - **Objective:** Optimize logistics, such as minimizing transportation costs or assigning tasks to minimize effort.
   - **Exercise:** Solve a transportation problem for a company distributing products across multiple warehouses and retail outlets.
   - **Tool:** Python (Google OR-Tools), Excel Solver.
3. **Network Analysis**
   - **Objective:** Analyze shortest paths, maximum flow, and minimum spanning trees in logistics and project management.
   - **Exercise:** Model a supply chain network and find the shortest path or the bottleneck using maximum flow analysis.
   - **Tool:** Gephi, Python (NetworkX), MATLAB.
4. **Decision Theory and Game Theory**
   - **Objective:** Make decisions under uncertainty or competitive conditions.
   - **Exercise:** Analyze a business scenario using decision trees and solve a two-player game theory problem (e.g., Nash equilibrium).
   - **Tool:** Python, R, or specialized software like Gambit.
5. **Simulation Modeling**
   - **Objective:** Model and simulate business processes to analyze performance under uncertainty.
   - **Exercise:** Simulate a queuing system (e.g., customer service at a bank) and measure key metrics like average waiting time.
   - Python (SimPy).
6. **Integer and Non-linear Programming**
   - **Objective:** Solve advanced optimization problems like workforce scheduling or capital budgeting.
   - **Exercise:** Formulate and solve an integer programming problem for staff scheduling.
   - **Tool:** Python (Pyomo), MATLAB, Gurobi.
7. **Project Management**
   - **Objective:** Optimize project schedules using PERT/CPM.
   - **Exercise:** Create a project network diagram, calculate critical paths, and analyze project risks.
   - **Tool:** MS Project, Primavera, Python.

TOTAL: 75 PERIODS

COURSE OUTCOMES
Upon completion of the course, the students will be able to:

CO1: Understand the origins, phases, scope, and applications of OR, and solve linear programming problems using graphical and simplex methods.
CO2: Apply decision-making techniques under uncertainty and risk, and solve job sequencing problems for various machine-job combinations.
CO3: Formulate and solve transportation problems using various metho addressing issues like unbalanced and degenerate cases.
CO4: Solve pure and mixed strategy problems in game theory using dominance and graphical methods, and optimize assignment problems using the Hungarian method.
CO5: Construct and analyze project networks using CPM and PERT to determine completion time, floats, and project probabilities.

TEXT BOOKS

1. Ravindran, A., Phillips, D. T., & Solberg, J. J. (2007). Operations research- principles and practice (2nd ed.). New Delhi: Wiley India (Indian print).
2. Swarup Kanti, Gupta PK (Dr), Mohan Man (2022), Operations Research, Introduction to Management Science, Sultan Chand & Sons
3. Taha, H. A. (2017). Operations research-an introduction (10th ed.). New Delhi: Pearson Prentice Hall (Indian print).

REFERENCES

1. Hillier, F.S., Lieberman, G. J., Nag, B., & Basu, P. (2017). Introduction to operations research- concepts and cases (10th ed.). New Delhi: Tata McGraw Hill (Indian print).
2. Hadley, G. (2002). Linear programming. New Delhi: Narosa Publishing House. Department of Operational Research, University of Delhi

<table>
<tr><td rowspan="2">25BA206</td><td rowspan="2">ENTREPRENEURSHIP AND DESIGN THINKING</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>3</td><td>0</td><td>2</td><td>4</td></tr>
<tr><td colspan="6">OBJECTIVES
The course will enable the learners to:
• To understand the fundamentals of entrepreneurship, types of entrepreneurs, and the socio- economic factors influencing entrepreneurial growth.
• To explore entrepreneurial motivation, competencies, and the institutional support system for small-scale enterprises and project formulation.
• To examine corporate entrepreneurship, women entrepreneurship, and entrepreneurial opportunities in various sectors including rural and informal economies.
• To apply design thinking and innovation management principles in addressing business challenges and fostering entrepreneurial creativity.</td></tr>
<tr><td>UNIT I</td><td colspan="4">ENTREPRENEURSHIP</td><td>9</td></tr>
<tr><td colspan="6">Definition, Role and expectations-Entrepreneurial styles and types-Characteristics of the Entrepreneur-Functions of an Entrepreneur-Promotion of Entrepreneurship-Role of Socio-Cultural, Economic and Political Environment-Growth of Entrepreneurship in Pre and Post-independence era-Constraints for the Growth of Entrepreneurial Culture.</td></tr>
<tr><td>UNIT II</td><td colspan="4">ENTREPRENEURIAL MOTIVATION THEORIES</td><td>9</td></tr>
<tr><td colspan="6">Entrepreneurial Competencies-Developing Competencies-Role of Entrepreneur. Development Programs-Assistance Programme for Small Scale Units-Institutional Framework-Role of SSI Sector in the Economy-SSI Units-Failure, Causes and Preventive Measures-Turnaround Strategies. Preparation of Feasibility Report-Financial and Technical Evaluation-Project Formulation Common Errors in Project Formulation-Specimen Project Report-Ownership Structures Proprietorship, Partnership, Company, Cooperative, Franchise</td></tr>
<tr><td>UNIT III</td><td colspan="4">CORPORATE ENTREPRENEURSHIP & WOMEN ENTREPRENEURSHIP</td><td>9</td></tr>
<tr><td colspan="6">Concepts-Need-Strategies - Corporate Practices-Select Cases-Dynamics of Competition-Plans for Survival and Growth Need-Growth of women Entrepreneurship-Problems faced by Women Entrepreneurs-Development of women Entrepreneurship-Entrepreneurship in Informal Sector-Rural Entrepreneurship-Entrepreneurship in Sectors. like Agriculture, Tourism, health case, Transport and allied services.</td></tr>
<tr><td>UNIT IV</td><td colspan="4">DESIGN THINKING</td><td>9</td></tr>
<tr><td colspan="6">Introduction to Design Thinking-Importance of Design Thinking-History of Design Thinking-Design Thinking Framework - Design Thinking Methods - Empathise -Define- Ideate-Prototype-Test- Software Development Methodology-Waterfall model-V - model -Customer Example.</td></tr>
<tr><td>UNIT V</td><td colspan="4">INNOVATION MANAGEMENT</td><td>9</td></tr>
<tr><td colspan="6">Innovation Management-Changing Management Paradigms-Design Thinking related to Science and art-Design Thinking in Business-Linking Design Thinking Solution to Business Challenges</td></tr>
</table>

LABORATORY COMPONENT 30 PERIODS

- Lab 1: Empathy and Problem Discovery
- Lab 2: Ideation and Brainstorming
- Lab 3: Value Proposition Canvas
- Lab 4: Business Model Development
- Lab 5: Rapid Prototyping
- Lab 6: Customer Journey Mapping
- Lab 7: Pitch Deck Development
- Lab 8: MVP Design and Validation
- Lab 9: Financial Modeling
- Lab 10: Team Collaboration and Agile Methods

TOTAL: 75 PERIODS

COURSE OUTCOMES

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

CO1:Apply the concepts of Entrepreneurship

CO2: Develop Entrepreneurial Competencies through motivation

CO3: Evaluate corporate and women entrepreneurship

CO4: Understand the concepts of design thinking

CO5: Develop critical Thinking and Problem Solving for innovation

TEXT BOOKS

1. Kuratko, D. F. (2025). Entrepreneurship (11th ed.). Cengage Learning.
2. Timmons, J. A., & Spinelli, S. (2024). New Venture Creation: Entrepreneurship for the 21st Century (11th ed.). McGraw-Hill.
3. Byers, T. H., Dorf, R. C., & Nelson, A. J. (2020). Technology Ventures: From Idea to Enterprise (5th ed.). McGraw-Hill.
4. Entrepreneurship: Successfully Launching New Ventures (2024). 7th Edition. Pearson.
5. Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation (2019). Harper Business.
6. Design Thinking for Strategic Innovation (2013). John Wiley & Sons.

REFERENCES

1. Kuratko, D. F. (2021). Entrepreneurship: Theory, Process, and Practice (11th ed.). Cengage Learning.
2. Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation. John Wiley & Sons.
3. Stickdorn, M., & Schneider, J. (2011). This Is Service Design Thinking: Basics, Tools, Cases. BIS Publishers.
4. Cross, N. (2023). Design Thinking: Understanding How Designers Think and Work (2nd ed.). Bloomsbury Publishing.

25BA211	STRATEGIC COMMUNICATION IN THE DIGITAL ERA	L	T	P	C
		0	0	2	1

OBJECTIVES
The course will enable the learners to:

- Provide students with an understanding of strategic communication concepts and their role in digital platforms.
- Develop the ability to create, analyze, and manage communication strategies in the digital age.
- Familiarize students with tools and techniques for digital communication, including social media, content creation, and analytics.
- Equip students with the skills to design engaging digital campaigns, analyze audience behavior, and measure communication effectiveness. Foster ethical and critical thinking in digital communication and messaging strategies.

1. **Social Media Strategy Development**
   - **Exercise:** Develop a social media campaign for a product or cause, including platform selection, content calendar, and messaging strategy.
   - **Tools:** Facebook/Instagram Business Suite, Hootsuite, Canva.
   - **Objective:** Learn how to create and implement a targeted social media strategy.
2. **Content Creation for Digital Platforms**
   - **Exercise:** Design multimedia content (graphics, videos, blogs, and captions) for platforms like Instagram, LinkedIn, or YouTube.
   - **Tools:** Canva, Adobe Spark, or CapCut for videos.
   - **Objective:** Develop content creation skills for engaging communication.
3. **Email Marketing Campaign Design**
   - **Exercise:** Create and send an email marketing campaign for a hypothetical product launch, including audience segmentation and A/B testing.
   - **Tools:** Mailchimp, HubSpot.
   - **Objective:** Understand the principles of email marketing and audience engagement.
4. **Website Development and Content Optimization**
   - **Exercise:** Develop a simple website or landing page for strategic communication using website builders. Optimize content for SEO.
   - **Tools:** Wix, WordPress, or Google Sites.
   - **Objective:** Learn website communication strategies and basic content optimization techniques.
5. **Audience Analysis and Digital Analytics**
   - **Exercise:** Analyze social media or website performance using digital analytics tools to track audience reach, engagement, and conversions.
   - **Tools:** Google Analytics, Facebook Insights, LinkedIn Analytics.

- **Objective:** Measure the impact of communication campaigns and derive actionable insights.

6. **Crisis Communication Simulation**
   - **Exercise:** Create a strategic communication response plan for a hypothetical online crisis (e.g., negative reviews, misinformation).
   - **Tools:** MS Word or Google Docs, along with communication mockups.
   - **Objective:** Learn to manage crises effectively using communication strategies.
7. **Podcast or Video Content Production**
   - **Exercise:** Record and edit a short podcast episode or video addressing a strategic communication topic or campaign idea.
   - **Tools:** Audacity (audio), CapCut/Filmora (video).
   - **Objective:** Develop multimedia production skills to support communication strategies.
8. **Keyword and SEO Research**
   - **Exercise:** Perform keyword research and optimize sample content for SEO using basic tools.
   - **Tools:** Google Keyword Planner, Ubersuggest.
   - **Objective:** Understand search engine optimization for improved online visibility.
9. **Digital Storytelling Workshop**
   - **Exercise:** Develop a compelling brand or cause story that combines visuals, text, and audio to engage audiences.
   - **Tools:** Canva, Animoto, Adobe Express.
   - **Objective:** Learn to tell powerful stories that resonate with the target audience.
10. **Performance Report Creation for a Campaign**
    - **Exercise:** Create a performance report for a digital marketing campaign using data insights and visualizations.
    - **Tools:** Google Analytics, MS Excel, or Tableau.
    - **Objective:** Learn to analyze and present performance metrics effectively.

Software and Tools for Strategic Communication:

1. **Content Creation:**
    - Canva, Adobe Creative Cloud (Photoshop, Illustrator, Premiere Pro), CapCut, Audacity.
2. **Social Media Management:**
    - Hootsuite, Buffer, Facebook Business Suite, Sprout Social.
3. **Email Marketing:**
    - Mailchimp, HubSpot, Constant Contact.
4. **Website Development and SEO:**
    - WordPress, Wix, Google Sites, Google Keyword Planner, SEMrush.
5. **Analytics and Reporting:**
    - Google Analytics, Facebook/Instagram Insights, LinkedIn Analytics, Tableau, MS Excel.
6. **Video/Podcast Tools:**
    - Audacity (audio editing), Filmora, CapCut, Animoto, Anchor (podcast hosting).
7. **Collaboration Tools:**
    - Trello, Slack, Google Workspace (Docs, Sheets, Forms).

TOTAL: 30 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of strategic communication, audience segmentation, and messaging in the digital era.

CO2: Evaluate the role of social media, content marketing, and digital tools in modern communication strategies.

CO3: Develop and execute strategic communication plans tailored for various digital platforms (e.g., social media, websites, emails).

CO4: Create engaging multimedia content (text, images, videos) for effective communication using relevant tools and software.

CO5: Use analytics tools to monitor audience behavior, evaluate campaign performance, and optimize communication strategies.

TEXT BOOKS

1. Camilleri, M. A. (2021). *Strategic Corporate Communication in the Digital Age*. Emerald Publishing.
2. Muntean, C. (2024). *Strategic Communications in the Digital Age*. Routledge.
3. Falkheimer, J., Heide, M., Young, P., & Coombs, W. T. (Eds.). (2015). *Strategic Communication, Social Media and Democracy: The Challenge of the Digital Naturals*. Routledge.
4. Kamath, K., & Vibrant Publishers. (2024). *Social Media Marketing Essentials You Always Wanted to Know*. Vibrant Publishers.

REFERENCES

1. Ogilvy, D. (2023). *Ogilvy on Advertising*. Vintage Books (Reprint Edition).
2. Ryan, D. (2024). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation* (5th ed.). Kogan Page.
3. Scott, D. M. (2023). *The New Rules of Marketing and PR* (9th ed.). Wiley.

SEMESTER III

25BA341	INTERNATIONAL BUSINESS MANAGEMENT	L	T	P	C
		4	0	0	4

OBJECTIVES

The course will enable the learners to:

- To provide a comprehensive understanding of the concept, scope, and environment of international business along with its evolving global dynamics.
- To familiarize students with the various theories of international trade and business, enabling analytical understanding of global economic interactions.
- To develop knowledge about international institutions and regional economic integrations, and their role in shaping global trade and policy frameworks.
- To equip students with insights into multinational corporations, global competitiveness, and functional areas such as international marketing, HRM, and finance in a global context.

UNIT I	INTRODUCTION TO INTERNATIONAL BUSINESS	12

Evolution, Meaning, Importance, Nature and Scope of International Business, Characteristics of International Business, Factors affecting International Business, Changing scenario of International Business, Advantages of International Business, challenges in International business, Modes of entry into International Business, Internationalization Process. Introduction, Meaning and Components of International Business Environment.

UNIT II	THEORIES OF INTERNATIONAL BUSINESS	12

Introduction, Mercantilism, Theory of absolute cost advantage, Comparative cost advantage theory, Comparative cost advantage with money, Relative factor endowment theory, Product life cycle theory, Global strategic rivalry theory, Porter's National Competitive Advantage Theory.

UNIT III	INTERNATIONAL INSTITUTIONS	12

UNCTAD- Introduction, Principles and achievements, IMF-Role and objectives, WTO-Role and advantages, TRIMS, TRIPS Features, Economic Integration. Introduction, Levels of Economic Integration, Regional Economic Integration in Europe, USA, ASEAN, SAARC, SAPTA.

UNIT IV	MULTI-NATIONAL CORPORATIONS	12

Definition and Meaning, factors that contributed to positive growth of MNCs, Importance of MNCs, Advantages and disadvantages of MNCs, MNCs in India, Organizational structure of MNCs, Transfer of Technology, Global Competitiveness, Indicators of competitiveness, Technology of Global competitiveness.

UNIT V	INTERNATIONAL MARKETING, GLOBAL HRM AND GLOBAL FINANCE	12

Basics of International Marketing- Environment and cultural dynamics of global markets, functions of International Marketing, determining International Marketing strategies, Major actors in International Marketing, Competitive Global Marketing Strategies. Global HRM- Characteristics, Nature and factors of IHRM, Functions of IHRM, Global Finance-Features of Global Capital Market, Growth of Global Capital Market, Global equity market.

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Emerging Trends in Business Management

TOTAL:60 PERIODS

COURSE OUTCOMES

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

CO1: Students will be able to explain the fundamentals of international business, including its nature, scope, environment, and modes of entry.

CO2: Students will be able to analyze and compare various international trade theories and their practical relevance in global business decisions.

CO3: Students will be able to evaluate the role of international institutions and economic integrations in facilitating global trade and cooperation.

CO4: Students will be able to assess the functioning, strategies, and impact of multinational corporations and their contribution to global competitiveness.

CO5: Students will be able to apply concepts of international marketing, global HRM, and global finance in understanding real-world global business operations.

TEXT BOOKS

1. International Business (Text and Cases): P Subba Rao, HPH, 5th Edition, 2026.
2. International Business: competing in the global market place, Charles W L Hill, G. Tomas M. Hult Tata McGraw-Hill., 14th Edition, 2023.
3. International Business, Justin Paul, PHI Learning, 6th Edition, 2022.
4. International Business: Text and Cases, Cherunilam, PHI Learning, Francis, 6th Edition, 2024.

REFERENCES

1. Charles W. L. Hill & Arun Kumar Jain. (2024). *International Business* (7th ed.). McGraw Hill.
2. Michael R. Czinkota et al. (2023). *International Business* (9th ed.). Cengage Learning.
3. K. Aswathappa. (2023). *International Business* (7th ed.). McGraw Hill.
4. John D. Daniels, Lee H. Radebaugh & Daniel P. Sullivan. (2023). *International Business* (17th ed.). Pearson.
5. Vyuptakesh Sharan. (2024). *International Business: Concepts, Environment and Strategy* (5th ed.). Pearson.

25BA108	INDIAN ETHOS AND BUSINESS ETHICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide an understanding of the foundations of Indian ethos and their relevance in modern managerial practices.
- To develop awareness of values, ethics, and cultural dimensions in business, including comparisons between Indian and Western management philosophies.
- To expose students to traditional and contemporary approaches to leadership, learning systems, and karma-based management principles.
- To equip students with knowledge of ethical theories, moral development, and the creation of ethical organizational culture and leadership.

UNIT I	INTRODUCTION TO INDIAN ETHOS	9

History & Relevance, Principles Practiced by Indian Companies, Role of Indian Ethos in Managerial Practices, Management Lessons from Vedas, Mahabharata, Bible and Quran.

UNIT II	UNDERSTANDING VALUES IN BUSINESS	9

Kautilya‘s Arthashastra, Indian Heritage in Business, Management- Production and Consumption. Ethics v/s Ethos , Indian v/s Western Management, Work Ethos and Values for Indian Managers- Relevance of Value Based Management in Global Change- Impact of Values on Stakeholders, Trans-Cultural Human Values, Secular v/s Spiritual Values , Value System in Work Culture, Stress Management-Meditation for mental health, Yoga.

UNIT III	CONTEMPORARY APPROACHES TO INDIAN ETHOS	9

Contemporary Approaches to Leadership- Joint Hindu Family Business–Leadership Qualities of Karta, Indian Systems of Learning-Gurukul System of Learning, Advantages-Disadvantages of Karma, importance of Karma to ManagersNishkama Karma-Laws of Karma, Law of Creation- Law of Humility- Law of Growth- Law of Responsibility- Law of Connection- Corporate Karma Leadership.

UNIT IV	UNDERSTANDING THE BUSINESS ETHICS	9

Understanding the need for ethics, Ethical values, myths and ambiguity, ethical codes, Ethical Principles in Business; Theories of Ethics, Absolutism verses Relativism, Teleological approach, the Deontological approach, Kohlberg‘s six stages of moral development (CMD).

UNIT V	ETHICAL CULTURE IN ORGANIZATION	9

Ethical Culture in Organization, Developing codes of Ethics and conduct, Ethical and value based leadership. Role of scriptures in understanding ethics, Indian wisdom & Indian approaches towards business ethics.

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Emerging Trends in Business Ethos and Ethics

TOTAL:45 PERIODS

COURSE OUTCOMES
Upon completion of the course, the students will be able to:

CO1: Students will be able to explain the concepts of Indian ethos and their application in managerial decision-making and organizational practices.
CO2: Students will be able to analyze the role of values, ethics, and cultural systems in shaping business behavior and stakeholder relationships.
CO3: Students will be able to apply principles from Indian philosophy such as karma, leadership models, and traditional learning systems in management contexts.
CO4: Students will be able to evaluate ethical issues in business using various ethical theories and frameworks of moral development.
CO5: Students will be able to design and promote ethical culture, value-based leadership, and codes of conduct within organizations.

TEXT BOOKS

1. Dr. Subhash Sharma, Indian Ethos and Business Ethics for Management, IBA Publications (Indus Business Academy), 2022
2. A. C. Fernando, Business Ethics and Corporate Governance, Pearson, 3rd Edition, 2021
3. Dr. Subhash Sharma & Rajneesh Khare, Indian Ethos and Business Ethics for Management, New Age International Publishers, 1st Edition, 2022.

REFERENCES

1. Ace V. Simpson, Leadership Lessons from Bhagavad Gita, SAGE, 2020.
2. Murthy, C.S.V. — Business Ethics, Himalaya Publishing House, 2024.

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25BA342	CAPSTONE PROJECT	L	T	P	C
		0	0	8	4

OBJECTIVES

The course will enable the learners to:

- Students are expected to understand key business processes involved in developing and managing new business ideas and their growth.
- Students will gain hands-on exposure in an organizational setting by observing and analyzing business operations and monitoring overall business performance.
- Students are expected to refine and improve their business plans or project ideas.
- Students are required to conduct a SWOT analysis of their chosen business ideas or project concepts as part of the in-house project.

COURSE OUTCOMES

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

CO 1 : Summarize and critique their existing business, its strengths and weaknesses. experimenting, and iteration play in the development of ideas.

CO 2 : Compare evaluate and set priorities for moving the business forward.

CO 3 : Develop a strategy for taking the business to the next level, including a plan for funding, and a plan and timeline for reaching scale.

CO 4: Identify different types of business process in creation of start-ups

CO 5: Evaluate and gain clear understanding on the business plan.

25BA345	EXECUTIVE COMMUNICATION	L	T	P	C
		0	0	4	2

OBJECTIVES

The course will enable the learners to:

- Understand effective communication and personality development in professional contexts.
- Develop analytical and business communication skills.
- Enhance decision-making and interpersonal skills through simulations.
- Gain placement-oriented competencies such as GD and interviews.
- Integrate communication and managerial capabilities for corporate performance.

UNIT I	**COMMUNICATION & PERSONALITY**	**12**
Team building exercises - Introduction to problem solving and critical thinking - Introduction to business case studies - Group discussion basics - Presentation practice and evaluation		
UNIT II	**ANALYTICAL & BUSINESS SKILLS**	**12**
Data analysis using Excel - Business report writing - Professional email writing - Group discussion practice - Case study analysis and evaluation		
UNIT III	**CORPORATE READINESS & MANAGERIAL SKILLS**	**12**
Introduction to business analytics - Data driven decision making - Strategic case study discussions - Group discussion simulation - Corporate scenario role plays		
UNIT IV	**PLACEMENT PREPARATION**	**12**
Mock interview – round 1 - Mock interview – round 2 - Industry knowledge and company preparation - Salary negotiation and job offer handling - Final placement assessment		
UNIT V	**CORPORATE PARADIGM APPLICATIONS (LEVEL 3)**	**12**
Communication & Personality - Analytical & Business Skills - Corporate Readiness & Managerial Skills - Placement Preparation - Placement Preparation		
CONTEMPORARY TOPICS		
Guest Lecture from Industry Experts		
		TOTAL: 60 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of professional communication, personality development, and team dynamics required in corporate environments.

CO2: Apply business communication skills in preparing professional reports, emails, and presentations, and participate effectively in group discussions and case-based activities.

CO3: Demonstrate analytical and problem-solving skills using data interpretation techniques and tools such as MS Excel.

CO4: Analyze business situations and corporate scenarios to support effective decision-making and managerial actions.

CO5: Evaluate personal performance in interviews, group discussions, and workplace simulations to enhance employability and corporate readiness.

TEXT BOOKS

1. Bovee, C. L., & Thill, J. V. (2023). *Business Communication Today* (15th ed.). Pearson.
2. Lesikar, R. V., Flatley, M. E., & Rentz, K. (2021). *Lesikar's Basic Business Communication* (14th ed.). McGraw-Hill Education.
3. Raman, M., & Singh, P. (2023). *Business Communication* (3rd ed.). Oxford University Press.
4. Koneru, A. (2021). *Professional Communication* (3rd ed.). McGraw-Hill Education.

