



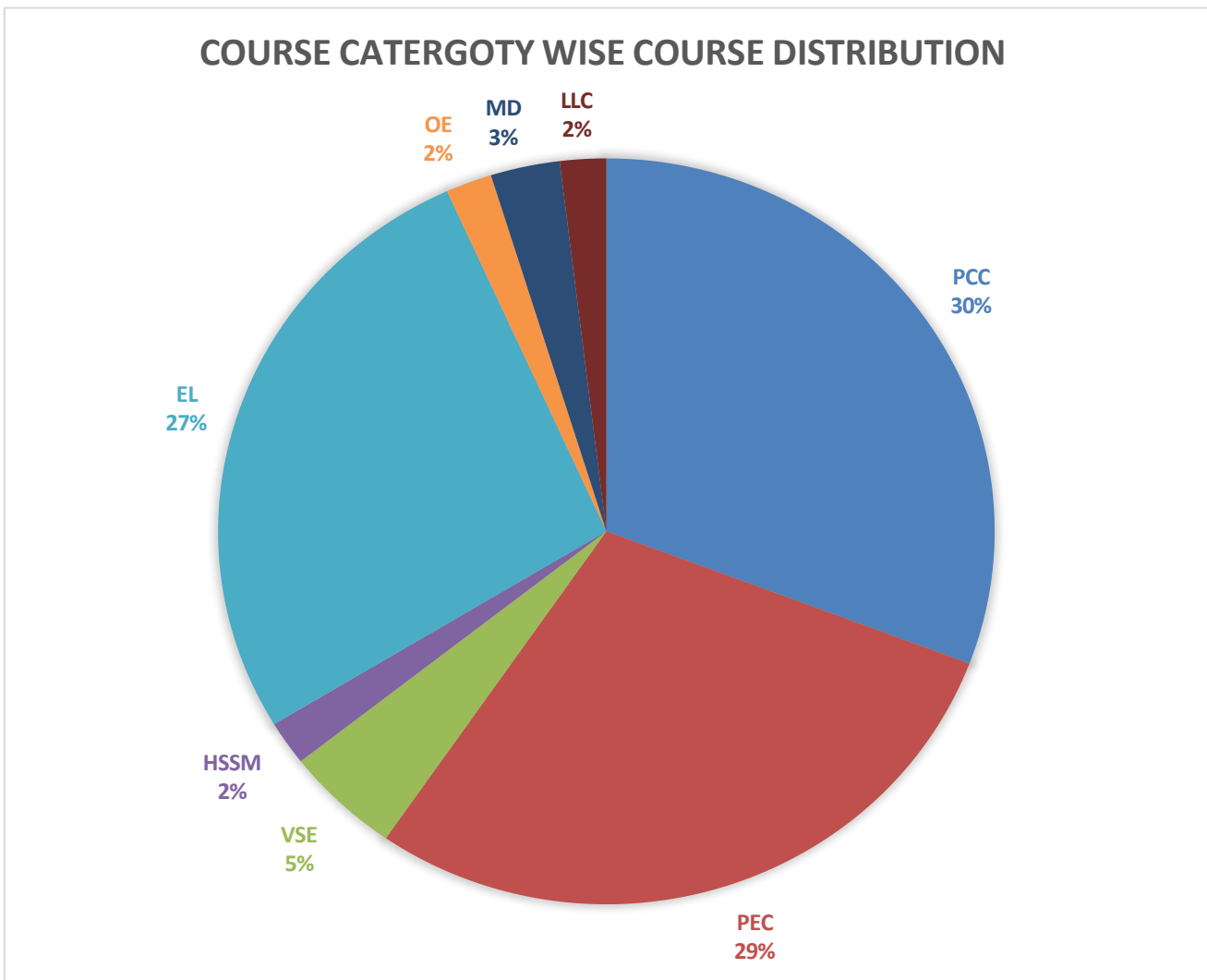
Marathwada Shikshan Prasarak Mandal's
DEOGIRI INSTITUTE OF ENGINEERING AND MANAGEMENT STUDIES
 (An Autonomous Institute)

Deogiri College Campus, Railway Station Road, Chhatrapati Sambhajnagar- 431 005 (M.S.)