REFERENCES

1. Harvard Business Review. (2016). *HBR Guide to Better Business Writing*. Harvard Business Review Press.
2. Cottrell, S. (2017). *Critical Thinking Skills: Effective Analysis, Argument and Reflection* (3rd ed.). Palgrave Macmillan.
3. Dhanavel, S. P. (2010). *Soft Skills for Engineers and Professionals*. Orient Blackswan.
4. Denny, R. (2015). *Communicate to Win*. Kogan Page.
5. Minto, B. (2021). *The Pyramid Principle: Logic in Writing and Thinking* (Updated ed.). Pearson.
6. Harvard Business Review. (2016). *HBR Guide to Persuasive Presentations*. Harvard Business Review Press.

25BA344	SUMMER INTERNSHIP	L	T	P	C
		0	0	12	6

OBJECTIVES

The course will enable the learners to:

- This course provides MBA students with an opportunity to participate in a well-structured summer internship after the completion of first year.
- The corporate internship helps students utilize the knowledge acquired from the management theories in solving real-world problems in a business organization.
- Students will be able to learn how things work on the ground by operating in different business functions including marketing, finance, human resource management, operations management, business analytics, logistics management, supplychain management, hospital management.

COURSE OUTCOMES

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

CO 1: To utilize business principles and functional understanding in actual business situations through experience-based learning and engagement.
CO 2: To study organizational structures, business procedures, and activities to analyze the integration of functions within organizations.
CO 3:To assess the business processes and decision-making mechanisms employed by management for gaining insights into organizational effectiveness and performance.
CO 4 : To exhibit professional managerial skills like communication, teamwork, leadership, and time management.
CO 5: To build up industrial exposure and business networks for career-oriented awareness and future career planning.

SEMESTER - IV

		L	T	P	C
25BA400	**PROJECT WORK**	**0**	**0**	**24**	**12**

OBJECTIVES

The course will enable the learners to:

- To equip students with hands on experience and problem solving skills.
- To merge theoretical learning with practical applications,enabling students to handle any challenges they may face in their future professional lives.

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

Students who have selected Sectorial Specialization should select the project topic based on the Sectorial Electives.

COURSE OUTCOMES

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

CO 1: To Develop relevant research problems based on effective application of research skills and logical reasoning.
CO 2: To Perform a thorough review of literature to provide adequate theoretical and conceptual background for the research study.
CO 3: To Plan and carry out research projects using appropriate research methods and techniques.
CO 4: To Communicate research results effectively using written reports and presentations.
CO 5: To apply research knowledge gained through experience to devise innovative solutions.

FUNCTIONAL ELECTIVES COURSES
FINANCIAL MANAGEMENT

25BA212	FINANCIAL SERVICES	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide foundational knowledge of the Indian financial Services and its key participants.
- To introduce various financial services such as banking, insurance, mutual funds, and leasing.
- To develop analytical skills for evaluating financial products and services.
- To understand regulatory frameworks and emerging trends in the financial sector.

UNIT-I	**INTRODUCTION TO FINANCIAL SERVICES**	**9**

Introduction to Financial Services. Nature of Financial Services. Scope of Financial Services. Types of Financial Services. Fund Based Financial Services. Fee Based Financial Services.

UNIT II	**LEASING AND HIRE PURCHASE**	**9**

Leasing: Meaning and Types of Leasing. Benefits of Leasing, Main Clauses in the Lease Agreement Legislative Frameworks related to leasing. Introduction to Hire Purchasing. Concept and features of Hire Purchase.

UNIT III	**CREDIT RATING AND SECURITIZATION OF DEBT**	**9**

Meaning and Process of Credit rating of financial instruments. Rating methodology. Introduction to various Rating Agencies. Rating Symbols of different companies. Securitization of Debts- Meaning and Features. Special Purpose Vehicle, Pass through certificate and mechanism. Benefits of Securitization. Issues of Securitization.

UNIT IV	**DEPOSITORY SERVICES AND MUTUAL FUNDS**	**9**

Role and Advantages of the Depository system, NSDL and CDSL, Depository participants and their roles. Stock broking services including SEBI guidelines. Mutual Fund: Structure of Mutual Funds, Types of Mutual Funds, Exchange Traded Funds, Hedge Funds and Advantages of Mutual Funds, Accounting Aspects and Performance Evaluation of Mutual Funds and Regulations

UNIT V	**FACTORING AND FORFEITING, CREDIT CARDS AND VENTURE CAPITAL FINANCE.**	**9**

Factoring: Types, Mechanism, Advantages and Disadvantages of Factoring. Forfeiting: Types, Mechanism, Advantages and Disadvantages of Forfeiting. Operational Procedure related with the working of Credit Card mechanism. Advantages and Disadvantages of Credit Cards. Procedure to obtain Venture Capital Finance Importance and advantages of Venture Capital Finance

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in Finance.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Complete knowledge of Financial Services

CO2: Clarity about the basic concepts of Lease and Hire purchase

CO3: Understanding of Financial Instruments

CO4: Development of basic understanding relating to NSDL, SEBI and mutual fund.

CO5: Knowing about Factoring services Venture capital and Card agencies.

TEXT BOOKS

1. Mishkin, F. S., & Eakins, S. G. (2023). *Financial markets and institutions* (9th ed.). Pearson.
2. Saunders, A., & Cornett, M. M. (2023). *Financial institutions management: A risk management approach* (10th ed.). McGraw-Hill Education.
3. Bhole, L. M., & Mahakud, J. (2023). *Financial institutions and markets: Structure, growth, and innovations* (6th ed.). McGraw-Hill Education India.
4. Khan, M. Y. (2023). *Indian financial system* (10th ed.). McGraw-Hill Education India.

REFERENCES

1. Bharati V. Pathak, Indian Financial System: Markets, Institutions & Services, Pearson Education India, 6th Edition, 2024
2. M.Y. Khan Publisher McGraw Hill Education (India) Pvt. Ltd, 10th Edition, 2019.
3. Taxmann's Editorial Board, SEBI Manual with SEBI Case Laws Digest, Taxmann Publications Pvt. Ltd., New Delhi, 46th Edition, 2025.
4. Taxmann's Editorial Board, Statutory Guide for NBFCs – Compendium of RBI's Master Directions & Allied Regulations, Taxmann Publications Pvt. Ltd., New Delhi, 31st Edition, 2025.
5. Frederic S. Mishkin & Stanley Eakins, Financial Markets and Institutions, Pearson Education, 10th Edition, 2023.

25BA213	FINANCIAL MARKETS	L	T	P	C
		3	0	0	3

OBJECTIVES
The course will enable the learners to:

- Understand the structure and functioning of Indian financial markets, including money market, capital market and their regulatory environment.
- Gain knowledge of financial instruments traded in various markets and their role in financial system development.
- Analyze the operations of primary and secondary markets including issue processes, trading, settlement, and regulatory frameworks.
- Develop an understanding of emerging financial segments such as debt markets, forex markets, mutual funds, derivatives, venture capital and private equity.

UNIT I	FINANCIAL MARKETS IN INDIA	9

Indian financial system and markets – structure of financial markets in India –Types-Participants in financial Market – Regulatory Environment, - RBI, CCIL, Common securities market, Money market, - Capital market - Governments philosophy and financial market – financial instruments

UNIT II	INDIAN CAPITAL MARKET- PRIMARY MARKET	9

Primary Market - Primary market system - Types of scripts - Issue of capital: process, regulation pricing of issue, – Methods of floating new issues, Book building- Primary markets intermediaries: commercial banks, development banks, Merchant banker, issue managers, rating agencies etc – Role of primary market – Regulation of primary market.

UNIT III	SECONDARY MARKET	9

Stock exchanges in India - History and development -listing - Depositaries - Stock exchange mechanism: Trading, Settlement, risk management, Basics of pricing mechanism - Player and stock exchange - Regulations of stock exchanges –Role of SEBI – BSE, OTCEI, NSE, ISE, - Role of FIIs, MFs and investment bankers –Stock market indices – calculation.

UNIT IV	DEBT MARKET AND FOREX MARKET	9

Bond markets in India: Government bond market and its interface with capital market - Components of bond market - G-Sec, T-Bills, Corporate Bonds, Yield conventions, Role of primary dealers, Auction Markets - Pricing of Bonds Introduction to Forex markets, basics in exchange rates theory - Forex risk exposures and basics of corporate forex risk management.

UNIT V	MUTUAL FUNDS, DERIVATIVES MARKETS AND VENTURE CAPITAL AND PRIVATE EQUITY	9

Mutual funds institutions in India. Types of mutual funds, Basics in portfolio management, Metrics of performance for fund manager. Introduction to Derivatives and the size of derivatives markets -Brief introduction to forwards, Options, Futures And Swaps. Role of VCs and PEs in financial markets - Venture capital and Private equity

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Complete knowledge of Financial Services

CO2: Clarity about the basic concepts of Lease and Hire purchase

CO3: Understanding of Financial Instruments

CO4: Development of basic understanding relating to NSDL, SEBI and mutual fund.

CO5: Knowing about Factoring services Venture capital and Card agencies.

TEXT BOOKS

1. Frederic S. Mishkin & Stanley Eakins, Financial Markets and Institutions, Pearson Education, 10th Edition, 2023.
2. Jeff Madura & Ohaness Paskelian, Financial Markets & Institutions, Cengage Learning, 14th Edition, 2024.
3. Anthony Saunders, Marcia Millon Cornett & Otgontsetseg Erhemjamts, Financial Markets and Institutions, McGraw Hill Education, 9th Edition 2024.

REFERENCES

1. Bharati V. Pathak, Indian Financial System: Markets, Institutions & Services, Pearson Education India6th Edition, 2024.
2. Dr. Paramjeet Kaur, Financial Markets and Institutions, Sultan Chand & Sons, 2023.
3. Anthony Saunders & Marcia Millon Cornett, Financial Markets and Institutions, 9th Edition, McGraw Hill Education, 2022.

25BA301	FINANCIAL DERIVATIVES	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the structure, pricing, and trading of derivatives like futures and forwards.
- To analyze options, their pricing, strategies, and regulatory aspects.
- To explore the concept and application of swaps in risk management.
- To measure and manage various financial risks using quantitative techniques.

UNIT-I	INTRODUCTION TO DERIVATIVES	9

Purpose, Definition of Badla, Evolution, Introduction to Forward Contracts & its demerits, Types of Futures instruments, Pricing of Futures, Lot sizes, Contract months, Expiry, Margins –initial & marked-to-market with calculations, Cost of carry, Roll over, Stop loss, Convergence, Trend indicators. Trading Mechanism, Hedging Mechanism, Arbitrage Mechanisms, and Utility of Hedging Mechanism in managing market risk.

UNIT II	OPTIONS MARKET	9

Types of Options, Call & Put Options, Premiums, Strike Prices, Put-Call ratios, SEBI's regulatory framework, Options Strategies, Profit and loss in options, Option pricing, factors affecting option pricing, Option Overwriting, Exotic Options and other derivatives, Mortgage-backed Securities, Nonstandard swaps, Weather Derivatives, Energy Derivatives, Insurance derivatives.

UNIT III	SWAPS	9

Definition of SWAPs, uses in risk Management and Hedging, different kind of swaps like currency Swaps and interest rate swaps and their working.

UNIT IV	OVERVIEW OF RISK MANAGEMENT	9

Meaning, Definition, Risk identification, Risk identification and Risk Evaluation, Risk assessment & Management. Risk analysis: Exposure of physical assets, financial assets, and Human assets, Exposure to legal liability, Risk Management, Risk control. Types of risks.

UNIT V	MEASUREMENT OF RISK AND RETURN	9

Meaning, Types of Risk, Measurement of Risk, Behavioural view of risk, Sensitivity Analysis, Probability, statistical measures of risk, Standard deviation, Variance, Value at Risk (VAR), Measure, Historical simulation, Model building approach, linear approach, Quadratic model, Monte Carlo simulation, stress testing and back testing.

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in Finance.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Apply knowledge of key financial building blocks used in constructing complex derivative instruments (Eg. Futures, Forwards, Options and Swap)
CO2 : Analyse and evaluate the options market
CO 3: Evaluate different kinds of swaps
CO4: Analyze the overview of risk management.
CO5: Apply and analyze the pricing of individual and combination of derivative securities.

TEXT BOOKS

1. John C. Hull, Options, Futures, and Other Derivatives, Pearson, 11th ed., 2022.
2. Madura & Paskelian, Financial Markets & Institutions (Chapter on Derivatives), Cengage Learning,
3. 14th Edition, 2024.
4. Robert A. Jarrow & Arkadev Chatterjea, An Introduction to Derivative Securities, Financial Markets, and Risk Management, World Scientific Publishing, 3rd Edition, 2024.

REFERENCES

1. Obiyathulla Ismath Bacha, Financial Derivatives: Markets and Applications, World Scientific Publishing, 5th Edition, 2022.
2. John C. Hull & Sankarshan Basu, Options, Futures, and Other Derivatives (Indian Edition), Pearson Education India, 11th Edition, 2022
3. Frederic S. Mishkin & Stanley Eakins, Financial Markets and Institutions, Pearson Education, 10th Edition, 2023.

25BA302	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To help students understand the basics of investments and how financial markets work.
- To teach students how to analyze different types of securities like shares and bonds.
- To explain how to measure the risk and return of investments.
- To guide students in building and managing a good investment portfolio.

UNIT-I	BASICS OF INVESTMENT	9

Investment meaning, Characteristics, Objectives, Investment process, Investment Vs. Speculation, Risking profiling of investors. Financial Instruments : money market instruments - T-bills, Certificate of deposits, Commercial papers.

UNIT II	RISK AND RETURN OF PORTFOLIO	9

Concepts of risk and return - Risk and return measurement of the portfolio - Minimizing the risk and maximizing the return - Risk and reward of stocks and bonds - The normal distribution - Predicting asset returns -Optimal portfolios with two risky assets combining risky assets.

UNIT III	INVESTMENT ANALYSIS & TRADING	9

Determinants of stock price -Fundamental analysis, Inflation-Macroeconomic and Industry Analysis -Equity Valuation Models- Financial Statement Analysis Industry life cycle, Characteristics -Technical Analysis- Event studies - Behavioral finance- Trading and markets Exchanges -Trading game instructions - Market and limit orders -Short selling and margin - Trading simulation.

UNIT IV	THEORY FOR INVESTMENT PORTFOLIO FORMATION	9

Quantitative methods of investment analysis -Capital Allocation to Risky Assets -Optimal Risky Portfolios -Portfolio Theory - Capital Asset Pricing Model - Arbitrage Price Theory - Random Walk theory and efficient market hypothesis

UNIT V	PORTFOLIO MANAGEMENT AND EVALUATION	9

Portfolio risk and return, Benefits of portfolio Diversification-Active versus passive portfolio management - Strategic versus tactical asset allocation - Monitoring and revision of the portfolio - Portfolio performance measures– Portfolio Revision.

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in Finance.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: To understand the Basics of Investment.

CO2: To Analyze and evaluate financial markets, how securities are traded, mutual funds, investment companies, and investor behavior.

CO3: To provide a theoretical and practical background in the field of investments.

CO4: To design and managing the optimal portfolio selection and the relation between risk and return.

CO5: To Analyze bond prices and yields and fixed-income portfolio market efficiency

TEXT BOOKS

1. Kevin, S. *Security analysis and portfolio management* (3rd ed.). PHI Learning, 2022.
2. Nandrajog, A. B. *Security analysis and portfolio management*. Barnes & Noble, 2022.
3. Prasanna Chandra, Investment Analysis and Portfolio Management, McGraw Hill Education, 2022.

REFERENCES

1. Bhalla, V. K. (2021). *Investment Analysis and Portfolio Management*. S. Chand Publishing.
2. Pandian, R. (2022). *Portfolio Management*. Himalaya Publishing House.
3. Strong, R. A. (2021). *Portfolio Management: Formulation, Implementation and Investment Performance*. Cengage Learning.
4. Fabozzi, F. J. (2021). *The Handbook of Portfolio Management*. Wiley.
5. Sharpe, W. F., Alexander, G. J., & Bailey, J. V. (2019). *Investments* (Latest Indian Reprint). Pearson.
6. Jones, C. P., Jensen, G. R., & Mercer, J. M. (2022). *Investments: Analysis and Management* (14th ed.). Wiley.
7. Damodaran, A. (2023). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (4th ed.). Wiley.
8. Graham, B., & Dodd, D. L. (2023). *Security Analysis* (Revised Edition). McGraw Hill.

25BA303	VENTURE CAPITAL AND ENTREPRENEURSHIP FINANCING	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the principles of entrepreneurial finance and apply life cycle-based financial planning to evaluate new venture opportunities.
- To explore startup financing options and prepare financial statements for assessing venture performance.
- To apply financial planning tools and evaluate the cost of capital throughout the venture's life cycle.
- To understand and apply various valuation methods for early-stage entrepreneurial ventures.

UNIT-I	FINANCE FOR ENTREPRENEURS	9

Principles of Entrepreneurial Finance- Role of Entrepreneurial Finance The successful venture life cycle- Financing through venture life cycle Life Cycle approach for teaching - Entrepreneurial finance. Developing Business Idea, Business Model. Screening venture opportunities: Pricing / Profitability considerations, Financial, / harvest Considerations. Financial Plans and Projections.

UNIT II	ORGANIZING AND OPERATING THE VENTURE	9

Financing a New venture, Seed, Startup and First Round Financing Sources- Financial Boot Strapping, Business Angel Funding, First Round Financing Opportunities. Preparing and Using Financial Statements: Obtaining and Recording the resources to start and Build a new venture, Asset and Liabilities and Owners Equity in Business, Sale expenses and profits Internal Operating Schedules, Statement of cash flows, Operating Break even Analysis. Evaluating operating and financial performance using ratio analysis.

UNIT III	FINANCIAL PLANNING	9

Financial Planning throughout the Venture's life cycle, Short Term cash planning tools, projected monthly financial statements. Types and costs of Financial Capital: Implicit and Explicit financial capital costs, Financial Markets, Determining the cost of Debt Capital, Investment Risk, Estimating the cost of Equity Capital, Weighted average cost of capital.

UNIT IV	VENTURE VALUATION	9

Valuing Early stage Ventures, Venture Worth, Basic Mechanics of valuation, developing the projected financial statements for a discounted Cash Flow Valuation, Accounting Vs Equity Valuation Cash Flow. Venture Capital Valuation Methods: Basic Venture Capital Valuation Method, Earnings Multiplier, and Discounted Dividends.

UNIT V	FINANCING FOR THE GROWING VENTURE	9

Professional Venture Capital, Venture Investing Cycle, Determining the fund objectives and policies, Organizing the new fund, Soliciting investments in the new fund, Capital Call, Conducting due diligence and actively investing, arranging harvest or liquidation, Other financing alternatives: Facilitators, Consultants and Intermediaries, Banking and Financial Institutions, Foreign Investors, State and Central Government Financing Programmes.

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in Finance.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Outline the role of entrepreneurial Finance and screening venture opportunities.
CO2: Evaluate components for organizing & operating the venture.
CO3: Discuss importance of finance in venture life cycle.
CO4: Analyze mechanisms & methods to venture valuation.
CO5: Assess agencies for financing growing venture.

TEXT BOOKS

1. Panda, T. K. Venture capital and entrepreneurial development (2nd ed.). Oxford University Press India, 2023.
2. Sase, M. Venture capital and start-up financing. Himalaya Publishing House, 2022.
3. Chandra, P. Financial management (10th ed.). Tata McGraw Hill, 2022.
   Bansal, L. K. Entrepreneurial finance. Kalyani Publishers, 2021.
4. Leach, J. C., & Melicher, R. W. Entrepreneurial finance (7th ed.). Cengage Learning, 2021.

REFERENCES

1. Josh Lerner., Felda Hardymon., Ann Leamon, Venture Capital and Private Equity: A Casebook, Wiley, 2021.
2. Josh Lerner, Venture Capital, Private Equity, and the Financing of Entrepreneurship, Wiley, 2021.
3. Stephen Spinelli Jr., Robert J. Adams, New Venture Creation: Entrepreneurship for the 21st Century, McGraw Hill, 2022.

25BA304	INTERNATIONAL FINANCE	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the international financial environment, balance of payments, and global financial institutions.
- To explore the structure, participants, and operations of the foreign exchange market.
- To analyze exchange rate determination and international parity conditions.
- To study international financial markets, instruments, and trade financing methods.

UNIT-I	INTERNATIONAL FINANCIAL ENVIRONMENT	9

Global Economy – Evolution, financial Globalization, rewards and risks, Openness of Indian Economy - International Monetary system, Multilateral financial institution – Overview, Importance and role in developing economies, Balance of Payments (BOP) – Fundamentals, Principles and its various components, The Current Account Deficit and Surplus-International Business methods – Exposure to international risk.

UNIT II	FOREIGN EXCHANGE MARKET	9

Evolution of foreign exchange market -International Monetary System -Introduction- Forex Market participants- Foreign Exchange Rate regime-Fixed and Floating- Advantages and Disadvantages, Foreign Exchange Contracts - Spot and Forward Contracts – Swap and options, Forex Dealers/market makers and brokers-Forex Trading and SWIFT- Forex market in India- FERA Vs. FEMA.

UNIT III	EXCHANGE RATE DETERMINATION	9

Exchange Rate Determination - Exchange rate movements - Factors that influence exchange rates – Forward Rate and Cross Rate - Concepts of International arbitrage - Interest rate parity - Purchasing power parity - International Fisher effect.

UNIT IV	INTERNATIONAL FINANCIAL MARKETS & INSTRUMENTS	9

Basic concepts of the International Money Market –International Equity and Bond Market-GDR, ADR, Cross listing of shares Global registered shares. International Financial Instruments: Foreign Bonds & Eurobonds, Global Bonds. Floating rate Notes, Zero coupon Bonds, International Money Markets.

UNIT V	MANAGEMENT OF FOREIGN EXCHANGE EXPOSURE	9

Concept of exposure forward and foreign exchange exposure- nature and measurement of foreign exchange exposure- Management of Transaction exposure- Management of Translation exposure- Management of Economic exposure- Management of political Exposure-Management of Interest rate exposure- -various tools and techniques of foreign risk management - risk management products.

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in Finance.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO:1: Analyze and interpret knowledge of basic theorems of exchange rate determination, interest rates and inflation and the role of arbitrage in keeping the foreign exchange market efficient.

CO:2: Identify risk related to exchange rate fluctuations and develop strategies to deal with them.

CO:3: Apply knowledge of foreign exchange hedging to identify and manage the foreign exchange risks faced by globally active firms.

CO:4: Analyze and evaluate various foreign exchange management exposures

CO:5: Demonstrate the ability to produce a clear and concise written report that demonstrates higher order understanding of key concepts in international finance.

TEXT BOOKS

1. Eun, C. S., & Resnick, B. G. International financial management (9th ed.). McGraw-Hill Education, 2021.
2. Eiteman, D. K., Stonehill, A. I., & Moffett, M. H. Multinational business finance (15th ed.). Pearson, 2022.
3. Krugman, P. R., Obstfeld, M., & Melitz, M. J. International economics: Theory and policy (11th ed.). Pearson, 2022.
4. P. G. Apte, International Financial Management, McGraw Hill Education, 2022
5. K. C. Shekhar, Lekshmi Shekhar, International Finance, Vikas Publishing, 2021

REFERENCES

1. Apte, P. G. International financial management (8th ed.). McGraw-Hill Education India, 2023.
2. Shapiro, A. C., & Moles, P. Foundations of multinational financial management (7th ed.). Wiley, 2020.
3. David K. Eiteman, Arthur I. Stonehill, Michael H. Moffett, Multinational Business Finance, Pearson, 2021

HUMAN RESOURCE MANAGEMENT

25BA214	**INDUSTRIAL RELATIONS AND LABOUR LEGISLATIONS**	**L**	**T**	**P**	**C**
		3	**0**	**0**	**3**

OBJECTIVES

The course will enable the learners to:

- Develop a conceptual understanding of Industrial Relations, its approaches, structure, and relevance in the Indian context.
- Gain knowledge of major Industrial Disputes, labour welfare measures, and mechanisms for resolving conflicts and promoting industrial harmony.
- Understand the principles, purpose, and provisions of key labour legislation governing wages, working conditions, employment standards, compensation, and welfare.
- Analyze contemporary issues in employee relations, including reforms, compliance challenges, and emerging trends in modern workplaces.

UNIT I	**INDUSTRIAL RELATIONS**	**9**

Concept, scope- objectives- Importance - Approaches to IR- Industrial relations system in India. Trade Unions Act,1926- trade union movement in India- objective -role - functions- procedure for registration of trade unions- Rights and responsibilities- problems- Employee relations in IT sector.

UNIT II	**INDUSTRIAL CONFLICTS AND LABOUR WELFARE**	**9**

. The Industrial Disputes Act, 1947-Disputes – Impact – Causes – Strikes – Prevention – Industrial Peace – Government Machinery – Conciliation – Arbitration – Adjudication. Labour welfare- statutory Voluntary- welfare funds-welfare of unorganized labour

UNIT III	**LABOUR LEGISLATIONS-I**	**9**

Origin and growth of labour legislation in India- Principles of labour legislations-Factories Act 1948- Minimum Wages Act, 1948- Payment of Wages Act, 1936- Payment of Bonus Act, 1965-

UNIT IV	**LABOUR LEGISLATIONS-II**	**9**

The Industrial employment (standing orders) Act, 1946- The Apprentices act, 1961-The Equal Remuneration act, 1976- Payment of Gratuity act 1972- Employee compensation act in 2013

UNIT V	**LABOUR LEGISLATIONS-III**	**9**

Employees' Provident fund and Miscellaneous provisions act, 1952- Employees' state insurance (ESI) Act, 1948- Maternity Benefit Act, 1961- Contract Labour Regulations and Abolition Act, 1970 -The Child Labour Prevention and Regulation Act, 1986.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES
Upon completion of the course, the students will be able to:

CO1: Explain the concept, scope, objectives, and approaches of Industrial Relations and evaluate the functioning of the IR system in India.

CO2: Describe the causes and impact of industrial conflicts and assess the role of government machinery in conciliation, arbitration, adjudication, and promoting labour welfare.

CO3: Demonstrate an understanding of major labour laws such as the Factories Act, Minimum Wages Act, Payment of Wages Act, and Payment of Bonus Act, and their relevance to employee protection.

CO4: Interpret and apply key provisions of the Industrial Employment (Standing Orders) Act, Apprentices Act, Equal Remuneration Act, Payment of Gratuity Act, and Employees' Compensation Act.

CO5: Analyze the application and implications of social security legislations, including EPF Act, ESI Act, Maternity Benefit Act, Contract Labour Act, and Child Labour Prohibition and Regulation Act.

TEXT BOOKS

1. S. C. Srivastava, Industrial Relations and Labour Laws, Vikas Publishing House, 8th Edition, 2022.
2. Avtar Singh, Harpreet Kaur, Introduction to Labour and Industrial Laws, LexisNexis, 2023.
3. Bhagyashree A. Deshpande, Textbook on New Labour and Industrial Laws, Central Law Publications, 2022.

REFERENCES

1. Taxmann Editorial Board, Labour Laws, Taxmann Publications, 2023.
2. Larry Suffield and Gary Gannon, Labour Relations, 5th Edition, 2021.

25BA215	HR STRATEGY AND DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand and apply strategic human resource practices that contribute to achieving organizational goals and long-term success.
- To analyses key HR management issues and develop effective strategies for resolving them in a dynamic business environment.
- To build competencies in strategic workforce planning, talent development, and HR-based decision-making.
- To explore the alignment of HR strategies with organizational vision to promote sustainable growth and competitiveness.

UNIT I	FOUNDATIONS OF STRATEGIC HUMAN RESOURCE MANAGEMENT	9

HRM - its role in enhancing business value. Fundamentals of business and corporate-level strategies - aligning HR strategies with overall business direction. Evolving HR landscape - technological advancements - organizational structures - management practices - demographic shifts - emerging trends in workforce utilization.

UNIT II	STRATEGIC HUMAN RESOURCE PLANNING	9

Strategic importance of HR planning - selecting suitable forecasting methods - Labour market trends - projecting future workforce needs - Internal talent supply. Effective employment practices - workforce optimization for strategic alignment.

UNIT III	STRATEGIC APPROACHES TO EMPLOYEE DEVELOPMENT	9

Planning and implementing employee development initiatives - Training with performance appraisal - integrating with reward systems. Strategic management development - competitive advantage through continuous learning - Structured model for strategic training.

UNIT IV	STRATEGIC RESOURCING AND KNOWLEDGE MANAGEMENT	9

Strategic approach to talent resourcing - HR planning - employee value propositions - resourcing and retention strategies - flexible work arrangements. Knowledge management - its process - sources - types - development approaches - critical issues in strategic KM implementation.

UNIT V	LEARNING - DEVELOPMENT - AND REWARD STRATEGIES	9

Strategic HR development to build a learning culture - organizational and individual learning strategies - approaches to become a learning organization -Reward strategy design - principles - structure - content - employee motivation and organizational goals.

CONTEMPORARY TOPICS

Guest lecture by industry experts on current trends in HR strategies.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the strategic role of HRM in relation to business goals and emerging workforce trends.

CO2: Apply HR planning methods to forecast and manage human resource needs.

CO3: Develop employee training strategies aligned with performance and compensation systems.

CO4: Design effective resourcing and knowledge management strategies for talent retention.

CO5: Create learning and reward strategies that support employee growth and organizational success.

TEXT BOOKS

1. Gary Rees and Ray French, Strategic People Management and Development: Theory and Practice, 6th Edition, Kogan Page, 2022.
2. Ashish Malik (Ed.), Strategic Human Resource Management and Employment Relations: An International Perspective, 2nd Edition, Springer, 2022.
3. 3. Sasmita Rani Samanta and J. P. Mahajan, Human Resource Management: Changing Landscape in Changing Times, PHI Learning, 2022.

REFERENCES

1. 1.Jeffrey A. Mello, Strategic Human Resource Management, 6th Edition, Cengage Learning, 2023.
2. Jon M. Werner and Randy L. DeSimone, Human Resource Development: Talent Development, 7th Edition, Cengage Learning, 2022.
3. Alan Nankervis, Marian Baird and John Shields, Human Resource Management: Strategy and Practice, 11th Asia-Pacific Edition, Cengage, 2023.
4. 4. Jonathan Ferrar and David Green, Excellence in People Analytics, Kogan Page, 2022.

25BA305	HR Analytics	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the fundamentals of HR analytics, including HR metrics, indicators, data types, and analytical frameworks such as LAMP and HCM 21.
- Develop skills in statistical tools and analytical techniques used for HR decision-making, dashboard creation, reporting, and data modelling.
- Gain knowledge of best practices in HR analytics, including staffing forecasts, compensation analytics, performance analytics, attrition analytics, L&D analytics, and employee engagement metrics.
- Learn to measure HR's contribution to business performance using HR scorecards, predictive analytics, ROI measures, regulations, reporting requirements, and effective data visualization.

UNIT I	INTRODUCTION TO HUMAN RESOURCE ANALYTICS	9
Understanding HR indicators, metrics and data, HR Analytics Process, Frameworks for HR Analytics: LAMP Framework, HCM 21 Framework. Application of analytical techniques to evaluate human capital impact on business.		
UNIT II	**STATISTICS FOR HRM**	**9**
Statistical analysis for HR, Toolkits, Compensation KPIs, Power interest stakeholder matrix, Data models, Creating dash boards, analysing and reporting.		
UNIT III	**BEST PRACTICES IN HR ANALYTICS**	**9**
Staffing, supply and demand forecasting, Total compensation analyses, Performance Analytics, Attrition Analytics, Learning and Development Analytics, Diversity Analytics, Employee engagement analytics - Employee satisfaction analytics.		
UNIT IV	**MEASURING HR CONTRIBUTION**	**9**
Developing HR Scorecard, Developing HR Analytics Unit: Analytics Culture, Analytics for decision making, Analytics for Human Capital in the Value Chain- Balance Score card – ROI –Predictive Analytics.		
UNIT V	**HR REGULATIONS AND REPORTING REQUIREMENTS**	**9**
Policies, Procedures and guidelines, Key regulations and reporting requirements, connecting missions or goals to HR Benchmarks and metrics, Reporting & Advising - the 4 rules of reporting HR analytics - importance of data visualization.		
CONTEMPORARY TOPICS		
Guest Lecture from Industry Experts		
		TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain HR indicators, metrics, and analytics frameworks (LAMP, HCM 21) and analyse how HR analytics impacts business performance.

CO2: Apply statistical tools, HR data models, dashboards, compensation KPIs, and stakeholder matrices for effective HR measurement and reporting.

CO3: Analyse and apply best practices in HR analytics, including staffing and forecasting, compensation, performance, attrition, L&D, diversity, engagement, and satisfaction analytics.

CO4: Develop HR scorecards, evaluate HR's contribution through ROI and predictive analytics, and integrate analytics into organizational decision-making processes.

CO5: Identify HR regulations, reporting requirements, and apply best practices in data visualization and reporting to align HR metrics with organizational goals.

TEXT BOOKS

1. Dipak Kumar Bhattacharyya, HR Analytics: Understanding Theories and Applications, 2nd Edition, Wiley India, 2023.
2. Rama Shankar Yadav and Sunil Maheshwari, HR Analytics: Connecting Data and Theory, Wiley India, 2020.
3. M. H. N. Badhusha, HR Analytics, Academic Guru Publishing House, 2023.

REFERENCES

1. Jonathan Ferrar and David Green, Excellence in People Analytics, Kogan Page, 2022.
2. Nadeem Khan and Dave Millner, Introduction to People Analytics: A Practical Guide to Data-driven HR, 2nd Edition, Kogan Page, 2023.
3. Rahul Ghatak, People Analytics: Data to Decisions, Springer, 2022.
4. Subhra R. Mondal, Francesca Di Virgilio and Subhankar Das (Eds.), HR Analytics and Digital HR Practices, Springer, 2022.
5. Martin Edwards, Kirsten Edwards and Daisung Jang, Predictive HR Analytics, 3rd Edition, Kogan Page, 2024.

25BA306	REWARD AND COMPENSATION MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Develop the ability to design, analyze, and restructure compensation and reward systems, using principles, theories, wage structures, and emerging compensation trends.
- Understand labour market dynamics and economic theories that influence employee compensation decisions at both micro and macro levels.
- Gain knowledge of employee benefits, reward systems, statutory requirements, and approaches for building comprehensive reward strategies that align with organizational goals.
- Acquire skills in performance-linked compensation, executive and sales compensation plans, and incentive systems suited for domestic and multinational organizations.

UNIT I	INTRODUCTION	9

Compensation - Definition - objectives- principles of compensation formulation- Compensation Design and strategy- theories of wage determination- Wage Structure -types of wages- wage boards- wage policy. Compensation decisions- compensation benchmarking- compensation trends and reward system in India.

UNIT II	EMPLOYEE COMPENSATION AND LABOUR MARKET	9

Macroeconomics of Labour markets- Unemployment and its impact on labour market-Neoclassical microeconomics of labour markets-models, supply and demand-economic model Implications on employee compensation- economic theories and employee compensation- trade -offs - valuation of employee compensation.

UNIT III	MANAGING EMPLOYEE BENEFITS AND REWARDS	9

Nature and types of employee benefits- statutory employee benefits in India- Deferred compensation plan- Non-monetary benefits. Reward - Meaning, Elements, Types- Basic concepts of reward management - Designing reward system- Approaches to reward system- Difference between reward and compensation.

UNIT IV	PERFORMANCE RELATED COMPENSATION	9

Performance management system (PMS)-performance objectives - indicators- standards and metric -effective performance modeling-dimensions of performance- competency based pay. Team Compensation – Gain Sharing Incentive Plan – Enterprise Incentive Plan – Profit Sharing Plan- ESOPs

UNIT V	EXECUTIVE AND SALES COMPENSATION PLAN	9

Executive Compensation – Components, Theories, Design- Relationship between Fixed and variable pay-Executive Incentive Programmes. Sale Compensation plan- design and administration- sales incentives and motivations. Compensation Management in Multi-National organisations.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the principles, theories, and components of compensation, and evaluate wage structures, wage policies, benchmarking practices, and compensation trends in India.

CO2: Analyse labour market behaviour, unemployment impacts, supply–demand models, and economic theories to determine their implications on employee compensation decisions.

CO3: Assess various employee benefits, statutory provisions, reward types, and design reward systems by differentiating between compensation and reward mechanisms.

CO4: Design performance-related compensation systems including PMS metrics, competency-based pay, gain-sharing, profit-sharing, ESOPs, and team-oriented incentive plans.

CO5:Evaluate and structure executive and sales compensation plans, including fixed–variable pay mixes, incentive programs, and compensation considerations in multinational organizations.

TEXT BOOKS

1. Barry Gerhart, Jerry Newman and Chaitanya S. Prasad, Compensation, 14th Edition McGraw Hill Education, 2023.
2. Joseph J. Martocchio, Strategic Compensation: A Human Resource Managemen Approach, 11th Edition, Pearson, 2023.
3. Michael Armstrong, Reward Management: Employee Performance, Compensation anc Benefits, Kogan Page, 2022.

REFERENCES

1. 1 Bashker D. Biswas and Debabrata Biswas, Compensation and Benefit Design, Oxforc University Press, 2021.
2. WorldatWork Faculty, Total Rewards and Employee Engagement, WorldatWork Press 2022.
3. 3. Duncan Brown, Strategic Reward and Recognition, Kogan Page, 2021.

25BA307	INTERNATIONAL HRD	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the scope and evolution of International HRD, including cross-cultural theories, global learning models, and career development frameworks used in multinational environments.
- Analyse global HRD processes, including international assignments, expatriation, transfer of HR practices, and international compensation approaches.
- Develop knowledge of HRD practices across multinational and host-country contexts, including training & development, global employment relations, performance management, and labour market compliance.
- Evaluate sustainable and future-oriented HRD practices, including repatriation, ethical and CSR-based HRD, green HRD, international labour standards, and global knowledge management.

UNIT I	IHRD	9
Scope of IHRD- Positivist and Interpretive views on Culture, Values, Power-Cross Cultural Management, Model, Dimensions; Comparison between HRD India and Globalization. Learning Theories globally and implications-Career development in multinational and multicultural environment-Schein's career anchors-Holland's vocational preference inventory.		
UNIT II	**PROCESSES**	**9**
Transfer of employment practices across borders-The four influences framework-IHRM approaches-Factors affection-Implications. International Assignments and Employment practices- motives-Process-Dimensions of success and failure. Expatriation- Developing International Staff and Multinational Teams, Approaches to International Compensation		
UNIT III	**DEVELOPMENT & PRACTICES**	**9**
Multinational companies and Host companies-Sustainable practices of host and divergent country employment arrangements-Global Employment Relations.Training & Development in global environment- Krikpatrick's Taxonomy-Expatriate Training, PMS -Transition of Expats to global leaders-Global and local sourcing-Compliance to Labour Market-Capitalist Vs Socialist Market economies		
UNIT IV	**PRACTICES IN ECONOMIES**	**9**
PMS in different economies- Total Rewards in International Context- Components Complexities-approaches. Global Context: EEO-Gender Sensitivity- Diversity- Inclusivity-Onshoring, offshoring, Friendshoring- Models of strategic HRD.		
UNIT V	**SUSTAINABILITY**	**9**
Repatriation-issues-best practices; Sustainable practices through Ethics and CSR; Green HRD; Ethical Issues-dispute settlement-International labour contract. Knowledge Management-Transfer; Changing and Future Trends: International labour standards, Managing Remote Work -issues-digital privacy and decent work.		

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the scope of International HRD, cross-cultural dimensions, global learning theories, and career development models in multinational and multicultural contexts.

CO2: Analyse international HRD processes such as transfer of employment practices, influences on IHRM approaches, expatriation, international assignments, and global compensation strategies.

CO3: Evaluate global HRD practices including T&D in international settings, expatriate training, global PMS, global sourcing, and compliance with diverse labour-market systems.

CO4: Assess HRD practices across different economies, including total rewards in global contexts, diversity and inclusion requirements, gender sensitivity, and strategic HRD models.

CO5: Apply sustainable HRD concepts, including ethical and CSR-based HRD practices, repatriation strategies, international labour standards, remote-work challenges, privacy issues, and global knowledge management

TEXT BOOKS

1. Dennis R. Briscoe, Randall S. Schuler and Ibraiz Tarique, International Human Resource Management, 6th Edition, Routledge, 2022.
2. Nilanjan Sengupta and Mousumi Bhattacharya, Global Human Resource Management, Sage Publications, 2021.
3. Russell F. Korte and Timothy W. H. Brown, Human Resource Development: Learning for
4. Innovation and Performance, Palgrave Macmillan, 2022.

REFERENCES

1. Rob F. Poell, Strategic Human Resource Development, Routledge, 2021.
2. Hugh Scullion, David G. Collings and Paula M. Caligiuri, Global Talent Management, 3rd Edition, Routledge, 2022.
3. Jon M. Werner and Randy L. DeSimone, Human Resource Development: Talent Development, 7th Edition, Cengage Learning, 2022.
4. Chris Brewster, Wolfgang Mayrhofer and Elaine Farndale, International and Comparative Human Resource Management, 3rd Edition, Sage Publications, 2023.

25BA308	KNOWLEDGE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the concept and importance of Knowledge Management in organizations
- To study knowledge creation, sharing, and application processes.
- To learn Knowledge Management tools, technologies, and strategies.
- To analyze Knowledge Management as a competitive advantage to business.

UNIT I	**INTRODUCTION TO KNOWLEDGE MANAGEMENT**	**9**
Introduction to KM – History of KM – Importance of KM – Information Management to Knowledge Management – KM Cycle – Industrial Economy to Knowledge Economy		
UNIT II	**MECHANICS OF KNOWLEDGE MANAGEMENT**	**9**
Mechanics of Knowledge Management – Tools and Technologies – Communities of Practice – Knowledge conversion – Knowledge Management Matrix		
UNIT III	**KNOWLEDGE SHARING AND APPLICATION**	**9**
Social Nature of Knowledge – Social Network Analysis – Obstacles to knowledge sharing – Organizational learning – Social Capital – Knowledge Application at Individual, Group and Organization levels		
UNIT IV	**KNOWLEDGE MANAGEMENT STRATEGY AND TOOLS**	**9**
KM Strategy – Knowledge audit – GAP Analysis – Road Map – KM Metrics – Balanced Score Card – KM Tools: Knowledge capture and creation – Knowledge sharing and dissemination – Knowledge acquisition and application		
UNIT V	**CONTEMPORARY ISSUES IN KNOWLEDGE MANAGEMENT**	**9**
KM Team – Roles and Responsibilities – Political issues in KM – Ethics in KM – Strategic issues in Knowledge Management – Future of Knowledge Management		

CONTEMPORARY ISSUES

Recent trends and case studies in Knowledge Management

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the concepts and importance of Knowledge Management.
CO2: Identify KM processes and tools used in organizations.
CO3: Apply KM strategies for organizational effectiveness.
CO4: Analyze KM systems for competitive advantage.
CO5: Evaluate emerging and ethical issues in Knowledge Management.

TEXT BOOKS

1. K. K. Gupta, Knowledge Management: Concepts, Applications and Technologies, BPB Publications, 2022.
2. Irma Becerra-Fernandez and Rajiv Sabherwal, Knowledge Management: Systems and Processes, 3rd Edition, Routledge, 2021.
3. Nick Milton and Patrick Lambe, The Knowledge Manager's Handbook, Kogan Page, 2020.

REFERENCES

1. Kimiz Dalkir, Knowledge Management in Theory and Practice, 4th Edition, MIT Press, 2023.
2. Jay Liebowitz, Knowledge Management for Competitive Advantage, CRC Press, 2021.
3. Laurence Prusak and Patrick Lambe, Knowledge Management and Organizational Learning, Oxford University Press, 2022.

MARKETING MANAGEMENT

<table>
<tr><td rowspan="2">25BA216</td><td rowspan="2">SERVICES MARKETING</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
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OBJECTIVES

The course will enable the learners to:

- Familiarize students with the fundamentals of services marketing, including characteristics, classification, and service consumption process.
- Provide insights into service product design, positioning, and distribution strategies in service industries.
- Develop understanding of demand and capacity management, service environment, and pricing strategies.
- Enable students to apply concepts of service quality, service process design, and sector-specific service strategies.

UNIT I	**INTRODUCTION TO SERVICES MARKETING**	**9**

Marketing Services: Introduction - Growth of the service sector - The Concept of Service - Nature & Characteristics of Service , Service and Goods Difference, – Classification of Service- Understanding service consumers- Three stage model of service consumption, Service encounter stage, Service Marketing Mix - 7 P's of Marketing, Service Marketing triangle.

UNIT II	**SERVICE PRODUCTS , POSITIONING , DISTRIBUTION OF SERVICES**	**9**

Service products , Flower of service , New service development - Hierarchy of new service category, Positioning of services, Customer driven strategy, Segmenting and Targeting Service Markets, Positioning maps, Distribution of services, Location considerations, Delivery of service, Challenges of distribution.

UNIT III	**DEMAND AND CAPACITY MANAGEMENT, SERVICE ENVIRONMENT, SERVICE PRICING**	**9**

Productive Service Capacity, Demand Fluctuations, Managing Demand and Capacity, Patterns of Demand, Managing Waiting Lines, Service Environment, Purpose of Service environment, Consumer Response, Dimensions, Pricing of services- Pricing strategy, Revenue Management, Ethical concerns in pricing, Putting service pricing into practice, Pricing, Strategies and Tactics.

UNIT IV	**MANAGEMENT OF SERVICE QUALITY AND SERVICE PROCESS**	**9**

Service quality- Causes Of Service – Quality Gaps, Gap model in service design, Measuring service quality, Measuring productivity, Improving service productivity, Designing service processes - Service Blueprinting, service process redesign, Customer participation in service process.

UNIT V	**SERVICE STRATEGY IN VARIOUS SECTORS**	**9**

Marketing of Service - Financial Services – Health Service - Hospitality Services including travel, hotels and tourism - Professional Service - Public Utility Services - Educational Services.

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Digital Service Marketing Practice.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Understand the concept, characteristics, classification, and consumer behavior in services marketing, including service marketing mix and triangle.
CO2: Analyze service products, new service development, positioning, segmentation, targeting, and distribution strategies.
CO3: Evaluate demand and capacity management, service environment, and pricing strategies in service organizations.
CO4: Apply service quality models, gap analysis, and service process design tools such as service blueprinting.
CO5: Develop service marketing strategies across sectors such as financial services, healthcare, hospitality, tourism, education, and public utilities.

TEXT BOOKS

1. Valarie A. Zeithaml, Mary Jo Bitner and Dwayne D. Gremler, Services Marketing: Integrating Customer Focus Across the Firm, 8th Edition, McGraw Hill, 2023.
2. Christopher Lovelock and Jochen Wirtz, Services Marketing: People, Technology, Strategy, 9th Edition, World Scientific Publishing, 2022.
3. Ravi Shanker, Services Marketing, Excel Books, 2021.

REFERENCES

1. Jochen Wirtz and Christopher Lovelock, Services Marketing: People, Technology, Strategy, 9th Edition, World Scientific Publishing, 2022.
2. V. Kumar, Digital Transformation in Services Marketing, Springer, 2023.
3. Balaji B. Krishnamurthy and S. Shajahan, Services Marketing and Management, Himalaya Publishing House, 2022.

25BA217	CUSTOMER RELATIONS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Develop a clear understanding of Customer Relationship Management (CRM) concepts, evolution, and strategic importance in organizations.
- Provide knowledge on customer-centric approaches, including customer value, satisfaction, loyalty, and lifetime value.
- Equip students with the ability to plan and design CRM strategies, including data requirements and customer-focused frameworks.
- Enable learners to understand CRM implementation, tools, and performance evaluation across different sectors.