Department of MBA

Course Category			I	II	III	IV	Total Credits
Program Courses	Program Core Course (PCC)	-	17	9	4	-	32
		MOOC	-	2	-		
	Program Elective Course (PEC)		-	12	18	-	30
Vocational and Skill Education Courses (VSE)	Seminar		-	-	-	3	5
	PG LAB		-	2	-	-	
Humanities, Social Science and Management (HSSM)	Indian Knowledge System (IKS)		2	-	-	-	2
Experiential Learning Courses (EL)	Research Methodology		3	-	-	-	28
	In-Plant Project		-	-	4	-	
	Internship		-	-	-	21	
Open Elective Courses (OE)	Open Elective (OE)		2	-	-	-	2
Multi-Disciplinary Courses (MD)	Multi-Disciplinary (MD)		-	3	-	-	3
Liberal Learning Courses (LLC)	Co-Curricular Courses (CC)		2	-	-	-	2
Value Added Courses (VAC)	PD/Advance Excel		-	AU	-	-	AU
Total Credits			26	28	26	24	104

Masters of Business Administration (MBA)		
Course Category	Credits	% Credits
Program Core Courses (PCC)	32	30.76
Program Elective Courses (PEC)	30	28.85
Vocational & Skill Enhancement (VSE)	5	4.81
Humanity, Social Science & Management (AEC, EM, IKS, VEC) HSSM	2	1.92
Experiential Learning (EL)	28	26.92
Open Electives (OE)	2	1.92
Multi-Disciplinary (MDC)	3	2.88
Liberal Learning Courses (LLC)	2	1.92
Total Credits	104	100.00



SEMESTER I												
Category	Course Code	Name of the Course	Teaching Scheme				Evaluation Scheme					Credits
			L	T	PR	Total	CA - I	CA - II	MS E	ESE	Total	
PCC	PB251001	Management Practices & Organizational Dynamics	3	-	-	3	10	10	20	60	100	3
	PB251002	Business Statistics	2	2	-	4	10	10	20	60	100	3
	PB251003	Managerial Economics	3	-	-	3	10	10	20	60	100	3
	PB251004	Applied Accounting for Business Managers	2	2	-	4	10	10	20	60	100	3
	PB251005	International Business Environment	3	-	-	3	10	10	20	60	100	3
	PB251006	Environment Management	2	-	-	2	10	10	20	60	100	2
OE	PB251301	Creativity & Innovation	2	-	-	2	10	10	20	60	100	2
	PB251302	Social Entrepreneurship		-	-							
	PB251303	Life Skills		-	-							
HSSM	PB251501	Indian Ethos, Ethics & Corporate Governance	2	-	-	2	10	10	20	60	100	2
EL	PB251601	Research Methodology	3	-	-	3	10	10	20	60	100	3
LLC	PB251701	Design Thinking for Social Innovation	-	-	4	4	20	20	-	60	100	2
Total			22	4	4	30					1000	26

SEMESTER II												
Category	Course Code	Name of the Course	Teaching Scheme				Evaluation Scheme					Credits
			L	T	PR	Total	CA - I	CA - II	MSE	ESE	Total	
PCC	PB252001	Business Policy and Strategic Management	3	-	-	3	10	10	20	60	100	3
	PB252002	Optimization Techniques	2	2	-	4	10	10	20	60	100	3
	PB252003	Legal Aspects of Business	3	-	-	3	10	10	20	60	100	3
	PB252004	MOOC	-	-	-	-	10	10	20	60	100	2
PEC	PB252101	Financial Management	2	2	-	4	10	10	20	60	100	3
	PB252102	Marketing Management	3	-	-	3	10	10	20	60	100	3
	PB252103	Production and Operations Management	3	-	-	3	10	10	20	60	100	3
	PB252104	Human Resource Management	3	-	-	3	10	10	20	60	100	3
MDC	PB252201	Business Analytics	3	-	-	3	10	10	20	60	100	3
VSE	PB252401	AI for Managerial Decision	2	-	-	2	10	10	20	60	100	2
Total			24	4	-	28					1000	28
VAC	PB252701	Personality Development	2	-	-	2	25	25	-	-	50	AU