UNIT I	INTRODUCTION	9
CRM- Definition, Emergence of CRM Practice, Factors responsible for CRM growth, CRM process, framework of CRM, Benefits of CRM, Types of CRM, Scope of CRM, Customer Profitability, Features Trends in CRM, CRM and Cost Benefit Analysis, CRM and Relationship Marketing.		
UNIT II	**CRM CONCEPTS**	**9**
Customer Value, Customer Expectation, Customer Satisfaction, Customer Centricity, Customer Acquisition, Customer Retention, Customer Loyalty, Customer Lifetime Value. Customer Experience Management, Customer Profitability, Enterprise Marketing Management, Customer Satisfaction Measurements, Web based Customer Support.		
UNIT III	**PLANNING FOR CRM**	**9**
Steps in Planning-Building Customer Centricity, Setting CRM Objectives, Defining Data Requirements, Planning Desired Outputs, Relevant issues while planning the Outputs, Elements of CRM plan, CRM Strategy: The Strategy Development Process, Customer Strategy Grid.		
UNIT IV	**CRM AND MARKETING STRATEGY**	**9**
CRM Marketing Initiatives, Sales Force Automation, Campaign Management, Call Centers. Practice of CRM: CRM in Consumer Markets, CRM in Services Sector, CRM in Mass Markets, CRM in Manufacturing Sector		
UNIT V	**CRM PLANNING AND IMPLEMENTATION**	**9**
Issues and Problems in implementing CRM, Information Technology tools in CRM, Challenges of CRM Implementation. CRM Implementation Roadmap, Road Map (RM) Performance: Measuring CRM performance, CRM Metrics		

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Digital Service Marketing Practice.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of CRM, including its evolution, process, types, and relationship with marketing strategies.
CO2: Analyze customer-centric concepts such as customer value, satisfaction, loyalty, and customer lifetime value.
CO3: Apply CRM planning techniques, including objective setting, data planning, and strategy development.
CO4: Evaluate the role of CRM in marketing initiatives, including sales automation, campaign management, and sector-wise applications.
CO5: Develop and assess CRM implementation strategies, including IT tools, performance metrics, and challenges

TEXT BOOKS

1. Jagdish N. Sheth, Atul Parvatiyar and G. Shainesh, Customer Relationship Management: Emerging Concepts, Tools and Applications, McGraw Hill Education, 2021.
2. Ed Peelen and Rob Beltman, Customer Relationship Management, 3rd Edition, Pearson Education, 2022.
3. Daniel D. Prior, Francis Buttle and Stan Maklan, Customer Relationship Management: Concepts, Applications and Technologies, 5th Edition, Routledge, 2024.

REFERENCES

1. Ed Peelen, Customer Relationship Management, Pearson India, 2022.
2. Mallika Srivastava, Customer Relationship Management, Vikas Publishing, 2023.
3. Dr. L. Senthil Kumar and Dr. M. Vimalarani, Customer Relationship Management, SK Research Group, 2023.
4. Samit Chakravorti, Customer Relationship Management: A Global Approach, SAGE Publications, 2024.

25BA309	PRODUCT AND BRAND MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the relationship between corporate strategy and product & brand management, including the importance of brand as a strategic intangible asset.
- Develop knowledge of the new product development process, product life cycle management, and organizational structures supporting product and brand management.
- Analyse brand management concepts, including brand identity, positioning, architecture, valuation, portfolio management, and international branding strategies.
- Acquire skills to manage product marketing, advertising, pricing, distribution, and promotional strategies while leveraging brand equity and enhancing customer experience.

UNITI	NEW PRODUCT DEVELOPMENT	9

Management of New Product Development Process - Managing Product Life cycle -Brands and Branding- Introduction to Brand Management -Brand Management Process - Brand Choice Decisions and Models.

UNIT II	PRODUCT PLANS	9

Product Plans-Elements of Branding- Brand Identity -Brand Communication -Brand Positioning – Brand Image and Personality - Valuation of Brands- Brand Valuation -Brand Tracking and Monitoring.

UNIT III	MARKETING MIX	9

Marketing Mix Factors and Products-Managing Brand Over Time- Building Brands in Indian Market - Launching a New Brand -Revitalizing Brands - Branding Strategies- Brand Extension Strategies – Brand Portfolio Management- Managing Brands Across Geographical Borders.

UNIT IV	MANAGING BRAND	9

Managing Brand Experience - Digital Branding-Employment Branding - Co-branding- Brand extension scorecard-Culture and branding-Brand flashbacks-Future brand priorities.

UNIT V	ADVERTISING	9

Advertising -Brand Name Plan- Pricing Systems -Product Distribution Systems -Advertising and Sales Promotion - Product Sales Management -Product and Public Relations Service Product Marketing - Industrial Product Marketing Product Exports and International Marketing -Critical Success Factors in Brand Management.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Apply fundamental concepts of product and brand development, including product life cycle and brand management processes.

CO2: Use brand positioning frameworks to develop, maintain, expand, and reposition brands in domestic and international markets.

CO3: Analyse competitors and market conditions using brand metrics and tools to create effective positioning strategies.

CO4: Coordinate interdisciplinary teams and organizational resources to effectively manage products and brand portfolios.

CO5: Apply knowledge of product management functions, including pricing, sales, advertising, promotions, and public relations, to achieve business objectives.

TEXT BOOKS

1. Kevin Lane Keller, Strategic Brand Management: Building, Measuring, and Managing Brand Equity, 5th Edition, Pearson, 2024.
2. Jaywant Singh and Paurav Shukla, Brand Management: Principles and Applications for Effective Branding, Kogan Page, 2024.
3. Michael Beverland and Pinar Cankurtaran, Brand Management: Co-creating Meaningful Brands, 3rd Edition, SAGE Publications, 2024.

REFERENCES

1. Christoph Burmann, Nicola Riley and Tilo Halaszovich, Identity-Based Brand Management: Fundamentals – Strategy – Implementation – Controlling, Springer, 2023.
2. Shilpi Bagga and Dhruv Saxena, Product and Brand Management, Cyber Tech Publications, 2023.
3. K. Venugopal Rao, Product and Brand Management, 2nd Edition, Himalaya Publishing House, 2022.

25BA310	DIGITAL MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the digital marketing ecosystem, including differences between traditional and digital marketing, and the role of digital marketing strategies in business growth.
- Develop skills in search engine optimization (SEO) and search engine marketing (SEM), including keyword strategy, on-page/off-page optimization, and pay-per-click advertising.
- Analyze email, mobile, and social media marketing techniques, including campaign design, automation, integration, targeting, and performance measurement.
- Apply web analytics and data-driven decision-making, including web mining, clickstream analysis, KPIs, predictive analytics, and multi-channel marketing management.

UNIT I	DIGITAL MARKETING STRATEGY	9

Digital vs. Traditional marketing- Online marketing space - Significance of digital marketing - Online marketing mix - E-products - STP - E-price - E-Promotion - Affiliate marketing – Online tools for Content Marketing – Market influence analytics in Digital Eco System.

UNIT II	SEO	9

Keyword strategy – SEO strategy – SEO success factors – On page and Off page techniques - Search Engine Marketing (SEM) – Working of Search Engine – SEM Components - PPC advertising –Display Advertisement.

UNIT III	EMAIL AND MOBILE MARKETING	9

Email and Mobile Marketing E- Mail Marketing - Types of E- Mail Marketing -Email Automation -Lead Generation -Integrating Email with Social Media and Mobile- Measuring and maximising email campaign effectiveness. Mobile Marketing-Mobile Inventory/channels Location based; Context based; Coupons and offers, Mobile Apps, Mobile Commerce, SMS Campaigns-Profiling and targeting

UNIT IV	SOCIAL MEDIA MARKETING	9

Social Media Channels - Social Media Strategy - Web PR and Online reputation management- Adwords - PPC Advertising - Video SEO - Conversion Optimization Monitoring – trends analysis – dashboards - segmentation - Navigation analysis (funnel reports, heat maps, etc.).

UNIT V	SEARCH AND WEB ANALYTICS	9

Repatriation-issues-best practices; Sustainable practices through Ethics and CSR; Green HRD; Ethical Issues-dispute settlement-International labour contract.Knowledge Management-Transfer; Changing and Future Trends: International labour standards, Managing Remote Work -issues-digital privacy and decent work. Search analytics Current trends & challenges - web analytics & Web 2.0, multi-channel marketing management, web mining & predictive analytics - Understanding the key fabric of the Web - Sources of data: clickstream data, online surveys, usability research - Clickstream data collection techniques - web server log analysis - page tagging - Web metrics and Key Performance Indicators (KPIs): simple views, visitor counts, measuring content, engagement, conversions, etc. Framework for mapping business needs to web analytics tasks - Data collection architecture- Introduction to OLAP, Web data exploration and reporting - Introduction to Splunk

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Examine the role and significance of digital marketing in modern business environments and design online marketing strategies.

CO2: Develop and implement effective SEO and SEM strategies, and measure their performance using relevant metrics.

CO3: Design and manage email and mobile marketing campaigns, including automation, lead generation, targeting, and campaign effectiveness analysis.

CO4: Analyse social media marketing strategies, monitor performance, optimize conversions, and manage online reputation effectively.

CO5: Apply digital marketing tools and platforms, including SEO, SEM, social media, email marketing, and analytics tools, to solve practical marketing problems.

TEXT BOOKS

1. Debra Zahay, Lauren Labrecque, Brooke Reavey and Mary Lou Roberts, Digital Marketing: Foundations and Strategy, 5th Edition, Cengage Learning, 2024.
2. Philip Kotler, Hermawan Kartajaya and Iwan Setiawan, Marketing 5.0: Technology for Humanity, Wiley, 2021.
3. Babu K.G. Raja Sabarish, B. Anbazhagan and S. Meenakumari, Digital Marketing, Sultan Chand & Sons, 2023

REFERENCES

1. V. Kumar and Philip Kotler, Transformative Marketing: Combining New Age Technologies and Human Insights, Palgrave Macmillan, 2024.
2. Philip Kotler, Kevin Lane Keller, Alexander Chernev, Jagdish N. Sheth and G. Shainesh, Marketing Management, 16th Edition, Pearson, 2021.
3. Rochelle Grayson, Foundations in Digital Marketing, BCcampus, 2023.

25BA311	MARKETING ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the fundamental concepts and frameworks of marketing analytics, including market insight, segmentation, targeting, and positioning.
- Develop skills to apply analytics in business strategy and operations, including forecasting, predictive analytics, data mining, and strategic decision-making.
- Analyse product and pricing strategies using marketing analytics, including conjoint analysis, decision tree models, portfolio allocation, and price optimization.
- Apply analytics for distribution, promotion, and sales, including multi-channel distribution, promotion budget allocation, e-commerce sales, and sector-specific marketing insights.

UNIT I	MARKETING ANALYTICS FRAMEWORK	9

Introduction to Marketing Analytics and Models. Market Insight - Market Data Source – treatment of outliers, Market sizing, PESTLE Market analysis, Porter Five Force Analysis Market segment identification, targeting and positioning - Tools and Techniques: Regression, Cluster Analysis, and Perceptual Mapping Techniques.

UNIT II	BUSINESS STRATEGY AND OPERATIONS	9

Analytics based strategy selection with strategic models - Strategic Scenarios, Strategic Decision Models, and Strategic Metrics.

Business Operations: Forecasting - Predictive Analytics - Data Mining - Balanced Scorecard- Critical Success Factors.

UNIT III	PRODUCT AND PRICE ANALYTICS	9

Product analytics: Conjoint Analysis model - Decision Tree Model - Portfolio Resource Allocation - Product/ service Metrics, Attribute Preference testing. Price Analytics: Pricing Techniques - Pricing Assessment - Profitable pricing - Pricing for
Business Markets - Price Discrimination

UNIT IV	DISTRIBUTION AND PROMOTIONS ANALYTICS	9

Distribution Analytics: Distribution Channel Characteristics - Retail Location selection,Channel Evaluation and Selection - Multi-channel Distribution.

Promotion Analytics: Promotion Budget estimation - Promotion Budget Allocation – Ad value equivalence model - Promotion Metrics for traditional Media - Promotion Metrics for social media.

UNIT V	SALES ANALYTICS	9

E commerce sales model, sales metrics, profitability metrics and support metrics – Rapid decision models - data driven presentations - contemporary issues and opportunities in application of marketing analytics in different sectors.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Understand and explain the key concepts, models, and frameworks of marketing analytics.

CO2: Analyse and implement business strategies using analytics-based decision-making and predictive models.

CO3: Apply product and price analytics techniques to optimize offerings, pricing decisions, and resource allocation.

CO4: Evaluate and employ distribution and promotion analytics to optimize channel selection, budgeting, and marketing effectiveness.

CO5: Utilize sales analytics tools and metrics to assess performance, profitability, and sector-specific marketing opportunities.

TEXT BOOKS

1. Wayne L. Winston, Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wiley, 2022.
2. Mike Grigsby, Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques, 3rd Edition, Kogan Page, 2023.
3. Ashok Charan, Marketing Analytics: Strategic Models and Metrics, World Scientific Publishing, 2021.

REFERENCES

1. Stephan Sorger, Marketing Analytics: Strategic Models and Metrics, Business Exper Press, 2021.
2. V. Kumar and Hariom Bhat, Marketing Analytics for Customer Value and Marke Insights, Springer, 2022.
3. Mike Grigsby, Advanced Customer Analytics, Kogan Page, 2022.

25BA312	CONSUMER BEHAVIOUR AND NEURAL MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand consumer behavior, including approaches, research methods, and the impact of technology, demographics, and economic factors.
- Analyze internal influences on consumer behavior, such as motivation, perception, attitudes, beliefs, personality, and learning.
- Evaluate external influences on consumer behavior, including socio-cultural, cross-cultural, family, reference groups, and communication factors
- Explore and apply neuromarketing techniques, consumer neuroscience concepts, and contemporary tools to understand consumer decision-making.

UNIT I	INTRODUCTION	9
Understanding Consumer behaviour - Consumption, Consumer orientation-Approaches to consumer behaviour research- Interpretive and Quantitative approaches - Effects of Technology, Demographics and Economy on Consumer behaviour.		
UNIT II	**INTERNAL INFLUENCES**	**9**
Influences on consumer behaviour – motivation – perception – Attitudes and Beliefs – Learning and Experience - Personality & Self Image.		
UNIT III	**EXTERNAL INFLUENCES**	**9**
Socio-Cultural, Cross Culture - Family group – Reference group – Communication – Influences on Consumer behavior		
UNIT IV	**CONSUMER BEHAVIOR MODELS**	**9**
Traditional and Contemporary Consumer behaviour model for Individual and industrial buying behaviour and decision making- Consumer decision making process- Diffusion of Innovation		
UNIT V	**CONSUMER NEUROSCIENCE**	**9**
Introduction to the application of neuroscience to consumer research. Nature of Neuro Marketing, Neuromarketing Versus Traditional Methods-key Benefits and Issues, Mapping the Brain. Attention and Consciousness, Eye Tracking, Senses and Perception, Sensory NeuroMarketing.		

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Understand, apply, and analyze approaches to consumer behavior research, including interpretive and quantitative methods.

CO2: Identify and interpret the internal factors that influence consumer behavior, such as motivation, perception, personality, and attitudes.

CO3: Assess and evaluate the impact of external factors, including socio-cultural, cross-cultural, family, and reference group influences on consumer behavior.

CO4: Understand, apply, and analyze models of consumer and industrial buying behavior, including decision-making processes and diffusion of innovation.

CO5:Design, apply, and interpret neuromarketing research, including brain mapping, eye tracking, sensory perception, and other neuroscience tools for marketing insights.

TEXT BOOKS

1. Leon G. Schiffman, Joseph Wisenblit and S. Ramesh Kumar, Consumer Behavior 13th Edition, Pearson Education, 2022.
2. Solomon, White, Dahl, Zaichkowsky and Polegato, Consumer Behaviour: Buying Having and Being, Pearson, 2023.
3. Patrick Renvoise and Christophe Morin, Neuromarketing: Understanding the Buy Buttons in Your Customer's Brain, Updated Edition, Thomas Nelson, 2021.

REFERENCES

1. Moran Cerf and Manuel Garcia-Garcia, Consumer Neuroscience and Neuromarketing Springer, 2021.
2. Pradeep K. Choudhury, Consumer Behaviour, Sage Publications India, 2022.
3. Michael R. Solomon, Consumer Behavior: A European Perspective, 8th Edition Pearson, 2024.

OPERATIONS MANAGEMENT

		L	T	P	C
25BA218	**INTRODUCTION TO SUPPLY CHAIN MANAGEMENT**	**3**	**0**	**0**	**3**

OBJECTIVES

The course will enable the learners to:

- Develop a comprehensive understanding of supply chain fundamentals, strategies, and performance drivers in modern business environments.
- Provide knowledge on strategic sourcing decisions, supplier selection, and global supply base development.
- Equip students with the ability to design supply chain networks and manage demand, inventory, and supply effectively.
- Enable learners to understand innovations and emerging technologies shaping supply chain integration and sustainability.

UNIT I	**INTRODUCTION**	**9**
Supply Chain – Fundamentals, Evolution, Role in Economy, Importance, Decision Phases, Enablers & Drivers of Supply Chain Performance; Supply chain strategy; Supply Chain Performance Measures.		
UNIT II	**STRATEGIC SOURCING**	**9**
Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing.		
UNIT III	**SUPPLY CHAIN NETWORK**	**9**
Distribution Network Design – Role in supply chain, Influencing factors, design options, online sales and distribution network, Distribution Strategies; Network Design in supply chain – Role, influencing factors, framework for network design, Impact of uncertainty on Network Design.		
UNIT IV	**PLANNING DEMAND, INVENTORY AND SUPPLY**	**9**
Managing supply chain cycle inventory and safety inventory - Uncertainty in the supply chain, Analyzing impact of supply chain redesign on the inventory, Risk Pooling, Managing inventory for short life-cycle products, multiple item -multiple location inventory management; Pricing and Revenue Management.		
UNIT V	**SUPPLY CHAIN INNOVATIONS**	**9**
Supply Chain Integration, SC process restructuring, Agile Supply Chains, Green Supply Chain, Reverse Supply chain; Supply chain technology trends – AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Blockchain.		

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Emerging Trends in Supply Chain Management (AI, IoT, Blockchain and Agile Supply Chains)

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of supply chain management, including evolution, drivers, strategies, and performance measures.

CO2: Analyze strategic sourcing decisions, including outsourcing, supplier selection, and global sourcing strategies.

CO3: Evaluate supply chain network design and distribution strategies, considering uncertainty and influencing factors.

CO4: Apply concepts of demand planning, inventory management, and supply coordination in complex supply chains.

CO5: Develop strategies incorporating supply chain innovations, integration, and emerging technologies such as AI, IoT, and blockchain.

TEXT BOOKS

1. Sunil Chopra, Supply Chain Management: Strategy, Planning, and Operation, 8th Edition, Pearson, 2023.
2. Janat Shah, Supply Chain Management: Text and Cases, 3rd Edition, Pearson India, 2021.
3. Ravi Shankar, Supply Chain Management, McGraw Hill Education, 2022.

REFERENCES

1. David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi, Designing and Managing the Supply Chain, McGraw Hill, 2021.
2. Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management, 6th Edition, McGraw Hill, 2023.
3. Sople Vinod V., Logistics Management and Supply Chain Management, 5th Edition, Pearson India, 2022.

25BA219	INTRODUCTION TO LOGISTICS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Develop a comprehensive understanding of logistics concepts, functions, and its role in value creation and competitive strategy.
- Provide knowledge on distribution channels, logistics outsourcing, and service provider selection in modern supply chains.
- Equip students with insights into transportation systems, freight management, international logistics, and packaging practices.
- Enable learners to understand logistics performance measurement, cost analysis, and emerging trends in logistics management.

UNIT I	INTRODUCTION	9

Definition and Scope of Logistics – Functions & Objectives – Customer Value Chain – Service Phases and attributes – Value added logistics services – Role of logistics in Competitive strategy – Customer Service - Functions of Logistics management – principles – Logistics Network – Integrated Logistics system.

UNIT II	DISTRIBUTION CHANNELS AND OUTSOURCING LOGISTICS	9

Distribution channel structure - channel members, channel strategy, role of logistics and support in distribution channels. Logistics requirements of channel members. Logistics outsourcing – catalysts, benefits, value proposition.3PL, 4PL, 5PL, 6PL; Selection of service provider.

UNIT III	TRANSPORTATION AND PACKAGING	9

Transportation System – Evolution, Infrastructure and Networks. Freight Management – Vehicle Routing – Containerization. Modal Characteristics, Inter-modal Operators and Transport Economies. International Logistics -objectives, importance in global economy, Characteristics of global supply chains, Incoterms. Packaging- Design considerations, Material and Cost. Packaging as Unitisation. Consumer and Industrial Packaging.

UNIT IV	PERFORMANCE MEASUREMENT AND COSTS	9

Performance Measurement – Need, System, Levels and Dimensions. Internal and External Performance Measurement. Logistics Audit. Total Logistics Cost – Concept, Accounting Methods. Cost – Identification, Time Frame and Formatting

UNIT V	CURRENT TRENDS	9

Logistics Information Systems – Need, Characteristics and Design. E-Logistics – Structure and Operation. Logistics Resource Management eLRM.Automatic Identification Technologies. Reverse Logistics – Scope, design and as a competitive tool. Global Logistics – Operational and Strategic Issues, ocean and air transportation. Strategic logistics planning. Green Logistics

CONTEMPORARY TOPICS

Guest Lecture by Industry Expert on Emerging Trends in Logistics and Supply Chain (E-Logistics / 3PL / Green Logistics)

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of logistics, including scope, functions, customer value, and integrated logistics systems.
CO2: Analyze distribution channel structures and logistics outsourcing strategies, including 3PL to 6PL models.
CO3: Evaluate transportation systems, freight management, international logistics, and packaging decisions.
CO4: Apply logistics performance measurement techniques and cost analysis methods in organizational contexts.
CO5: Develop strategies based on current trends in logistics, including e-logistics, reverse logistics, green logistics, and global logistics.

TEXT BOOKS

1. Sople Vinod V., Logistics Management and Supply Chain Management, 5th Edition, Pearson India, 2022.
2. Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management, 6th Edition, McGraw Hill, 2023.
3. Satish C. Ailawadi and Rakesh Singh, Logistics Management, PHI Learning, 2021.

REFERENCES

1. John J. Coyle, Robert A. Novack, Brian Gibson and Edward J. Bardi, Transportation: A Supply Chain Perspective, 10th Edition, Cengage Learning, 2022.
2. Rushton, Croucher and Baker, The Handbook of Logistics and Distribution Management, 7th Edition, Kogan Page, 2022.
3. Alan Harrison and Remko Van Hoek, Logistics Management and Strategy, 6th Edition, Pearson, 2024.

25BA313	MATERIALS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide learners with a foundational understanding of materials management and its strategic role in efficient production systems.
- To enable learners to apply materials planning techniques, including MRP, capacity planning, and scheduling for effective production control.
- To develop competency in inventory management principles, analytical models, and decision-making tools for optimizing stock levels.
- To equip learners with knowledge of purchasing, warehousing, and logistics strategies to achieve cost efficiency and operational excellence.

UNITI	INTRODUCTION	9

Introduction to Materials Management,Operating environment-Production planning system -manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan - Master scheduling- Developing MPS.

UNITII	MATERIALS PLANNING	9

Materials requirements planning-bill of materials- planning process-manufacturing resource planning-capacity management-Capacity Requirements Planning (CRP) - scheduling orders production activity control-Scheduling – Load Leveling- Theory of Constraints- Control.

UNITIII	INVENTORY MANAGEMENT	9

Aggregate Inventory Management – Item inventory Management – Flow of materials Objectives of Inventory Management – Costs – ABC Analysis –Inventory Policy Decisions–objectives-control -Retail Discounting Model, News vendor Model; -Quantity discount models. Probabilistic inventory models.

UNITIV	PURCHASING MANAGEMENT	9

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing

UNITV	WAREHOUSE MANAGEMENT	9

Warehousing functions – types - Stores management-stores systems and procedures incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management –operational efficiency-productivity-cost effectiveness-performance measurement

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the concepts, functions, and importance of materials management within modern manufacturing and service operations.

CO2: Apply materials planning tools such as MRP, MPS, CRP, and scheduling methods for effective production and capacity management.

CO3: Analyse and evaluate inventory decisions using models such as ABC analysis, Newsvendor model, retail discounting, and quantity-discount models.

CO4: Demonstrate the ability to formulate purchasing strategies including supplier selection, price forecasting, and procurement under uncertainty.

CO5: Manage warehousing operations, storekeeping systems, material handling, and logistics to enhance productivity, cost effectiveness, and overall performance.

TEXT BOOKS

1. P. Gopalakrishnan and M. Sundaresan, Materials Management: An Integrated Approach, PHI Learning, 2022.
2. K. Shridhara Bhat, Materials Management, Himalaya Publishing House, 2021.
3. A.K. Datta, Materials Management: Procedures, Text and Cases, PHI Learning, 2023.

REFERENCES

1. Donald Waters, Inventory Control and Management, 3rd Edition, Wiley, 2021.
2. S. N. Chary, Production and Operations Management, 7th Edition, McGraw Hill, 2022.
3. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, Pearson, 2023.

25BA314	SERVICES OPERATIONS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide an understanding of the nature, characteristics, and strategic importance of services in modern economies.
- To enable learners to design and manage service processes using tools such as service blueprinting, service encounters, and technology-enabled service innovations.
- To develop skills in assessing, measuring, and improving service quality and productivity through models, tools, and benchmarking techniques.
- To equip learners with knowledge of capacity management, service facility design, location planning, and demand management for efficient service operations.

UNIT I INTRODUCTION 9

Services – Importance, role in economy, service sector – nature, growth. Nature of services distinctive characteristics, Service Package, Service classification, service-dominant logic, open-systems view. Service Strategy –Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness.

UNIT II SERVICE DESIGN 9

New Service Development – Design elements – Service Blue-printing - process structure – generic approaches. Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface– service decoupling. Technology in services – self -service, automation, e-commerce, e-business, technology innovations.

UNIT III SERVICE QUALITY 9

Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality – SERVQUAL,Walk-through Audit, Quality service by design , Service Recovery, Service Guarantees -quality tools- benchmarking - Quality improvement programs. Process Improvement –productivity improvement - DEA.

UNIT IV SERVICE FACILITY 9

Supporting facility -Service scapes, Facility design – nature, objectives, process analysis, Service facility layout. Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling

UNIT V MANAGING CAPACITY AND DEMAND 9

Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics,operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising , globalization.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Understand the nature of service operations, distinguish between goods and services, compare the difference service classification system develop service strategy

CO2: Understand and apply the new service development process, design and improve services by applying service blueprinting and service decoupling.

CO3: Understand, apply and assess the quality in service design and delivery

CO4: Understand, Apply and Adapt models to design service facility, determine facility location and layout and Route and schedule vehicles

CO5: Understand and apply demand and capacity management in services, Illustrate and apply yield management, manage inventory and queuing system and grow and sustain service business

TEXT BOOKS

1. Robert Johnston, Graham Clark and Michael Shulver, Service Operations Management: Improving Service Delivery, 5th Edition, Pearson, 2021.
2. James A. Fitzsimmons and Mona J. Fitzsimmons, Service Management: Operations, Strategy, Information Technology, 10th Edition, McGraw Hill, 2022.
3. Cengiz Haksever and Barry Render, Service Management: An Integrated Approach to Supply Chain Management and Operations, 3rd Edition, Pearson, 2021.

REFERENCES

1. K. Douglas Hoffman and John E.G. Bateson, Services Marketing: Concepts, Strategies and Cases, 6th Edition, Cengage Learning, 2022.
2. Christian Grönroos, Service Management and Marketing, 5th Edition, Wiley, 2022.
3. Jochen Wirtz and Christopher Lovelock, Services Marketing: People, Technology, Strategy, 9th Edition, World Scientific Publishing, 2023.

25BA315	PROJECT MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To enable learners to understand the fundamentals, lifecycle, and strategic role of project management in diverse business environments.
- To equip learners with skills in defining project scope, developing schedules, and applying project planning tools such as WBS, PERT, and CPM.
- To develop competencies in resource management, cost estimation, risk assessment, and conflict resolution within project teams.
- To familiarize learners with project performance measurement, project integration, monitoring systems, and management of international projects.

UNIT I	INTRODUCTION TO PROJECT MANAGEMENT	9

Project Management – Definition –Goal - Lifecycles.Project Environments.Project Manager – Roles- Responsibilities and Selection.Definition and examples of projects, Key features of projects, Typical project problems, Human issues in Projects, Project identification and screening: (Brainstorming, Strength, and weaknesses in the system, environmental opportunities and threats, Identification and screening) – Project Appraisal and Selection

UNIT II	SCOPE AND TIME MANAGEMENT	9

Scope Management – Defining the Project – SOW - WBS and PBS – Time Management – Network Diagram – Forward Pass and Backward Pass Critical path – PERT and CPM – AOA and AON methods – tools for Project Network – Estimation Techniques

UNIT III	RESOURCE AND COST MANAGEMENT	9

Scheduling Resources – Resource Allocation methods - Reducing Project duration: Project Crashing – resource-leveling methods - Simulation for resource allocation.Goldratt‟s Critical Chain- Cost Management – Earned Value Method.

UNIT IV	PROJECT ORGANISATION, CONFLICT AND MANAGEMENT	9

Project Organization Structure,– Formal Organisation Structure – Organisation Design –Types of project organizations. Culture - Conflict – Origin & Consequences.Project Teams.Managing conflict – Team methods for resolving conflict.Risk identification: types of risk, risk checklists-Risk prioritization -Risk management tactics, Including risk avoidance, risk transfer, risk reduction, risk mitigation and contingency planning

UNIT V	PERFORMANCE MANAGEMENT	9

Project Integration - Progress and Performance measurement and evaluation – Project monitoring information system, developing a status report and other control issues – Project audit and closure – audit process, project closure, team, team member and project manager evaluations - International Projects – environmental factors, cross-cultural considerations, selection and training for international projects - Future likely trends in Project management

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the roles and responsibilities of a project manager and carry out project identification, screening, appraisal, and selection.

CO2: Define project scope and elements, develop work breakdown structures, construct project networks, and estimate project duration using PERT/CPM techniques.

CO3: Apply resource allocation methods, project crashing, critical chain concepts, and cost management techniques such as the Earned Value Method to schedule and control projects.

CO4: Compare different project organizational structures, identify sources of conflict, and apply conflict-resolution and risk-mitigation strategies effectively.

CO5: Analyse project performance using monitoring tools, evaluate project progress, conduct project audits and closure activities, and assess international project management considerations.

TEXT BOOKS

1. Erik W. Larson and Clifford F. Gray, Project Management: The Managerial Process, 9th Edition, McGraw Hill, 2024.
2. Jack R. Meredith, Samuel J. Mantel Jr. and Scott M. Shafer, Project Management: A Managerial Approach, 11th Edition, Wiley, 2022.
3. Kathy Schwalbe, Information Technology Project Management, 10th Edition, Cengage Learning, 2023.

REFERENCES

1. Harold Kerzner, Project Management: A Systems Approach to Planning, Scheduling and Controlling, 13th Edition, Wiley, 2022.
2. Project Management Institute (PMI), A Guide to the Project Management Body of Knowledge (PMBOK® Guide), 7th Edition, PMI, 2021.
3. Bennet P. Lientz and Kathryn P. Rea, Project Management for the 21st Century, Routledge, 2021.

25BA316	INTRODUCTION TO SUPPLY CHAIN ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide learners with foundational knowledge of descriptive, predictive, and prescriptive analytics and their application in modern data-driven supply chains.
- To equip learners with analytical and mathematical modeling skills for solving warehousing, inventory, and transportation decision problems.
- To develop the ability to analyze supply chain risks, optimize inventory across multiple echelons, and improve overall system performance.
- To enable learners to apply multi-criteria decision-making techniques for complex supply chain problems and strategic decision support.

UNIT I	INTRODUCTION	9

Introduction to analytics – descriptive, predictive and prescriptive analytics, Data Driven Supply Chains – Basics, transforming supply chains, Barriers to implementation, Road Map.

UNIT II	WAREHOUSING DECISIONS	9

Mathematical Programming Models - P-Median Methods - Guided LP Approach - Balmer – Wolfe Method, Greedy Drop Heuristics, Dynamic Location Models, Space Determination and Layout Methods

UNIT III	INVENTORY MANAGEMENT	9

Inventory aggregation Models, Dynamic Lot sizing Methods, Multi-Echelon Inventory models, Aggregate Inventory system and LIMIT, Risk Analysis in Supply Chain - Measuring transit risks, supply risks, delivering risks, Risk pooling strategies.

UNIT IV	TRANSPORTATION NETWORK MODELS	9

Notion of Graphs, Minimal Spanning Tree, Shortest Path Algorithms, Maximal Flow Problems, Multistage Transshipment and Transportation Problems, Set covering and Set Partitioning Problems, Traveling Salesman Algorithms, Advanced Vehicle Routing Problem Heuristics, Scheduling Algorithms-Deficit function Approach and Linking Algorithms

UNIT V	MULTI-CRITERIA DECISION MAKING MODELS	9

Analytic Hierarchy Process(AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Techniques, the analytical network process (ANP), TOPSIS-Application in SCM

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Understand and apply the concepts of descriptive, predictive, and prescriptive analytics to analyze data-driven supply chain systems.

CO2: Design and evaluate warehousing and facility-location models using mathematical programming, heuristics, and dynamic location approaches.

CO3: Analyze and implement inventory models—including aggregation, dynamic lot sizing, multi-echelon models, and risk-pooling strategies—to enhance inventory performance.

CO4: Apply and develop transportation and network optimization models such as shortest path, maximal flow, transshipment, TSP, VRP heuristics, and scheduling algorithms.

CO5: Use multi-criteria decision-making tools such as AHP, ANP, DEA, TOPSIS, and fuzzy logic methods to support complex supply chain decisions.

TEXT BOOKS

1. Peter W. Robertson, Nada R. Sanders and Morgan Swink, Supply Chain Analytics, McGraw Hill, 2023.
2. Deepak Chahar and Sushil Kumar, Supply Chain Analytics, CRC Press, 2022.
3. Nada R. Sanders, Supply Chain Management: A Global Perspective, Wiley, 2021.

REFERENCES

1. Sunil Chopra, Supply Chain Management: Strategy, Planning, and Operation, 8th Edition, Pearson, 2023.
2. David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi, Designing and Managing the Supply Chain, McGraw Hill, 2021.
3. Nicolas Vandeput, Data Science for Supply Chain Forecasting, De Gruyter, 2021.

BUSINESS ANALYTICS

		L	T	P	C
25BA220	DATA PREPROCESSING AND ANALYTICS	3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the fundamentals and importance of business analytics in decision making.
- Apply statistical and quantitative techniques to analyze business data.
- Use data visualization tools to interpret and present insights effectively.
- Develop analytical thinking for solving real-world business problems.

UNIT I	**INTRODUCTION TO BUSINESS ANALYTICS**	**9**
Introduction to Business Analytics – Evolution and Scope – Types of Analytics: Descriptive, Diagnostic, Predictive, Prescriptive – Role of Analytics in Business Decision Making – Data-driven organizations – Business Analytics Process – Applications of Business Analytics in various domains (Marketing, Finance, HR, Operations).		
UNIT II	**DATA COLLECTION AND DATA PREPROCESSING**	**9**
Sources of Data – Structured and Unstructured Data – Data Collection Methods – Data Cleaning – Handling Missing Values – Data Transformation – Data Integration – Data Reduction Techniques – Introduction to Big Data – Overview of Data Warehousing and Data Mining.		
UNIT III	**DESCRIPTIVE ANALYTICS AND DATA VISUALIZATION**	**9**
Measures of Central Tendency and Dispersion – Data Summarization – Frequency Distribution – Data Visualization Concepts – Charts and Graphs (Bar, Pie, Histogram, Scatter Plot) – Dashboard Design Principles – Introduction to Tools (Excel, Power BI/Tableau basics).		
UNIT IV	**PREDICTIVE ANALYTICS**	**9**
Introduction to Predictive Modeling – Regression Analysis (Simple and Multiple) – Correlation Analysis – Time Series Basics – Forecasting Techniques – Classification Techniques (Overview) – Introduction to Machine Learning Concepts.		
UNIT V	**PRESCRIPTIVE ANALYTICS AND APPLICATIONS**	**9**
Optimization Techniques – Linear Programming – Decision Analysis – Simulation – Risk Analysis – Business Case Studies – Ethical Issues in Business Analytics – Data Privacy and Security.		
CONTEMPORARY TOPICS		
Guest Lecture from Industry experts		
		TOTAL:45 PERIOD

COURSE OUTCOMES
Upon completion of the course, the students will be able to:

CO1: Explain the role of business analytics in organizational decision-making.
CO2: Apply data preprocessing techniques to prepare data for analysis.
CO3: Analyze data using descriptive statistical methods and visualization tools.
CO4: Develop predictive models using basic statistical techniques.
CO5: Evaluate business problems and recommend solutions using prescriptive analytics.

TEXT BOOKS

1. Foster Provost and Tom Fawcett, Data Science for Business, Revised Edition, O'Reilly Media, 2023.
2. Asha A. George and S. Jeeva, Business Analytics, McGraw Hill India, 2022.
3. Galit Shmueli, Peter C. Bruce, Nitin R. Patel and Peter Gedeck, Data Mining for Business Analytics: Concepts, Techniques and Applications, Wiley, 2023.

REFERENCES

1. Bart Baesens, Analytics in a Big Data World, 3rd Edition, Wiley, 2021.
2. U. Dinesh Kumar and Deepak Choudhary, Business Analytics: The Science of Data-Driven Decision Making, Wiley India, 2022.
3. V. Kumar and G. Shainesh, Business Analytics, Pearson India, 2023.

25BA221	DATA MINING AND DECISION SCIENCES	L	T	P	C
		3	0	0	3

OBJECTIVES
The course will enable the learners to:

- Understand the concepts and techniques of data mining and decision sciences.
- Apply data mining algorithms for extracting meaningful patterns from data.
- Analyze business problems using decision science models.
- Interpret results using analytical and statistical tools.

UNIT I	INTRODUCTION TO DATA MINING AND DECISION SCIENCES	9

Introduction to Data Mining – Evolution and Scope – Knowledge Discovery in Databases (KDD) Process – Data Mining Functionalities – Applications in Business – Introduction to Decision Sciences – Role of Decision Making in Management – Types of Decisions – Decision Making Process.

UNIT II	DATA PREPROCESSING AND DATA WAREHOUSING	9

Data Cleaning – Data Integration – Data Transformation – Data Reduction – Handling Missing Data – Data Discretization – Data Warehousing Concepts – Architecture – OLAP Operations – Introduction to Big Data.

UNIT III	DATA MINING TECHNIQUES	9

Classification – Decision Trees – Naïve Bayes – K-Nearest Neighbor (KNN) – Clustering – K-Means Algorithm – Hierarchical Clustering – Association Rule Mining – Apriori Algorithm – Pattern Evaluation.

UNIT IV	DECISION SCIENCE MODELS	9

Decision Theory – Decision Making under Certainty, Risk and Uncertainty – Payoff Tables – Decision Trees – Expected Value – Utility Theory – Linear Programming – Transportation and Assignment Problems – Sensitivity Analysis.

UNIT V	ADVANCED APPLICATIONS AND ETHICS	9

Business Applications of Data Mining – Customer Segmentation – Market Basket Analysis – Fraud Detection – Risk Analysis – Introduction to Predictive Analytics – Ethical Issues in Data Mining – Data Privacy – Security Challenges.

CONTEMPORARY TOPICS

Guest Lecture from Industry experts

TOTAL:45 PERIOD

COURSE OUTCOMES

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

CO1: Explain the principles of data mining and decision sciences.

CO2: Apply preprocessing techniques to prepare datasets for analysis.

CO3: Implement classification, clustering, and association techniques.

CO4: Analyze business decisions using quantitative models.

CO5: Evaluate real-world business problems using data-driven approaches.

TEXT BOOKS

1. Galit Shmueli, Peter C. Bruce, Nitin R. Patel and Peter Gedeck, Data Mining for Business Analytics: Concepts, Techniques, and Applications, Wiley, 2023.
2. U. Dinesh Kumar and Deepak Choudhary, Business Analytics: The Science of Data-Driven Decision Making, Wiley India, 2022.
3. Asha A. George and S. Jeeva, Business Analytics, McGraw Hill India, 2022.

REFERENCES

1. Jiawei Han, Micheline Kamber and Jian Pei, Data Mining: Concepts and Techniques, 4th Edition, Morgan Kaufmann (Elsevier), 2023.
2. Foster Provost and Tom Fawcett, Data Science for Business, Revised Edition, O'Reilly Media, 2023.
3. Bart Baesens, Analytics in a Big Data World, 3rd Edition, Wiley, 2021.

25BA317	SOCIAL MEDIA WEB ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide learners with an understanding of the evolution, characteristics, and social theories underlying social media and online communities.
- To equip learners with skills for building, managing, and leveraging social media communities for communication, branding, and business applications
- To develop knowledge of social media policies, ethics, privacy, and analytical approaches for measuring online performance.
- To introduce learners to web analytics, search analytics, and data-driven techniques for optimizing user engagement, campaigns, and digital strategies.

UNIT I	**INTRODUCTION**	**9**
Evolution of online communities - History and Evolution of Social Media- Social Media vs. traditional media - Social Media Audience and Goals for using Social Media - Understanding Social Media: Strong and weak ties – Influencers - How ideas travel – Viralness - Social theory and social media -technological determinism in popular discourse on social media technologies.		
UNIT II	**COMMUNITY BUILDING AND MANAGEMENT**	**9**
Science of Social Media - Keys to Community Building - Promoting Social Media Pages-Linking Social Media Accounts-The Viral Impact of Social Media-Digital PR-Encourage Positive Chatter in Social Media - Identity in social media: formation of identities, communities, activist movements, and consumer markets - Social Media as business.		
UNIT III	**SOCIAL MEDIA POLICIES AND MEASUREMENTS**	**9**
Social Media Policies-Etiquette, Privacy- ethical problems posed by emerging social media technologies - The road ahead in social media- The Basics of Tracking Social Media - social media analytics- Insights Gained From Social Media- Customized Campaign Performance Reports - Observations of social media use.		
UNIT IV	**WEB ANALYTICS**	**9**
Web Analytics - Present and Future, Data Collection - Importance and Options, Overview of Qualitative Analysis, Business Analysis, KPI and Planning, Critical Components of a Successful Web Analytics Strategy, Web Analytics Fundamentals, Concepts, Proposals & Reports, Web Data Analysis.		
UNIT V	**SEARCH ANALYTICS**	**9**
Search engine optimization (SEO), non-linear media consumption, user engagement, usergenerated content, web traffic analysis, navigation, usability, eye tracking, online security, online ethics, content management system, data visualization, RSS feeds, Mobile platforms, User centered design, Understanding search behaviors.		
CONTEMPORARY TOPICS		
Guest Lecture from Industry Experts		
		TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the evolution of social media, online communities, and the theories that describe how influence, ideas, and viral content spread.

CO2: Apply strategies for community building, social media promotion, digital PR, and identity formation to support business and communication goals.

CO3: Identify and evaluate social media policies, etiquette, privacy concerns, ethical issues, and methods for tracking and analyzing social media activity.

CO4: Understand and apply the fundamental concepts of web analytics including data collection, KPIs, qualitative/quantitative analysis, and reporting.

CO5: Use insights from web and search analytics—including SEO, user engagement patterns, usability data, and mobile behavior—to improve website design, campaign performance, and digital strategy.

TEXT BOOKS

1. Tracy L. Tuten, Social Media Marketing, 4th Edition, Sage Publications, 2023.
2. Puneet Singh Bhatia, Digital Marketing, Pearson India, 2022.
3. Seema Gupta, Digital Marketing, McGraw Hill Education, 2023.

REFERENCES

1. Dave Chaffey and Fiona Ellis-Chadwick, Digital Marketing: Strategy, Implementation and Practice, Pearson, 2022.
2. Kevin Hartman, Digital Marketing Analytics: In Theory and In Practice, Routledge, 2021.
3. Marshall Sponder, Social Media Analytics: Effective Tools for Building, Interpreting and Using Metrics, McGraw Hill, 2021.

25BA318	E - BUSINESS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide learners with foundational knowledge of e-business concepts, models, and technologies essential for establishing and managing online business operations.
- To familiarize students with the technological infrastructure required for e-business, including internet protocols, web systems, and publishing technologies.
- To equip learners with an understanding of consumer- and business-oriented e-business applications, digital marketing tools, CRM, and electronic service delivery systems.
- To develop awareness of e-payment systems, security mechanisms, and legal, ethical, and privacy issues governing e-business practices

UNIT I	INTRODUCTION TO e-BUSINESS	8
e-business, e-business vs e-commerce, Economic forces – advantages – myths – e-business models, design, develop and manage e-business, Web 2.0 and Social Networking, Mobile Commerce, S-commerce		
UNIT II	**TECHNOLOGY INFRASTRUCTURE**	**10**
Internet and World Wide Web, internet protocols - FTP, intranet and extranet, information publishing technology- basics of web server hardware and software.		
UNIT III	**BUSINESS APPLICATIONS**	**10**
Consumer oriented e-business – e-tailing and models - Marketing on web – advertising, e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, e-governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals– social media marketing		
UNIT IV	**e-BUSINESS PAYMENTS AND SECURITY**	**9**
E-payments - Characteristics of payment of systems, protocols, e-cash, e-cheque and Micro payment systems- internet security – cryptography – security protocols – network security.		
UNIT V	**LEGAL AND PRIVACY ISSUES**	**8**
Legal, Ethics and privacy issues – Protection needs and methodology – consumer protection, cyber laws, contracts and warranties, Taxation and encryption policies.		

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Design, develop, and manage e-business models by understanding the concepts, advantages, and technological trends in online business.

CO2: Explain the components of e-business technology infrastructure, including internet protocols, intranet/extranet systems, and web server technologies.

CO3: Analyze and apply consumer- and business-oriented e-business applications such as e-tailing, e-CRM, e-governance, delivery systems, virtual communities, and social media marketing.

CO4: Describe and compare various e-payment systems, protocols, cryptographic methods, and network security techniques.

CO5: Evaluate legal, ethical, consumer protection, privacy, and cyber law issues to ensure safe and compliant e-business operations.

TEXT BOOKS

1. Dave Chaffey, E-Business and E-Commerce Management: Strategy, Implementation and Practice, Pearson, 2022.
2. Kenneth C. Laudon and Carol Guercio Traver, E-Commerce: Business, Technology, Society, 18th Edition, Pearson, 2024.
3. Bharat Bhasker, Electronic Commerce: Framework, Technologies and Applications, McGraw Hill India, 2021.

REFERENCES

1. Turban, Pollard, King, Lee and Liang, Electronic Commerce: A Managerial and Social Networks Perspective, Springer, 2021.
2. Gary P. Schneider, Electronic Commerce, Cengage Learning, 2022.
3. Ravi Kalakota and Marcia Robinson, E-Business 2.0: Roadmap for Success, Pearson, 2021 Reprint Edition.

25BA319	ERP	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To provide learners with a comprehensive understanding of ERP concepts, evolution, modules, and organizational benefits.
- To equip students with knowledge of data management technologies—such as data warehousing, mining, OLAP, and PLM—and their role in ERP systems.
- To develop the ability to analyze ERP marketplace dynamics, functional modules, and integration with SCM and CRM.
- To train learners in ERP implementation methodologies, evaluation strategies, and emerging trends to ensure successful adoption and integration.

UNIT I	INTRODUCTION	9

ERP Introduction - Origin, Evolution, Structure and Benefits - Conceptual Model of ERP-Scenario and Justification of ERP in India - Various Modules of ERP - Advantage of ERP.

UNIT II	DATA MANAGEMENT	9

Advancement of IT and Impact on organizations data management: Data warehousing, Data Mining, Online Analytic Processing (OLAP), Product Life Cycle Management (PLM).ERP Marketplace and Marketplace Dynamics: Market Overview, Marketplace Dynamics, and The changing ERP Market.

UNIT III	MARKETPLACE DYNAMICS	9

ERP Marketplace and Marketplace Dynamics: Market Overview, Marketplace Dynamics, and The changing ERP Market. ERP- Functional Modules: Introduction, Functional Modules of ERP Software Integration of ERP, Supply chain and Customer Relationship Applications.

UNIT IV	ERP IMPLEMENTATION	9

ERP- Functional Modules: Introduction, Functional Modules of ERP Software Integration of ERP, Supply chain and Customer Relationship Applications.ERP Implementation: Business Process mapping and re-engineering, ERP Implementation Life Cycle, Role of Consultants, Vendors and Employees. Critical Success Factors: Guiding.

UNIT V	TRENDS	9

Selection and Evaluation of ERP, Strategies and CSF for Successful ERP Implementation, Causes of ERP Failure. Practical Module: ERP & E-Commerce, Future Directives- in ERP, Integrating ERP into organizational culture. Using an open source ERP tool for orienting students to ERP

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals, evolution, structure, and benefits of ERP systems, including the justification for ERP adoption.

CO2: Analyze the impact of IT advancements on data management and apply concepts of data warehousing, data mining, OLAP, and PLM within ERP environments.

CO3: Evaluate ERP marketplace dynamics and explain ERP functional modules and their integration with supply chain and customer relationship applications.

CO4: Apply ERP implementation methodologies including business process mapping, reengineering, lifecycle planning, and stakeholder roles, while identifying critical success factors.

CO5: Assess ERP selection, evaluation strategies, causes of implementation failure, and emerging trends while gaining exposure to open-source ERP tools.

TEXT BOOKS

1. Alexis Leon, Enterprise Resource Planning, McGraw Hill Education, 2021.
2. Ravi Shankar and S. Jaiswal, Enterprise Resource Planning, Pearson India, 2022.
3. Simha R. Magal and Jeffrey Word, Integrated Business Processes with ERP Systems, Wiley, 2023.

REFERENCES

1. Mary Sumner, Enterprise Resource Planning, Pearson, 2021.
2. Monk and Wagner, Concepts in Enterprise Resource Planning, Cengage Learning, 2022.
3. Bret Wagner, Enterprise Resource Planning Systems, Cengage Learning, 2023.

25BA320	BUSINESS ANALYTICS USING PYTHON	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To introduce learners to the fundamentals of business analytics, evolution of analytical techniques, and the use of Python for data-driven decision making.
- To equip students with skills in visualizing business data using Python, R, Tableau, and developing meaningful performance metrics across domains
- To enable students to apply analytical models such as segmentation, clustering, positioning, and marketing engineering for business insights.
- To provide hands-on understanding of marketing mix analytics and advanced Python-based analytical applications including churn, sentiment analysis, and recommender systems.

UNIT I	INTRODUCTION	9

Introduction to Business Analytics - Evolution of Business Data and Analytics timeline – Types of Analytics - Marketing Analytics Applications - Summarizing & Reporting Marketing Data using Excel.

UNIT II	VISUALIZING BUSINESS DATA USING TABLEAU	9

Visualizations Using Python & R - Understanding the Metrics across domains –Developing Metrics - Flowchart for Metric Creation.

UNIT III	BUSINESS MODELS & STRATEGIES	9

Please find attached the unit-wise syllabus mapping of the MBA Career Development Courses (Career Development I, II, III, and Executive Communication) with the training proposals received from the vendors.

UNIT IV	MARKETING MIX ANALYTICS	9

New Product development decisions - Pricing the Product - Forecasting the Sales – Allocating the Retail space & Sales Resource – Consumer Attribution Modelling Methods.

UNIT V	MARKETING MIX ANALYTICS APPLICATIONS	9

Customer Churn Modelling – Purchase Behaviour Prediction Models- social media Listening and Sentimental Analysis – Market Basket Analysis – RFM Analysis – Recommender Systems development.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the evolution of business analytics, types of analytics, and apply basic reporting and summarization techniques using tools like Excel.

CO2: Visualize and interpret business data using Python, R, and Tableau, and design domain-specific performance metrics.

CO3: Apply business models and analytical techniques such as segmentation, clustering, positioning analysis, and data mining for strategic decision making.

CO4: Use marketing mix analytics to support decisions related to new product development, pricing, sales forecasting, resource allocation, and attribution modeling.

CO5: Implement Python-based analytical applications such as churn prediction, purchase behavior modeling, sentiment analysis, market basket analysis, RFM modeling, and recommender systems.

TEXT BOOKS

1. U. Dinesh Kumar and Manaranjan Pradhan, Business Analytics: Data Analysis and Decision Making Using Python, Wiley India, 2022.
2. James R. Evans, Business Analytics: Methods, Models and Decisions, Pearson, 2023.
3. Galit Shmueli, Peter C. Bruce, Nitin R. Patel and Peter Gedeck, Data Mining for Business Analytics: Concepts, Techniques, and Applications in Python, Wiley, 2023.

REFERENCES

1. Wes McKinney, Python for Data Analysis, 3rd Edition, O'Reilly Media, 2022.
2. Jake Vander Plas, Python Data Science Handbook, O'Reilly Media, 2023.
3. Foster Provost and Tom Fawcett, Data Science for Business, Revised Edition, O'Reilly Media, 2023.

HOSPITAL AND HEALTHCARE MANAGEMENT

<table>
<tr><td rowspan="2">25BA222</td><td rowspan="2">INTRODUCTION TO HOSPITAL MANAGEMENT</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
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OBJECTIVES

The course will enable the learners to:

- To understand the structure, functions, and processes of clinical and non-clinical departments in various hospitals.
- To develop the ability to utilize modern management principles within diverse healthcare units.
- To learn and analyse healthcare costs and related processes.
- To gain comprehensive knowledge of hospital operations and healthcare systems.

UNIT I	**INTRODUCTION TO HOSPITAL MANAGEMENT**	**9**
Introduction to Hospital Administration -Rationale of Hospital Administration- role of hospital management – hospital problem solving- Statistics in hospital – introduction of Clinical & Non – Clinical, & Ancillary services.		
UNIT II	**HOSPITAL ADMINISTRATION**	**9**
Inpatient services (IP) - Outpatient services (OPD)- Overview of reception protocols, patient registration processes, appointment scheduling, and handling of patient inquiries. - maintaining outpatient and inpatient records, and confidentiality standards. Ward management-Fundamentals of ward operations.		
UNIT III	**HOSPITAL SERVICES AND FACILITIES**	**9**
Clinical Lab Services - Imaging services -Transfusion services – movement of each unit of blood - key challenges in blood bank operations- Operation Theatre process - understanding zoning policies and process - ICU management.		
UNIT IV	**DEPARTMENTS IN HOSPITAL**	**9**
Nursing department- services provided by nursing - Emergency department - Central Sterile Supplies Department (CSSD)- Medical Records Department-Dietary department -Pharmacy Department-House-keeping department -Hospital Engineering service.		
UNIT V	**HRM IN HOSPITAL**	**9**
Human Resource Management System in hospital- Management of healthcare professionals: Doctors, Nurses, and Paramedical Staff- Recruitment and selection processes in hospitals-Employee motivation and performance enhancement strategies.		
CONTEMPORARY TOPICS		
Guest lecture by industry experts on current trends in hospital management.		
		TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: To introduce students to the organizational structure and key responsibilities of various clinical departments within a hospital setting.

CO2: To enhance understanding of the functions and significance of non-clinical units in hospitals and healthcare institutions.

CO3: To familiarize students with professional approaches and best practices in managing day-to-day hospital operations.

CO4: To build foundational skills in strategic planning and administration of healthcare services and hospital systems.

CO5: Integrated functioning of and within departments.

TEXT BOOKS

1. S. L. Goel and R. Kumar, Hospital Administration and Management, Deep & Deep Publications, 2022.
2. B. M. Sakharkar, Principles of Hospital Administration and Planning, Jaypee Brothers Medical Publishers, 2021.
3. G. D. Kunders, Hospitals: Planning, Design and Management, Tata McGraw Hill, 2021.

REFERENCES

1. Sharon B. Buchbinder and Nancy H. Shanks, Introduction to Health Care Management, 4th Edition, Jones & Bartlett Learning, 2021.
2. Kathryn McKee and James Healy, The Hospital in the Changing Health Care System, Routledge, 2022.
3. Ann Scheck McAlearney and Anthony R. Kovner, Health Care Management and Leadership, Springer Publishing, 2023.

25BA223	HOSPITAL PLANNING AND MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the space, function, and infrastructure needed in healthcare facilities.
- To learn the key elements involved in the planning of a hospital.
- To know the process and steps required for the construction of hospitals.
- To be aware of the safety and security measures followed in hospitals.

UNIT I	INTRODUCTION TO HOSPITAL PLANNING	9

Concept and scope of hospital planning – Functions of hospitals – Classification of hospitals – Departmental organization and hierarchy – Hospital management structure – Characteristics of an effective organisational framework – Role and significance of hospital committees – Responsibilities of major medical and support departments – Importance of organisational culture in healthcare institutions – Use of organisational charts – Bed utilization and patient flow management – Achieving efficiency and quality patient care.

UNIT II	HOSPITAL PLANNING	9

Hospital planning and its principles – Hospital plan – Role of Management Information System (MIS) – Planning of material, product, manpower, financial, marketing, peripheral services, health education, equipment, operational and functional areas.

UNIT III	HOSPITAL CONSTRUCTION PLANNING	9

Role of hospital consultant – Importance of planning stage – Responsibilities of the architect – Preparation of working drawings – Legal formalities and statutory approvals – Selection of hospital site – Design considerations – Environmental regulations – Equipment planning – Distribution of beds – Space requirements and interrelationships – Construction cost management

UNIT IV	INTERDEPARTMENTAL BONDS	9

Functional orientation among departments – Communication practices – Cooperation and coordination – Leadership development in hospital departments – Enhancing managerial capacity.

UNIT V	HOSPITAL SAFETY PROTOCOLS	9

Hospital safety measures – Security and loss prevention – Fire safety protocols – Bomb threat management – Alarm systems – Disaster preparedness planning.

CONTEMPORARY TOPICS

Case study on evaluation of hospital planning and management.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Recognize the key elements involved in hospital planning.

CO2: Explain how the hospital environment supports high-quality patient care.

CO3: List the important factors to consider when planning and designing hospital services. CO4: Describe the operational needs of a hospital to ensure effective patient care.

CO5:Understand how hospital administrators contribute to the smooth operation of healthcare services.

TEXT BOOKS

1. B. M. Sakharkar, Principles of Hospital Administration and Planning, Jaypee Brothers Medical Publishers, 2021.
2. G. D. Kunders, Hospitals: Planning, Design and Management, Tata McGraw Hill, 2021.
3. S. L. Goel and R. Kumar, Hospital Administration and Management, Deep & Deep Publications, 2022.

REFERENCES

1. Sharon B. Buchbinder and Nancy H. Shanks, Introduction to Health Care Management, 4th Edition, Jones & Bartlett Learning, 2021.
2. Ann Scheck McAlearney and Anthony R. Kovner, Health Care Management and Leadership, Springer Publishing, 2023.
3. Kathryn McKee and James Healy, The Hospital in the Changing Health Care System, Routledge, 2022.

		L	T	P	C
25BA321	**STRATEGIC MARKETING FOR HOSPITALS**	**3**	**0**	**0**	**3**

OBJECTIVES

The course will enable the learners to:

- To introduce students to modern marketing concepts and tools.
- To develop skills for effective marketing in hospital settings.
- To provide the practical understanding of marketing functions in healthcare.
- Analyse marketing strategies and recommend implementation plans

UNIT I	**OVERVIEW OF HEALTHCARE SYSTEMS AND MARKETING ROLES**	**9**

Explores the evolving function of marketing within healthcare organizations- Covers the structure of healthcare systems- key trade-offs involved-the broader healthcare industry landscape, and factors-influencing the use of healthcare services.

UNIT II	**MARKET ANALYSIS AND STRATEGIC PLANNING**	**9**

Strategic Business Unit (SBU);-Includes understanding how healthcare consumers make decisions, the role of marketing information systems and approaches to segmentation-analyzing the various models of SBU: BCG Growth Share Matrix – GE/McKinsey Matrix (GE Approach)

UNIT III	**PRODUCT AND SERVICE STRATEGY IN HEALTHCARE**	**9**

Marketing Mix Strategies: concept of the marketing mix and explores key decisions related to product items, product lines, and the overall product mix of hospital.

Product life cycle strategies-Pricing strategies- Channel management in Hospital- Franchisee management- Elements of Promotion Mix- Promotion strategies.

UNIT IV	**COMMUNICATION IN HEALTHCARE**	**9**

Internal marketing – Significance and goals – Responsibilities of service employees – Key internal marketing strategies; External marketing – Components of the promotion mix – Planning and executing promotional campaigns; Interactive marketing – Methods of engaging customers through interactive communication.

UNIT V	**SERVICE DELIVERY AND RECOVERY MANAGEMENT**	**9**

Service distribution methods – Managing service demand and capacity – Physical evidence in services – Types of service – Strategies for managing physical evidence – Service recovery strategies.

CONTEMPORARY TOPICS

Guest Lecture from industry experts on contemporary topics in market competition and strategic decision in hospital management.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1**:** Explain the role and key functions of marketing in different healthcare organizations.
CO2**:** Understand core marketing concepts and tools for analysing diverse situations.
CO3**:** Recognize how changing environments affect marketing decisions and strategies.
CO4**:** Use marketing theories and frameworks in practical healthcare scenarios.
CO5**:** Evaluate how environmental shifts influence marketing plans and practices.

TEXT BOOKS

1. Philip Kotler, Joel Shalowitz and Robert J. Stevens, Strategic Marketing for Health Care Organizations: Building a Customer-Driven Health System, Wiley, 2021.
2. Richard K. Thomas, Health Services Marketing: A Practitioner's Guide, Health Administration Press, 2022.
3. Eric N. Berkowitz, Essentials of Health Care Marketing, Jones & Bartlett Learning, 2023.

REFERENCES

1. John L. Fortenberry Jr., Health Care Marketing: Tools and Techniques, Jones & Bartlett Learning, 2021.
2. Sharon B. Buchbinder and Nancy H. Shanks, Introduction to Health Care Management, 4th Edition, Jones & Bartlett Learning, 2021.
3. Paul Feldstein, Health Care Marketing, Cengage Learning, 2022

25BA322	PRINCIPLES OF FINANCE IN HEALTH SECTOR	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To Understand the fundamental concepts of financial management as applied to the healthcare sector.
- To Analyse healthcare financial statements and interpret key performance indicators.
- To Apply costing, budgeting, and pricing strategies for efficient financial planning in healthcare organizations.
- To Evaluate investment decisions, insurance mechanisms, and ethical considerations in healthcare finance.

UNIT I INTRODUCTION TO HEALTHCARE FINANCE 9

Overview of the healthcare industry and financial environment-Importance of finance in health sector decision-making-Types of healthcare organizations: public, private, and not-for-profit-Financial objectives and challenges in healthcare-Sources of finance for hospitals and clinics

UNIT II FINANCIAL STATEMENTS AND ANALYSIS IN HEALTHCARE 9

Basic financial statements: Balance Sheet, Income Statement, Cash Flow-Key financial terms and concepts-Analysing financial performance of hospitals-Ratio analysis for healthcare organizations-Budgeting process in healthcare settings.

UNIT III COSTING AND PRICING IN HEALTHCARE 9

Types of healthcare costs: fixed, variable, direct, indirect-Cost allocation methods in hospitals-Break-even analysis-Pricing of healthcare services-Role of cost control in hospital efficiency.

UNIT IV HEALTH INSURANCE, REIMBURSEMENT & ETHICS 9

Capital budgeting in healthcare: NPV, IRR, Payback-Short-term and long-term financial planning-Investment decisions in medical equipment and infrastructure-Leasing vs. buying medical assets-Working capital management in hospitals.

UNIT V HEALTH INSURANCE, REIMBURSEMENT & ETHICS 9

Basics of health insurance and reimbursement systems-Role of government schemes (e.g., Ayushman Bharat, PM-JAY)- Private insurance models and third-party payers-Financial implications of medical ethics and billing transparency-Risk management and fraud control in health finance.

CONTEMPORARY TOPICS

Guest Lecture from Industry experts on contemporary issues and recent trends in financial management of hospital

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the financial structure and funding sources of healthcare institutions.

CO2: Interpret and analyse financial statements and ratios relevant to hospitals and clinics.

CO3: Prepare cost sheets and perform break-even analysis for healthcare services.

CO4**:** Assess capital budgeting decisions and manage working capital in a healthcare setup.

CO5: Examine the role of health insurance, reimbursement policies, and ethical issues in healthcare financial systems.

TEXT BOOKS

1. Michael Nowicki, Introduction to the Financial Management of Healthcare Organizations, Health Administration Press, 2023.
2. Louis C. Gapenski and George H. Pink, Understanding Healthcare Financial Management, Health Administration Press, 2022.
3. Steven A. Finkler, David M. Ward and Judith J. Baker, Essentials of Cost Accounting for Health Care Organizations, Jones & Bartlett Learning, 2022.

REFERENCES

1. William N. Zelman, Michael J. McCue and Noah D. Glick, Financial Management of Health Care Organizations, Wiley, 2021.
2. Kristin L. Reiter and Paula H. Song, Gapenski's Healthcare Finance: An Introduction to Accounting and Financial Management, Health Administration Press, 2024.
3. Steven A. Finkler, Thad Calabrese and Daniel L. Smith, Financial Management for Public, Health, and Not-for-Profit Organizations, CQ Press, 2021.

25BA323	LEGAL FRAMEWORK FOR HEALTHCARE SYSTEM	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the accreditation process in healthcare organizations.
- To design Standard Operating Protocols (SOPs) tailored to departmental needs.
- To gain insights into selecting appropriate accreditation policies for an organization or department.
- To apply accreditation knowledge to improve quality and compliance in hospital management.

UNIT I	INTRODUCTION TO HEALTH CARE MANAGEMENT	9

Introduction and Evolutions of healthcare – Institutional Accreditation– Educational Institution and Hospital Accreditation. Accreditation Policies – Accreditation Procedures – Quality Council of India (QCI) – Organizational Structure – Governing Body.

UNIT II	OVERVIEW OF ACCREDITATION SYSTEMS: SAP, NAP and IAP	9

State Accreditation Policies – Role of State Government – Policies and Procedures – History – Initiatives in Indian States. National Accreditation Policies(NAP)-NABH, AAC, COP, MOM, PRE, HIC, CQI, ROM, FMS, HRM, IMS – Accreditation Standards & Objective Elements – Benefits for Service Providers & Customers – Becoming an Assessor – Accreditation Process. International Accreditation Procedures -JCI – History & Overview – ISQua – Accreditation for Ambulance Services, Laboratories, Critical Care, Clinics, Dental Clinics, Diagnostic Services, and Alternative Medicine

UNIT III	ETHICS AND CORPORATE RESPONSIBILITY	9

This unit covers business ethics-including the nature, scope, and purpose of ethics-the relevance of value -the importance of ethics and moral standards- and ethics and moral decision making—followed by corporate social responsibility-focusing on its nature, scope, importance, corporate governance concepts, work ethics, and etiquettes.

UNIT IV	HEALTHCARE LAWS & EMPLOYEE RIGHTS	9

legal framework in healthcare- addressing the Consumer Protection Act of 1986- Medical Negligence Act -medical ethics and the doctor-patient relationship-as well as legal requirements for licenses and certificates for hospitals. Employees Provident Fund Act, 1952 – Payment of Gratuity Act, 1972 – Minimum Wages Act, 1948 – Maternity Benefit Act, 1961

UNIT V	HEALTH CARE AND PHARMACY LAWS	9

Pre-conception and Pre-natal Diagnostic Techniques (PCPNDT) Act-Medical Termination of Pregnancy (MTP) Act- Consumer Protection Act (COPRA)- Organ Transplantation and Mental Health Act- pharmacy act -Drug Price Control Order (DPCO)- Drugs and Cosmetics Act (DCA)-Clinical Trials and Product Launch.

CONTEMPORARY TOPICS

Case study of all the laws and legal aspect in the healthcare managements

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1 :To provide an overview of accreditation policies

CO2 :To familiarize with the different accreditation policies available

CO3 :To explain the process of accrediting a hospital

CO4 :To teach the steps for renewing accreditation

CO5 :To highlight the importance and challenges of sustaining accreditation in healthcare institutions.

TEXT BOOKS

1. George D. Pozgar – Legal and Ethical Issues for Health Professionals (2023)
2. Kathleen M. Young – Essentials of Health Law and Ethics (2024)
3. Barry R. Furrow et al. – Health Law: Cases, Materials and Problems (2023)

REFERENCES

1. Mark A. Hall et al. – Health Care Law and Ethics (2022)
2. Jonathan Herring – Medical Law and Ethics (2023)
3. Dean M. Harris – Contemporary Issues in Healthcare Law and Ethics (2021).

25BA324	HEALTH CARE ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To gain familiarity with fundamental principles of healthcare analytics
- To understand big data technologies and analytical methods
- To learn techniques for effective data visualization and presentation
- To acquire knowledge of artificial intelligence and machine learning in healthcare.

UNIT I	INTRODUCTION TO BUSINESS ANALYTICS	9

An introduction to business analytics highlights its significance in modern decision-making, emphasizing the role and applications of various analytical domains such as predictive analytics – marketing analytics – healthcare analytics – social media analytics – supply chain analytics – retail analytics – epidemiological analytics – customer analytics – people analytics – and financial analytics.

UNIT II	TOOLS AND TECHNIQUES	9

An overview of big data sources, tools, and techniques – covering key data-related challenges – including the organization and origin of data – the importance of maintaining high data quality – and the use of healthcare information systems such as HIS – LIS – RIS – and enterprise platforms like SAP – along with data mining applications using tools like XL Miner – and programming environments such as R.

UNIT III	DATA ANALYSIS	9

Data analysis; tools and techniques – basic and advanced Excel functionalities – to programming and statistical analysis using R and SAS – visualization and business intelligence platforms like Power BI – Tableau – and Qlik View – network analysis with Gephi – along with foundational knowledge of basic statistics – and the application of problem-solving skills.

UNIT IV	DATA VISUALIZATION	9

Data visualization focuses on effective data representation – through interactive dashboards – detailed reports – and visual storytelling – while marketing analytics emphasizes tools like MEXL – to extract insights and drive strategic marketing decisions.

UNIT V	AI AND MACHINE LEARNING IN HEALTHCARE	9

AI and machine learning in healthcare encompass an overview of techniques and applications – traditional machine learning methods – the use of AI for data analytics and data mining – and the design and deployment of AI and machine learning solutions tailored for healthcare environments.

CONTEMPORARY TOPICS

Guest Lecture from industry experts on contemporary topics at health analytics.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Basic understanding of healthcare analytics and its role in improving care.
CO2: Familiarity with big data tools and techniques in healthcare.
CO3: Knowledge of data analytics for extracting insights.
CO4: Skills in visualizing healthcare data effectively.
CO5: Understanding AI and machine learning applications in healthcare.

TEXT BOOKS

1. Chandan K. Reddy and Charu C. Aggarwal, Healthcare Data Analytics, CRC Press, 2022.
2. Hui Yang and Eva K. Lee, Healthcare Analytics: From Data to Knowledge to Healthcare Improvement, Wiley, 2021.
3. Jason Burke, Health Analytics: Gaining the Insights to Transform Health Care, Wiley, 2021.

REFERENCES

1. Katherine Marconi and Harold Lehmann, Big Data Analytics in Healthcare, CRC Press, 2021.
2. Trevor L. Strome, Healthcare Analytics for Quality and Performance Improvement, Wiley, 2022.
3. Anand J. Shah and Joseph C. Kvedar, Digital Health and Healthcare Analytics, Springer, 2023.

25BA325	DISASTER MANAGEMENT IN MEDICAL CENTERS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To identify safety risks and hazards in a hospital setting.
- To focus on the importance of disaster preparedness and creating emergency plans.
- To gain knowledge of risk assessment techniques to evaluate and address potential dangers.
- To understand basics of emergency response, including evacuation procedures and first aid, will be covered.

UNIT I	DISASTER MANAGEMENT	9

Disaster management - understanding fundamental concepts - classifying disasters - analyzing the disaster process - identifying special characteristics - applying principles of planning - responding effectively - managing disaster administration.

UNIT II	HOSPITAL HAZARDS MANAGEMENT	9

Hospital hazards management - meaning - recognizing the need - applying core principles - defining the purpose - addressing fire hazard management.

UNIT III	HOSPITAL WASTE AND INFECTION CONTROL	9

Biomedical waste disposal - strategies to control hospital-acquired infections - proper handling and disposal of human waste - sewage and wastewater management in healthcare settings.

UNIT IV	RISK MANAGEMENT IN HEALTHCARE	9

Different types of risks in healthcare - moral hazard and adverse selection - issues related to cost escalation - identifying and preventing fraud and abuse - understanding cream skimming - tools and methods to effectively manage and mitigate healthcare risks.

UNIT V	HOSPITAL DISASTER MANAGEMENT	9

Core principles of managing mass casualties - key objectives and the critical need for a hospital disaster plan - formation and function of the disaster management committee - structure and roles of personnel involved in disaster response and recovery.

CONTEMPORARY TOPICS

Case study on evaluation of disaster management in medical centers.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: To understand the fundamental concepts of disaster management.

CO2: To recognize the need for effective hazard control measures in healthcare settings.

CO3: To learn the safe handling and disposal methods for human waste.

CO4: To understand the concept of cream skimming and its impact on healthcare delivery.

CO5: To develop the ability to organize and manage disaster response and recovery efforts within healthcare facilities.

TEXT BOOKS

1. Rajesh Arora and Anil Kumar Gupta, Disaster Management in Healthcare: Preparedness, Response and Recovery, CBS Publishers, 2022.
2. Linda Young Landesman, Public Health Management of Disasters: The Practice Guide, APHA, 2021.
3. S. K. Singh, Disaster Management and Healthcare Administration, McGraw Hill, 2023.

REFERENCES

1. K. Park, Park's Textbook of Preventive and Social Medicine, 27th Edition, 2023.
2. David Alexander, Principles of Emergency Planning and Management, Oxford University Press, 2021.
3. World Health Organization, Hospital Emergency Response Checklist, Updated Edition.

25BA326	ARTIFICIAL INTELLIGENCE(AI) IN MEDICAL CARE.	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the significance of AI in healthcare.
- To comprehend the use of AI in healthcare finance and revenue cycle management.
- To gain insights into AI's role in improving healthcare quality.
- To learn how to implement AI solutions within healthcare administration.

UNIT I	INTRODUCTION TO AI IN HEALTHCARE	9

Introduction to AI in healthcare provides an overview of artificial intelligence and its applications in the medical field – traces the historical evolution of AI in healthcare – and explores how AI is utilized in healthcare administration.

UNIT II	APPLICATIONS OF AI IN HEALTHCARE	9

Applications of AI in healthcare operations include AI-driven optimization of workflows such as appointment scheduling, resource allocation, and patient flow management – use of predictive analytics for demand forecasting – capacity planning – and inventory management.

UNIT III	AI IN HEALTHCARE FINANCE	9

AI in healthcare finance and revenue cycle management involves leveraging AI to optimize claims processing, billing, and revenue integrity – detecting and preventing fraud using AI algorithms – and improving financial forecasting and budgeting through AI-driven predictive analytics.

UNIT IV	AI FOR HEALTHCARE QUALITY IMPROVEMENT	9

AI for healthcare quality improvement includes applying quality management principles in healthcare administration – using AI-enabled tools for quality monitoring, performance measurement, and outcomes analysis – and supporting continuous improvement methodologies through AI technologies.

UNIT V	IMPLEMENTING AI SOLUTIONS IN HEALTHCARE	9

Implementing AI solutions in healthcare administration involves planning and executing AI initiatives within healthcare organizations – applying change management strategies for technology adoption – addressing challenges and best practices for successful implementation – and considering ethical and legal aspects.

CONTEMPORARY TOPICS

Guest Lecture from industry experts on learn new trend in the AI in hospital management.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1**:** Develop a comprehensive understanding of various AI applications in healthcare.
CO2**:** Learn how AI technologies can be applied to address complex healthcare challenges.
CO3**:** Understand methods to improve patient outcomes using AI-driven solutions.
CO4**:** Explore ways AI enhances the quality and efficiency of healthcare delivery.
CO5**:** Gain skills to responsibly and effectively implement AI tools within healthcare settings.

TEXT BOOKS

1. Arjun Panesar, Machine Learning and AI for Healthcare: Big Data for Improved Health Outcomes, Apress, 2021.
2. Adam Bohr and Kaveh Memarzadeh, Artificial Intelligence in Healthcare, Academic Press, 2022.
3. Kerrie Holley and Siu Cheung Hui, Artificial Intelligence for Healthcare, CRC Press, 2023.

REFERENCES

1. Eric Topol, Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again, 2021 Reprint Edition.
2. Bernard Marr, Artificial Intelligence in Practice, Wiley, 2023.
3. Parag Mahajan and Suchita Kothari, Artificial Intelligence in Healthcare and Medicine, Springer, 2024.

LOGISTICS MANAGEMENT

25BA224	LOGISTICS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the concepts, scope, and importance of logistics in supply chain management.
- Analyze transportation, warehousing, and inventory decisions in logistics systems.
- Apply quantitative and analytical tools for logistics planning and optimization.
- Evaluate logistics performance and cost trade-offs.

UNIT I	**INTRODUCTION TO LOGISTICS MANAGEMENT**	**9**

Concept and Evolution of Logistics – Logistics vs Supply Chain Management – Objectives and Functions of Logistics – Logistics Network Design – Customer Service in Logistics – Logistics Strategy and Planning – Role of Logistics in Competitive Advantage.

UNIT II	**TRANSPORTATION MANAGEMENT**	**9**

Modes of Transportation – Modal Characteristics and Selection – Transportation Costing and Pricing – Routing and Scheduling – Fleet Management – Carrier Selection – Freight Documentation – International Transportation and Incoterms (overview).

UNIT III	**WAREHOUSING AND MATERIAL HANDLING**	**9**

Role of Warehousing – Types of Warehouses – Warehouse Design and Layout – Storage Systems – Material Handling Equipment – Order Picking and Packaging – Cross Docking – Warehouse Performance Metrics.

UNIT IV	**INVENTORY MANAGEMENT AND LOGISTICS ANALYTICS**	**9**

Inventory Concepts – EOQ and Reorder Point – Safety Stock – ABC Analysis – Just-In-Time (JIT) – Vendor Managed Inventory (VMI) – Logistics Information Systems – Introduction to Logistics Analytics and KPIs.

UNIT V	**GLOBAL AND SUSTAINABLE LOGISTICS**	**9**

Global Logistics – Trade Regulations and Documentation – Customs Procedures – Third-Party and Fourth-Party Logistics (3PL/4PL) – Reverse Logistics – Green Logistics – Risk Management in Logistics – Emerging Trends: E-commerce Logistics, Digitalization, IoT in Logistics.

CONTEMPORARY TOPICS

Guest Lecture from Industry experts

TOTAL:45 PERIOD

COURSE OUTCOMES

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

CO1: Explain the role of logistics in supply chain and business strategy.
CO2: Analyze transportation and warehousing decisions in logistics systems.
CO3: Apply inventory models and logistics analytics tools.
CO4: Evaluate logistics performance and cost efficiency.
CO5: Assess global logistics practices and sustainability initiatives.

TEXT BOOKS

1. Ronald H. Ballou, Business Logistics and Supply Chain Management, Pearson Education, 2021.
2. Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management, McGraw-Hill Education, 2023.
3. John J. Coyle, Robert A. Novack, Brian J. Gibson and Edward J. Bardi, Transportation: A Supply Chain Perspective, Cengage Learning, 2022.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, Pearson Education, 2022.
2. Alan Harrison and Remko Van Hoek, Logistics Management and Strategy, Pearson Education, 2021.
3. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, Pearson Education, 2023.

25BA225	MATERIAL MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the principles and scope of material management in organizations.
- Analyze purchasing, stores, and inventory functions.
- Apply quantitative techniques for inventory control and material planning.
- Evaluate vendor selection and procurement strategies.

UNIT I	INTRODUCTION TO MATERIAL MANAGEMENT	9
Concept and Scope of Material Management – Objectives and Functions – Integrated Material Management – Role in Cost Reduction and Profitability – Material Planning and Budgeting – Organization of Materials Department.		
UNIT II	**PURCHASING AND PROCUREMENT MANAGEMENT**	**9**
Purchasing Functions – Purchasing Cycle – Make or Buy Decision – Vendor Selection and Evaluation – Negotiation Techniques – Contract Management – E-Procurement – Ethics in Purchasing.		
UNIT III	**STORES MANAGEMENT**	**9**
Stores Functions – Store Layout and Organization – Codification and Standardization – Receipt and Issue Procedures – Store Records – Materials Handling – Waste Management and Scrap Disposal.		
UNIT IV	**INVENTORY MANAGEMENT**	**9**
Inventory Concepts – Costs (Ordering, Carrying, Shortage) – EOQ – Reorder Level – Safety Stock – ABC, VED, HML Analysis – Just-In-Time (JIT) – Material Requirement Planning (MRP) – Inventory Control Techniques.		
UNIT V	**MODERN TRENDS IN MATERIAL MANAGEMENT**	**9**
ERP Systems – Supply Chain Integration – Lean Materials Management – Green Materials Management – Reverse Logistics – Risk Management in Procurement – Digitalization and Industry 4.0 in Materials Management.		

CONTEMPORARY TOPICS

Guest Lecture from Industry experts

TOTAL:45 PERIOD

COURSE OUTCOMES

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

CO1: Explain the role of material management in organizational performance.
CO2: Analyze procurement and vendor management processes.
CO3: Apply inventory control techniques for efficient material usage.
CO4: Evaluate stores management practices and material handling systems.
CO5: Assess modern trends and technologies in material management.

TEXT BOOKS

1. P. Gopalakrishnan and M. Sundaresan, Materials Management: An Integrated Approach, PHI Learning, 2021.
2. J. R. Tony Arnold, Stephen N. Chapman and Lloyd M. Clive, Introduction to Materials Management, Pearson Education, 2022.
3. K. Shridhara Bhat, Materials Management, Himalaya Publishing House, 2023.

REFERENCES

1. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, Pearson Education, 2023.
2. Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management, McGraw-Hill Education, 2023.
3. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, Pearson Education, 2022.

25BA327	WAREHOUSE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the significance, functions, and decisions involved in warehousing operations.
- Gain knowledge of inventory management concepts, systems, and control techniques essential for efficient warehouse operations.
- Learn principles, equipment, and performance measures of materials handling in various warehousing environments.
- Develop familiarity with modern warehousing technologies including AS/RS, barcoding, and RFID for enhanced efficiency.

UNIT I	INTRODUCTION WAREHOUSING	9
Introduction Warehousing – Basic Warehousing Decisions – Warehouse Operations – Types of Warehouses – Functions – Centralized & Decentralized – S rage Systems – Warehousing Cost Analysis – Warehouse Layout – Characteristics if Ideal Warehouse		
UNIT II	**INVENTORY MANAGEMENT**	**9**
Inventory: Basic Concepts – Role in Supply Chain – Role in Competitive Strategy – Independent Demand Systems – Dependent Demand Systems – Functions – Types _ Cost – Need for Inventory – Just in Time		
UNIT III	**NVENTORY CONTROL**	**9**
Inventory Control – ABC Inventory Control – Multi-Echelon Inventory Systems – Distribution Requirement Planning – Bull Whip Effect – Using WMS for Managing Warehousing Operations		
UNIT IV	**MATERIALS HANDLING**	**9**
Principles and Performance Measures Of Material Handling Systems – Fundamentals of Material Handling – Various Types of Material Handling Equipments – Types of Conveyors – Refrigerated Warehouses- Cold Chain- Agri SCM		
UNIT V	**MODERN WAREHOUSING METHODS**	**9**
Modern Warehousing – Au mated S rage & Retrieval Systems & their Operations – Bar Coding Technology & Applications in Logistics Industry – RFID Technology & Applications – Advantages of RFID		

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of warehousing, warehouse operations, cost analysis, and layout design.

CO2: Analyze inventory concepts, types, costs, and inventory management systems including JIT.

CO3: Apply inventory control techniques such as ABC classification, multi-echelon systems, and DRP for effective warehouse management.

CO4: Evaluate various materials handling systems, equipment, conveyor types, and their applications in cold chain and agri-supply chains.

CO5: Demonstrate the use and advantages of modern warehousing technologies including AS/RS, barcoding, and RFID in logistics operations.

TEXT BOOKS

1. Gwynne Richards, Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, 4th Edition, Kogan Page, 2024.
2. Stuart Emmett, Excellence in Warehouse Management, Wiley India, 2021.
3. David E. Mulcahy and Joachim Sydow, A Supply Chain Logistics Program for Warehouse Management, CRC Press, 2022.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, Pearson Education, 2022.
2. Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management, McGraw-Hill Education, 2023.
3. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, Pearson Education, 2023.

25BA328	TRANSPORTATION AND DISTRIBUTION MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the fundamental concepts, roles, and functions of transportation and distribution in supply chain management.
- Gain knowledge of distribution network planning, routing, scheduling, and related decision-making processes.
- Learn the principles, modes, and management aspects of national and international transportation.
- Develop awareness of IT applications in transportation and distribution management for improved efficiency and visibility.

UNIT I	DISTRIBUTION	9

Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.

UNIT II	PLANNING	9

Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)

UNIT III	TRANSPORTATION	9

Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.

UNIT IV	TRANSPORTATION	9

International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation

UNIT V	INFORMATION TECHNOLOGY (IT)	9

Usage of IT applications -E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the role of distribution, channel functions, and distribution network models in supply chain operations.

CO2: Apply concepts of distribution network planning, make distribution-related decisions, and use DRP techniques effectively.

CO3: Analyze transportation principles, modes, carrier selection, routing, and scheduling in logistics operations.

CO4: Evaluate international transportation practices, freight and fleet management, transportation administration, and rate negotiation.

CO5: Demonstrate the use of IT applications such as e-commerce, ITMS, communication systems, AVL, and GIS in transportation and distribution management.

TEXT BOOKS

1. John J. Coyle et al., Transportation: A Supply Chain Perspective, 2022.
2. Donald J. Bowersox et al., Supply Chain Logistics Management, 2023.
3. David B. Grant et al., Fundamentals of Logistics Management, 2021.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 2022.
2. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 2023.
3. Alan Harrison & Remko Van Hoek, Logistics Management and Strategy, 2021.

25BA329	REVERSE AND CONTRACT LOGISTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the concepts, principles, and evolution of contract logistics and the role of 3PL providers across industries.
- Gain knowledge of closed-loop supply chains, reverse logistics processes, and their strategic significance.
- Develop insights into business dynamics, market trends, warranty management, and value-added services in reverse logistics.
- Learn about emerging technologies, sectoral trends, and process management in implementing effective contract and reverse logistics systems.

UNIT I	**CONTRACT LOGISTICS**	**9**
Third party logistics industry overview - A framework for strategic alliances - Evolution of contract logistics - Types of third party logistics providers – Automobile, FMCG and Retail- Third party services and integration		
UNIT II	**CLOSED LOOP SUPPLY CHAINS AND LOGISTICS**	**9**
Introduction closed loop supply chains and logistics – Logistics and closed loop supply chain service -Overview of return logistics and closed loop supply chain models – Introduction product returns -Product Vs Parts returns - Strategic issues in closed loop supply chains		
UNIT III	**BUSINESS AND MARKET**	**9**
Overview - Introduction life cycle management - Trends and opportunities – Auto Warranty management, return process and benchmarks - Market overview - Reasons for using reverse logistics- General characteristics - Consumer goods Depot repair and value added services – Operating dynamics - Competitive evaluation - Secondary markets and final disposal.		
UNIT IV	**EMERGING TRENDS**	**9**
Emerging trends in Retail, E-Commerce- FMCG and Automobile sectors- Systems and technology -For consumer goods operations, High tech logistics system - Impact and value of advanced logistics		
UNIT V	**MANAGING PROCESSES**	**9**
Managing processes - Step by step process - Use of third party service providers - Additional factors – Contemporary issues – Make in India and its impact on Countries GDP and Economic Growth.		
CONTEMPORARY TOPICS		
Guest Lecture from Industry Experts		
		TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the framework of contract logistics, types of third-party logistics providers, and their applications in automobile, FMCG, and retail sectors.

CO2: Analyze closed-loop supply chains, return logistics models, and strategic issues associated with product and parts returns.

CO3: Evaluate business and market factors such as life-cycle management, warranty management, depot repair, and value-added services in reverse logistics.

CO4: Assess emerging trends, technologies, and advanced logistics systems influencing retail, e-commerce, FMCG, and automobile sectors.

CO5: Demonstrate the ability to manage reverse and contract logistics processes, utilize third-party service providers, and understand contemporary issues including Make in India and its economic impact.

TEXT BOOKS

1. Ravi Ravindran & Diane A. Thierry, Reverse Logistics: Quantitative Models for Closed-Loop Supply Chains, CRC Press, 2021.
2. Gwynne Richards, Warehouse Management, 4th Edition, 2024.
3. Donald J. Bowersox, David J. Closs & M. Bixby Cooper, Supply Chain Logistics Management, 2023.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 2022.
2. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 2023.
3. Alan Harrison & Remko Van Hoek, Logistics Management and Strategy, 2021.

25BA330	AIR CARGO MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Provide comprehensive knowledge of airfreight operations, handling processes, and industry practices relevant to business functions.
- Create awareness of air cargo management concepts, documentation, freight calculation, and regulatory requirements.
- Develop understanding of industry bodies, airway bills, pricing policies, and airline cargo operations.
- Equip learners with knowledge of cargo hubs, multimodal advantages, and handling of dangerous goods (DG) in air transportation.

UNIT I — AIR PORTS AND SHIPMENT — 9

Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do's and Don'ts in Air Cargo Business

UNIT II — AIR CARGO — 9

Air Cargo Console - Freighting of Air Cargo - Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation

UNIT III — AIRWAY BILLS — 9

Airway Bills - FIATA - IATA - History of IATA - Mission of IATA - Price setting by IATA - Licensing of Agencies - Sub Leasing of Agencies - freight carriers by scheduled freight tonne kilometers flown

UNIT IV — CARGO VILLAGE — 9

History of Dubai Cargo Village - Location of DCV - Equipment and Handling at DCV - Operations - Advantage of Sea Air Cargo - Why Sea Air Cargo is Cheaper - Why Air freight from Dubai is Cheaper?

UNIT V — DG CARGO — 9

DG Cargo by Air - Classification and labelling - Types of Labels according Cargo – Samples of Labels - Packing and Transportation of DG Goods by Air

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the operations of airports, ground handling agencies, types of air shipments, and guidelines for handling sensitive cargo.

CO2: Apply air cargo documentation procedures and calculate freight using volume-based and weight-based methods.

CO3: Analyze the functions of airway bills, roles of FIATA and IATA, and IATA's pricing and licensing mechanisms.

CO4: Evaluate the operations of Dubai Cargo Village, equipment used, and the cost advantages of sea-air and Dubai-origin freight movements.

CO5: Demonstrate knowledge of DG cargo classification, labeling requirements, and safe practices for packing and transporting dangerous goods by air.

TEXT BOOKS

1. John G. Wensveen, Air Transportation: A Management Perspective, Routledge, 2023.
2. Michael Sales, Air Cargo Management: Air Freight and the Global Supply Chain, Routledge, 2022.
3. Peter S. Morrell, Moving Boxes by Air: The Economics of International Air Cargo, Routledge, 2021.

REFERENCES

1. John G. Wensveen, Air Transportation: A Management Perspective, 2023.
2. Martin Christopher, Logistics and Supply Chain Management, 2022.
3. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 2023.

25BA331	PORT AND TERMINAL MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the major functions, roles, and economic significance of ports and terminals in global trade.
- Gain knowledge of port operations, organizational structure, and cargo-handling facilities.
- Learn about port marketing, pricing strategies, service requirements, and logistics cost concepts.
- Familiarize learners with port performance measurement, digital systems, security standards, and contemporary environmental and safety issues.

UNIT I	INTRODUCTION TO PORT AND TERMINAL	9

Role of ports in international trade and transport - Economic impact of ports on the regional economy - Multiplier effect - Location characteristics of ports - Different types of ports (natural, manmade, river, estuary).

UNIT II	PORT OPERATIONS	9

Design features of facilities in ports for handling various cargoes - Organization structure in Ports -Delivery of port services and the relationship between various departments – Marine Department –Traffic Department – other departments.

UNIT III	PORT MARKETING AND SERVICES	9

Marketing of Port services - Pricing of Port services - Components of port tariff - Concept of hinterland – Identifying the needs of ship owners and operators, ship agents, forwarders, truckers, rail and barge operators - Concept of Total Logistics cost.

UNIT IV	PORT PERFORMANCE	9

Measurement of port performance - vessel turn round time, cargo volume, speed of cargo Handling - Information flow requirements of the port, statutory bodies and port users - Port community computer systems and EDI applications.

UNIT V	PORT SECURITY AND ISSUES	9

Environmental issues connected with Ports & Terminals - Health and safety issues – Port security issues - International Ships and Port facility security (ISPS) code - Role of national, regional and local governments in owning / operating / managing ports.

CONTEMPORARY TOPICS

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the role of ports in international trade, their economic impact, location characteristics, and different types of ports.

CO2: Describe port operations, organizational structure, facility design features, and interactions between marine, traffic, and other departments.

CO3: Analyze port marketing strategies, tariff structures, hinterland concepts, and the needs of various stakeholders such as ship operators, freight forwarders, and inland carriers.

CO4: Evaluate port performance using key measures such as vessel turnaround time and cargo handling speed, and assess the use of EDI and port community systems.

CO5: Demonstrate understanding of environmental, health, safety, and security issues including ISPS code and the role of government bodies in managing ports.

TEXT BOOKS

1. Patrick Alderton, Port Management and Operations, Routledge, 2022.
2. Theo Notteboom, Athanasios Pallis & Jean-Paul Rodrigue, Port Economics, Management and Policy, Routledge, 2021.
3. Maria G. Burns, Port Management and Operations, CRC Press, 2023.

REFERENCES

1. Theo Notteboom, Port Economics, Management and Policy, 2021.
2. Martin Stopford, Maritime Economics, 4th Edition, 2023.
3. Martin Christopher, Logistics and Supply Chain Management, 2022.

25BA332	GLOBAL TRANSPORT REGULATIONS & LEGAL FRAMEWORKS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To familiarize students with the legal framework and objectives of the Motor Vehicles Act, 1988 and its amendments.
- To provide comprehensive knowledge of the Central and State Motor Vehicle Rules governing licensing, registration, and vehicle standards.
- To develop an understanding of the legal structure and operational aspects of multimodal transport under Indian law.
- To impart insights into the Customs Act and customs duty procedures relevant to import/export regulation and compliance.

UNIT I	THE MOTOR VEHICLES ACT	9
Motor Vehicles Act, 1988 – Objectives and scope – Driver licensing and vehicle registration – Regulation of transport vehicles – Offences, penalties, and enforcement – Third-party motor vehicle insurance – Motor Vehicles (Amendment) Act, 2017.		
UNIT II	**CENTRAL AND STATE MOTOR VEHICLE RULES**	**9**
Central Motor Vehicles Rules, 1989 – Tamil Nadu Motor Vehicle Rules – Licensing and registration procedures – Regulation of transport vehicles – Standards for construction and maintenance – Rules relating to public service vehicles.		
UNIT III	**MULTIMODAL TRANSPORT SYSTEM**	**9**
Multimodal Transportation of Goods Act, 1993 – Purpose and intent of the legislation – Key Multimodal Transportation of Goods Act, 1993 – Role of Competent Authority – Multimodal Transport Operator (MTO) – Liability and responsibilities of MTO – Legal framework for multimodal transport.		
UNIT IV	**CUSTOMS ACT, 1962**	**9**
Customs Act, 1962 – Powers and functions of customs authorities – Import and export restrictions – Customs ports, airports, and warehousing – Exemptions and key amendments.		
UNIT V	**CUSTOMS DUTIES AND PROCEDURES**	**9**
Customs duties -Types of customs duties – Import and export clearance procedures – Goods in transit – Confiscation, penalties, and offences – Appeals and settlement procedures – Overview of revised customs duty structure.		

CONTEMPORARY ISSUES

Guest Lecture from Industry experts on contemporary issues and recent trends in LSCM.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Understand the provisions and implications of the Motor Vehicles Act, 1988 and its recent amendments.

CO2: Explain the key components of Central and Tamil Nadu Motor Vehicle Rules related to public and commercial transport.

CO3: Analyze the Multimodal Transportation of Goods Act and evaluate the roles and liabilities of MTOs.

CO4: Apply the legal concepts of the Customs Act, 1962 in regulating import and export operations.

CO5: Demonstrate knowledge of customs duties, clearance procedures, and the legal consequences of violations.

TEXT BOOKS

1. Paul Stephen Dempsey, International Air and Space Law, Routledge, 2022.
2. Rhidian Thomas, The Carriage of Goods by Sea under International Law, Routledge, 2021.
3. Malcolm A. Clarke and David Yates, Contracts of Carriage by Land and Air, Informa Law, 2023.

REFERENCES

1. International Maritime Organization, IMO Compendium on Facilitation and Electronic Business, 2023.
2. International Air Transport Association, Air Cargo Tariff and Rules Manual, 2024.
3. United Nations Conference on Trade and Development, Review of Maritime Transport, 2023.

SUPPLY CHAIN MANAGEMENT

25BA226	SUPPLY CHAIN MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the fundamental concepts, structure, and strategic role of supply chain management in enhancing organizational competitiveness.
- Analyze sourcing strategies, supplier selection, and global procurement practices that contribute to building an efficient supply base.
- Evaluate supply chain network design, distribution decisions, and the impact of uncertainty on logistics and supply chain operations.
- Explore modern supply chain innovations, technologies, and integration practices that improve responsiveness, sustainability, and overall performance.

UNIT I INTRODUCTION 9

Supply Chain – Fundamentals, Evolution, Role in Economy, Importance, Decision Phases, Enablers & Drivers of Supply Chain Performance; Supply chain strategy; Supply Chain Performance Measures.

UNIT II STRATEGIC SOURCING 9

Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing.

UNIT III SUPPLY CHAIN NETWORK 9

Distribution Network Design – Role in supply chain, Influencing factors, design options, online sales and distribution network, Distribution Strategies; Network Design in supply chain – Role, influencing factors, framework for network design, Impact of uncertainty on Network Design.

UNIT IV PLANNING DEMAND, INVENTORY AND SUPPLY 9

Managing supply chain cycle inventory and safety inventory - Uncertainty in the supply chain, Analyzing impact of supply chain redesign on the inventory, Risk Pooling, Managing inventory for short life-cycle products, multiple item -multiple location inventory management; Pricing and Revenue Management.

UNIT V SUPPLY CHAIN INNOVATIONS 9

Supply Chain Integration, SC process restructuring, Agile Supply Chains, Green Supply Chain, Reverse Supply chain; Supply chain technology trends – AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Block chain.

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the fundamentals of supply chain management, its evolution, performance drivers, and strategic importance in achieving competitive advantage.

CO2: Assess sourcing decisions including make-or-buy analysis, supplier selection, contracting, and global sourcing strategies.

CO3: Design and evaluate distribution networks and supply chain network structures, considering influencing factors and uncertainties.

CO4: Apply concepts of demand planning, inventory management (cycle & safety stock), risk pooling, and revenue management in supply chain operations.

CO5: Analyze supply chain innovations such as integration, agile and green supply chains, reverse logistics, and emerging technologies like AI, IoT, analytics, and blockchain.

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TEXT BOOKS

1. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, 2023.
2. Donald J. Bowersox et al., Supply Chain Logistics Management, 2023.
3. Nada R. Sanders, Supply Chain Management: A Global Perspective, 2022.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 2022.
2. Alan Harrison & Remko Van Hoek, Logistics Management and Strategy, 2021.
3. John T. Mentzer, Fundamentals of Supply Chain Management, 2021.

25BA227	SOURCING AND SUPPLY MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the framework and strategic role of sourcing and supply management within the overall supply chain.
- Gain exposure to current industry practices in purchasing, supplier management, and global sourcing.
- Learn key tools and techniques used in sourcing decisions, supplier evaluation, cost analysis, negotiation, and contract management.
- Develop insights into advanced trends such as sustainability, green buying, lean supply chains, and digital procurement systems.

UNIT I	INTRODUCTION TO PURCHASING AND SUPPLY CHAIN MANAGEMENT	9
The Purchasing Process. Purchasing Policies and Procedures. Supply Management Integration for Competitive Advantage, Purchasing and Supply Management Organization		
UNIT II	**STRATEGIC SOURCING**	**9**
Supply Management and Commodity Strategy Development, Supplier Evaluation and Selection Supplier Quality Management Supplier Management and Development, Creating a World-Class Supply Base, Worldwide Sourcing		
UNIT III	**STRATEGIC SOURCING PROCESS**	**9**
Strategic Cost Management, Purchasing and Supply Chain Analysis: Tools and Techniques, Negotiation and Conflict Management Contract Management Purchasing Law and Ethics.		
UNIT IV	**SUPPLIER PERFORMANCE AND QUALITY MANAGEMENT**	**9**
Performance Measurement and Evaluation: Strategies, tools and techniques for measuring and managing supplier performance, Supplier performance evaluation, Purchasing services, Supply Chain Information Systems and Electronic Sourcing.		
UNIT V	**FUTURE DIRECTIONS**	**9**
Purchasing and Supply Strategy Trends Green Buying, Sustainability, material research, Lean supply Chain Management		
CONTEMPORARY TOPICS		
Guest Lecture from Industry Experts		
		TOTAL: 45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the purchasing process, policies, procedures, and the role of supply management in achieving competitive advantage.

CO2: Evaluate sourcing strategies, supplier evaluation and selection methods, and practices used for building a world-class global supply base.

CO3: Apply strategic cost management, analytical tools, negotiation techniques, and contract management principles in sourcing decisions.

CO4: Assess supplier performance using appropriate metrics and explain the role of information systems, e- sourcing, and service purchasing in supply management.

CO5: Analyze future trends in sourcing such as green buying, sustainability, material innovation, and lean supply chain practices.

TEXT BOOK

1. P. Fraser Johnson et al., Purchasing and Supply Management, 17th Edition, 2023.
2. Robert M. Monczka et al., Purchasing and Supply Chain Management, 2022.
3. Arjan J. van Weele, Purchasing and Supply Chain Management, 8th Edition, 2021.

REFERENCES

1. Jonathan O'Brien, Category Management in Purchasing, 2022.
2. Jonathan O'Brien, Supplier Relationship Management, 2021.
3. Chartered Institute of Procurement and Supply, Procurement and Supply Cycle, 2023.

25BA333	SUPPLY CHAIN INVENTORY MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand fundamental and advanced concepts of inventory management within a supply chain context.
- Develop the ability to use analytical models (P & Q systems, safety stock, single period models) for effective inventory decision-making.
- Gain knowledge of inventory management strategies such as postponement, risk pooling, and fashion supply chain practices.
- Learn inventory optimization techniques, industry initiatives, and recent trends in managing inventory across various supply chain environments.

UNIT I — INTRODUCTION TO INVENTORY MANAGEMENT — 9

Inventory in SCM, Cash to cash cycle time, measure of inventory in terms of days, Inventory turnover ratio and its relationship with working capital, Review of models, Q-models and P-models Aggregation of Inventory, Cycle stock concepts, Ordering multiple items in a single order to reduce cycle stock

UNIT II — INVENTORY MODELS — 9

Safety stock issues Safety stock with lead time and demand uncertainty (for Q-models), Short term discounting & Forward Buying, Periodic review models with safety stock, Comparison of P and Q systems

UNIT III — INVENTORY MANAGEMENT STRATEGIES — 9

Single period models, Inventory management for fashion supply chains, Postponement strategies to reduce inventory, Examples of Fashion supply chains: NFL Reebok, ZARA and Sport Obermeyor Risk Pooling, Applications, Risk pooling in different forms-Substitution, Specialisation, Postponement and Information pooling

UNIT IV — INVENTORY OPTIMIZATION — 9

Distribution resource planning techniques, Inventory and transportation integration decisions, Vendor Managed Inventory, Product availability measures, Product fill rate, order fill rate, Cycle service level.

UNIT V — LATEST TRENDS IN INVENTORY MANAGEMENT SYSTEMS — 9

Industry initiatives, Efficient consumer Response and Quick response ,CPFR and other industry initiatives, Inventory reduction strategies, Managing inventory in Reverse Logistics and Remanufacturing situations , Best practices in Inventory Management in a Supply Chain

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the role of inventory in SCM, calculate cash-to-cash cycle time, inventory turns, and understand Q and P models including cycle stock concepts.

CO2: Apply inventory models involving safety stock, demand uncertainty, short-term discounting, and compare periodic and continuous review systems.

CO3: Analyze inventory management strategies such as single-period models, postponement, and risk-pooling techniques used in fashion supply chains.

CO4: Evaluate inventory optimization decisions using DRP, VMI, transportation-inventory integration, and product availability measures like fill rates and service levels.

CO5: Demonstrate understanding of modern industry initiatives (ECR, QR, CPFR), inventory reduction strategies, and inventory management in reverse logistics and remanufacturing.

TEXT BOOKS

1. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, 2023.
2. Nada R. Sanders, Operations and Supply Chain Management, 2022.
3. David A. Collier & James R. Evans, Operations and Supply Chain Management, 2023.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 2022.
2. John T. Mentzer, Fundamentals of Supply Chain Management, 2021.
3. Association for Supply Chain Management, APICS CPIM Learning System, 2024.

25BA334	SUPPLY CHAIN ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- Understand the concepts, scope, and applications of analytics in supply chain decision-making.
- Develop the ability to apply quantitative models for warehousing, inventory, and transportation planning.
- Gain analytical skills for developing data-driven, optimized, and risk-mitigated supply chain systems.
- Learn to use multi-criteria decision-making tools to evaluate and enhance supply chain performance.

UNIT I	INTRODUCTION	9
Introduction to analytics – descriptive, predictive and prescriptive analytics, Data Driven Supply Chains – Basics, transforming supply chains, Barriers to implementation, Road Map.		
UNIT II	**WAREHOUSING DECISIONS**	**9**
Mathematical Programming Models - P-Median Methods - Guided LP Approach - Balmer – Wolfe Method, Greedy Drop Heuristics, Dynamic Location Models, Space Determination and Layout Methods		
UNIT III	**INVENTORY MANAGEMENT**	**9**
Inventory aggregation Models, Dynamic Lot sizing Methods, Multi-Echelon Inventory models, Aggregate Inventory system and LIMIT, Risk Analysis in Supply Chain - Measuring transit risks, supply risks, delivering risks, Risk pooling strategies.		
UNIT IV	**TRANSPORTATION NETWORK MODELS**	**9**
Notion of Graphs, Minimal Spanning Tree, Shortest Path Algorithms, Maximal Flow Problems, Multistage Transshipment and Transportation Problems, Set covering and Set Partitioning Problems, Traveling Salesman Algorithms, Advanced Vehicle Routing Problem Heuristics, Scheduling Algorithms-Deficit function Approach and Linking Algorithms		
UNIT V	**MULTI-CRITERIA DECISION MAKING MODELS**	**9**
Analytic Hierarchy Process(AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Techniques, the analytical network process (ANP), TOPSIS-Application in SCM		

CONTEMPORARY TOPICS

Guest Lecture from Industry Experts

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Understand, apply, and analyze the fundamentals of descriptive, predictive, and prescriptive supply chain analytics.

CO2: Design and apply mathematical and heuristic models for warehouse location, space planning, and layout optimization.

CO3: Analyze and adapt dynamic lot-sizing, multi-echelon, aggregation, and risk-based inventory models for supply chain decision-making.

CO4: Apply and devise transportation network models such as shortest path, spanning tree, max-flow, VRP heuristics, and scheduling algorithms.

CO5: Use multi-criteria decision-making models (AHP, ANP, DEA, TOPSIS, fuzzy logic) to evaluate and solve supply chain problems.

TEXT BOOKS

1. Peter W. Robertson, Supply Chain Analytics: Using Data to Optimise Supply Chain Processes, 2021.
2. Nada R. Sanders, Operations, Supply Chain and Analytics, 2022.
3. S. Christian Albright & Wayne L. Winston, Business Analytics: Data Analysis and Decision Making, 8th Edition, 2023.

REFERENCES

1. Dursun Delen, Data, Analytics and Decision Support for Supply Chain Management, 2021.
2. Thomas H. Davenport, Competing on Analytics, Updated Edition, 2022.
3. Association for Supply Chain Management, Supply Chain Analytics and Technology Learning System, 2024.

25BA335	SUSTAINABLE SUPPLY CHAIN MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the concepts and principles of sustainability in supply chain management.
- To examine the relationship between sustainable development and supply chain operations.
- To analyze emerging supply chain models focusing on environmental and social responsibility.
- To apply sustainability measurement tools and strategic frameworks in supply chain decisions.

UNIT I	**INTRODUCTION TO SUPPLY CHAIN SUSTAINABILITY**	**9**

Introduction to sustainable supply chain management – Concepts of sustainability in supply chains – Triple Bottom Line approach – Role of sustainability in business operations – Corporate Social Responsibility (CSR) and sustainability reporting – Sustainability initiatives in global supply chains.

UNIT II	**CLOSED LOOP SUPPLY CHAINS AND NEW SCM MODELS**	**9**

Closed loop supply chains – Natural resource management in supply chains – Reverse logistics and waste reduction – Sustainable collaboration among supply chain partners – Humanitarian logistics.

UNIT III	**SUSTAINABILITY MEASUREMENT TOOLS**	**9**

Greenhouse gas emission protocols – Carbon footprint measurement – Life Cycle Assessment (LCA): concepts and applications – Sustainability metrics and performance indicators.

UNIT IV	**CORPORATE RESPONSIBILITY AND STRATEGIC THINKING**	**9**

Corporate responsibility and ethical supply chain practices – Strategic integration of sustainability into supply chains – Risk and reputation management – Stakeholder engagement.

UNIT V	**SCENARIO PLANNING AND FUTURE SUPPLY CHAINS**	**9**

Future-proofing supply chains – Scenario planning techniques – Managing uncertainty and disruption – Sustainable innovation and long-term supply chain strategies.

CONTEMPORARY TOPICS

Guest lectures and industry interactions on sustainable logistics, green supply chains, circular economy practices, ethical sourcing, climate-resilient supply chains, and real-time sustainability initiatives.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain the importance of sustainability concepts in supply chain management.
CO2: Analyze closed loop supply chains and emerging sustainable SCM models.
CO3: Apply tools for measuring environmental and social impacts in supply chains.
CO4: Evaluate corporate responsibility strategies within supply chain contexts.
CO5: Develop future-oriented sustainable supply chain strategies using scenario planning.

TEXT BOOKS

1. Joseph Sarkis, Sustainable Supply Chain Management, Routledge, 2021.
2. Cecilia Mark-Herbert, Sustainability in Supply Chains, Springer, 2022.
3. Nada R. Sanders, Operations, Supply Chain and Sustainability, Wiley, 2022.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, 2022.
2. David B. Grant, Sustainable Logistics and Supply Chain Management, 3rd Edition, 2023.
3. Association for Supply Chain Management, Sustainable Supply Chain Professional Learning System, 2024

25BA336	MACROECONOMICS & SUPPLY CHAIN	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand macroeconomic concepts and their influence on business environments.
- To learn supply chain principles and logistics management.
- To apply macroeconomic indicators to supply chain decision making.
- To analyse supply chain operations and strategic planning in global markets.

UNIT I	**INTRODUCTION TO MACROECONOMICS AND SCM**	**9**
Meaning of macroeconomics, scope, national income concepts, aggregate demand & supply, introduction to supply chain management, key components of SCM.		
UNIT II	**MACROECONOMIC INFLUENCES ON SCM**	**9**
Inflation, unemployment, business cycles, fiscal and monetary policy, exchange rates, impact on sourcing, procurement and global supply networks.		
UNIT III	**SUPPLY CHAIN STRUCTURE AND LOGISTICS**	**9**
Logistics functions, transportation, warehousing, inventory, order fulfillment, distribution network design, customer service.		
UNIT IV	**DEMAND FORECASTING AND ECONOMIC ANALYSIS**	**9**
Forecasting methods, trend analysis, macroeconomic forecasting, demand planning, forecasting accuracy, aligning SCM with economic indicators.		
UNIT V	**STRATEGIC SCM AND GLOBAL ECONOMICS**	**9**
Strategic sourcing, global supply chain strategy, risk management, trade policy, global trade agreements, sustainability in SCM.		

CONTEMPORARY ISSUES

Case studies on macroeconomic impact on global supply chains and disruptions (e.g., COVID-19, trade wars, logistics innovations).

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Explain macroeconomic concepts and their business implications.

CO2: Analyse economic indicators to support supply chain planning.

CO3: Apply logistics and supply chain principles for operational efficiency.

CO4: Use forecasting and data analysis in SCM decision making.

CO5: Evaluate global economic conditions and supply chain strategies.

TEXT BOOKS

1. N. Gregory Mankiw, Principles of Economics, 10th Edition, 2023.
2. Olivier Blanchard, Macroeconomics, 9th Edition, 2021.
3. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, 2022.

REFERENCES

1. Paul Krugman & Robin Wells, Macroeconomics, 7th Edition, 2022.
2. Michael H. Hugos, Essentials of Supply Chain Management, 5th Edition, 2024.
3. Nada R. Sanders, Operations, Supply Chain and Analytics, 2022.

25BA337	SUPPLY CHAIN DIGITIZATION	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To examine the evolving landscape of digital technologies in supply chain management.
- To develop strategic decision-making capabilities for managing digital transformation in supply chains.
- To apply advanced technologies such as IoT, Artificial Intelligence, and augmented reality for smart supply chain operations.
- To integrate sustainability, resilience, and green practices within digitally enabled supply chain systems.

UNIT I	**DIGITAL TRANSFORMATION AND INDUSTRY 4.0**	**9**
Platforms and network effects – Evolution of digital transformation – Digital transformation as an ever-changing strategy – Industry 4.0 – Logistics 4.0 – Management of digital transformation in supply chain management.		
UNIT II	**DIGITAL SUPPLY NETWORK AND INTEGRATION**	**9**
The Digital Supply Network (DSN) – Introduction to digital technologies in supply chain management – Controlling the bullwhip effect and value of information – Supply chain integration – Push–pull strategies and complexity reduction – Supply chain segmentation – Selected case studies on digital supply chain management.		
UNIT III	**SUPPLY CHAIN RESILIENCE AND RISK MANAGEMENT**	**9**
Business models in the post-crisis environment – Risks of supply chain disruptions – Use of big data to improve operations – Supply chain resiliency – Supply chain flexibility – Inventory management and risk pooling strategies – Supply contracts and risk-sharing strategies – Selected case studies on digital supply chain management.		
UNIT IV	**STRATEGIC NETWORK DESIGN AND GREEN SUPPLY CHAINS**	**9**
Strategic partnering – Network planning – Green supply chain management – Integration of IT and business processes – Fuzzy decision-making in supply chain management – Selected case studies on digital supply chain management.		
UNIT V	**SMART AND SUSTAINABLE SUPPLY CHAIN TECHNOLOGIES**	**9**
Customer value and operations strategy – Smart operations management – Smart and sustainable / green supply chain management – Augmented reality in supply chain management – Internet of Things (IoT) and cyber-physical systems – AI, robotics, and autonomous systems in supply chain management – Maturity models and analysis of digital supply networks – Selected case studies on digital supply chain management.		

CONTEMPORARY ISSUES

Guest lectures and industry interactions on digital supply chain transformation, Industry 4.0, AI and analytics, blockchain-enabled logistics, and sustainable supply chain practices.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Apply digital supply chain strategies including the implementation of digital technologies.

CO2: Evaluate and design resilient supply chain models.

CO3: Analyze the impact of Industry 4.0 and Logistics 4.0 on supply chain management.

CO4: Integrate strategic sourcing, network planning, and green supply chain initiatives within digital transformation contexts.

CO5: Apply emerging digital technologies to enhance supply chain performance and sustainability.

TEXT BOOKS

1. Bart A. MacCarthy, Digital Supply Chains: Transforming Supply Chains Through Emerging Technologies, Springer, 2022.
2. Nada R. Sanders, Operations, Supply Chain and Analytics, Wiley, 2022.
3. Michael H. Hugos, Essentials of Supply Chain Management, 5th Edition, Wiley, 2024.

REFERENCES

1. Martin Christopher, Logistics and Supply Chain Management, 6th Edition, 2022.
2. David B. Grant, Sustainable Logistics and Supply Chain Management, 2023.
3. Association for Supply Chain Management, Digital Supply Chain Transformation Learning System, 2024.

25BA338	GLOBAL SUPPLY CHAIN MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To examine worldwide supply chain management practices in a global business environment.
- To analyze the key drivers and dynamics influencing global supply chains.
- To evaluate global logistics, infrastructure, and purchasing strategies.
- To develop effective coordination and sustainability practices in global supply chains.

UNIT I	ESTABLISHING A GLOBAL SUPPLY CHAIN STRATEGY	9

Insight into global trade and global supply chains – Expertise in emerging markets and global supply chains – Best practices for strategic global supply chain management – Integration of global supply chain functions – Strategic benefits of global supply chains.

UNIT II	IMPLICATIONS OF INDUSTRY GLOBALIZATION	9

Drivers for global supply chains – Identification of key global market drivers – Influence of market globalization drivers on supply chains – Declining role of governments as producers and customers and their evolving value-adding role – Competitive globalization drivers – Increase in world trade levels – Growth of born-global companies – Expansion of global networks.

UNIT III	EVALUATING GLOBAL SUPPLY CHAIN INFRASTRUCTURE	9

Analysis of transportation, communication, utilities, and technology infrastructure – Supply chain security, risks, and value – Legal considerations – International contracts and insurance issues – Commercial documents and customs clearance – International commerce terms (Incoterms).

UNIT IV	LEVERAGING LOGISTICS IN GLOBAL SUPPLY CHAINS	9

Designing a global logistics strategy – Managing global inventory – Global packaging and materials handling – Global distribution centers – Ocean, air, land, and intermodal transportation systems.

UNIT V	PURCHASING AND OPERATIONS IN GLOBAL SUPPLY CHAINS	9

Global purchasing strategies – Transition from international to global purchasing – Outsourcing and offshoring strategies – Supplier selection and global supplier network design – International wholesaling, retailing, and franchising – Global online operations – Global EDGE diagnostic tools for channel partners – Coordination mechanisms – Inter-organizational relationships – Stakeholder management – Global supply chain sustainability – Guidelines for managing global supply chains.

CONTEMPORARY ISSUES

Guest lectures and industry interactions on global sourcing, international logistics challenges, geopolitical risks, sustainability in global supply chains, and digital integration in cross-border supply networks.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Demonstrate key issues and challenges in global supply chain management.
CO2: Analyze globalization drivers and their impact on supply chain strategies.
CO3: Evaluate global logistics and infrastructure requirements.
CO4: Apply effective global purchasing and supplier network strategies.
CO5: Design coordinated and sustainable global supply chain systems.

TEXT BOOKS

1. Sunil Chopra, Supply Chain Management: Strategy, Planning and Operation, 8th Edition, Pearson, 2023.
2. John J. Coyle et al., The Management of Business Logistics: A Supply Chain Perspective, Cengage, 2022.
3. Nada R. Sanders, Operations, Supply Chain and Analytics, Wiley, 2022.

REFERENCES

1. Artin Christopher, Logistics and Supply Chain Management, 6th Edition, 2022.
2. Alan Harrison & Remko Van Hoek, Logistics Management and Strategy, 2021.
3. Michael H. Hugos, Essentials of Supply Chain Management, 5th Edition, 2024.

NON FUNCTIONAL ELECTIVE COURSE

25BA346	FUNDAMENTALS OF BUSINESS ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES

The course will enable the learners to:

- To understand the role of business analytics in decision-making.
- To familiarize students with data-driven problem-solving approaches.
- To introduce basic tools and techniques used in descriptive, predictive, and prescriptive analytics.
- To apply analytics for real-time business functions such as marketing, finance, operations, and HR.

UNIT I	INTRODUCTION TO BUSINESS ANALYTICS	9

Meaning, Scope, and Evolution of Business Analytics-Types of Business Analytics: Descriptive, Predictive, Prescriptive-Role of Business Analyst – Skills and Responsibilities-Data-Driven Decision Making in Organizations-Overview of Data Sources: Structured and Unstructured-Use Cases and Applications in Different Industries.

UNIT II	DATA PREPARATION AND EXPLORATION	9

Types of Data: Nominal, Ordinal, Interval, Ratio - Data Collection Techniques - Data Cleaning, Pre-processing, and Transformation-Data Visualization and Interpretation: Graphs, Charts, and Dashboards - Introduction to Tools: Excel, Power BI.

UNIT III	DATA VIZUALIZATION	9

Principles of effective data visualization. Choosing the right chart type for different data scenarios. Customizing charts for clarity. Creating Advanced Charts in Spreadsheets, Building advanced charts (e.g., trendlines, combo charts, and waterfall charts). Case studies and exercises applying advanced functions.

UNIT IV	PREDICTIVE ANALYTICS – BASIC MODELS	9

Introduction to Predictive Modelling Concepts-Forecasting Techniques: Moving Average, Exponential Smoothing-Introduction to Linear Regression for Forecasting-Concept of Classification (Logistic Regression – Basic Idea)-Case Applications in Retail, Banking, and HR

UNIT V	APPLICATIONS OF BUSINESS ANALYTICS	9

Marketing Analytics: Customer Segmentation, Market Basket Analysis-Financial Analytics: Budgeting, Financial Forecasting-HR Analytics: Employee Attrition, Performance Metrics-Supply Chain Analytics: Inventory, Demand Forecasting-Ethics in Business Analytics and Data Privacy.

CONTEMPORARY TOPICS

Guest lecture by industry experts on current trends in Analytics.

TOTAL:45 PERIODS

COURSE OUTCOMES

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

CO1: Understand the concepts, types, and evolution of business analytics and the role of business analysts.

CO2: Collect, clean, and transform data using tools like Excel and Power BI for effective analysis.

CO3: Apply principles of data visualization and create advanced charts for analytical insights.

CO4**:** Use basic predictive models like regression and forecasting in business scenarios.

CO5: Analyze applications of business analytics across domains with ethical and privacy considerations.

TEXT BOOKS

1. Evans, J. R. Business analytics, Pearson, 3rd Edition 2021.
2. Albright, S. C., & Winston, W. L. Business analytics: Data analysis and decision making, Cengage Learning. 8th Edition, 2024
3. Sharda, R., Delen, D., & Turban, E. Pearson, Analytics, data science, and artificial intelligence: Systems for decision support, 5th Edition 2024.
4. Shmueli, G., Bruce, P. C., Data Mining for Business Analytics, Wiley, 2023.
5. Chapple, M., & Seidl, D. (2020). Data visualization with Excel dashboards and reports (2nd ed.). Wiley.

REFERENCES

1. Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. Business Analytics (5th ed.). Cengage Learning. 2023.
2. Jaggia, S., Kelly, A., Lertwachara, K., & Chen, L. Business Analytics: Communicating with Numbers (2nd ed.). McGraw-Hill. 2022.
3. Kolokolov, A., & Zelensky, M. Data Visualization with Microsoft Power BI: How to Design Savvy Dashboards. O'Reilly Media. 2024.