SEMESTER III												
Category	Course Code	Name of the Course	Teaching Scheme				Evaluation Scheme					Credits
			L	T	PR	Total	CA-I	CA-II	MSE	ESE	Total	
PCC	PB253001	Entrepreneurial Development	4			4	10	10	20	60	100	4
PEC (Any 4)	PB253011	Elective-1	4			4	10	10	20	60	100	4
	PB253012	Elective-2	4			4	10	10	20	60	100	4
	PB253013	Elective-3	4			4	10	10	20	60	100	4
	PB253014	Elective-4	4			4	10	10	20	60	100	4
	PB253116	Elective-5	4			4	10	10	20	60	100	4
PEC (Any 1)	PB253116	Elective-6	2			2	10	10	20	60	100	2
	PB253116	Elective-7	2			2	10	10	20	60	100	2
EL	PB253601	In-plant Training	-	-	8	8	20	20	-	60	100	4
Total			22	-	8	30					700	26

Note: From **PEC-1 to PEC-5**, students are required to select **any four** courses (4 credits each). From **PEC-6 and PEC-7**, students are required to select **any one** course (2 credits).

Program Elective / Specialization Course Basket

Category	Course Code	Name of the Course	Credits	Specialization
PEC- 1	PB253011	Consumer Behaviour	4	Marketing Management
		Security Analysis and Portfolio Management	4	Financial Management
		Strategic Human Resource Management	4	Human Resource Management
		Management of Software Projects	4	Production and Operations Management
		Business Analytics for Decision Making	4	Business Analytics
PEC- 2	PB253012	Sales and Distribution Management	4	Marketing Management
		Financial Statement Analysis	4	Financial Management
		Performance and Compensation Management	4	Human Resource Management
		Digital Manufacturing and Industry 5.0	4	Production and Operations Management
		Business Intelligence and Data Visualization	4	Business Analytics
PEC- 3	PB253013	Digital and Social Media Marketing	4	Marketing Management
		Direct And Indirect Taxation	4	Financial Management
		Industrial Relations and Labour Law	4	Human Resource Management
		Supply Chain Management & Digital Logistics	4	Production and Operations Management
		Customer and Marketing Analytics	4	Business Analytics
PEC- 4	PB253014	Advertising and Brand Management	4	Marketing Management
		Business Valuation and Corporate Restructuring	4	Financial Management
		Human Resource Planning and Development	4	Human Resource Management
		Product Planning & Control	4	Production and Operations Management
		Financial Analytics and FinTech	4	Business Analytics
PEC- 5	PB253015	Services Marketing and CRM	4	Marketing Management
		Fin-Tech and Digital Finance	4	Financial Management
		Training and Development	4	Human Resource Management
		Project Management	4	Production and Operations Management
		Supply Chain and Operations Analytics	4	Business Analytics
PEC- 6	PB253016	Rural and Agricultural Marketing	2	Marketing Management
		Indian Financial System	2	Financial Management
		HR Audit and Analytics	2	Human Resource Management
		Purchasing & Materials Management	2	Production and Operations Management
		People Analytics	2	Business Analytics
PEC- 7	PB253017	Marketing Research and Analytics	2	Marketing Management
		Goods and Services Tax (GST)	2	Financial Management
		Global HRM (GHRM)	2	Human Resource Management
		Lean Manufacturing and Quality Management (LMQM)	2	Production and Operations Management
		Artificial Intelligence for Business Applications (AIBA)	2	Business Analytics

SEMESTER IV												
Category	Course Code	Name of the Course	Teaching Scheme				Evaluation Scheme					Credits
			L	T	P	Total	CA-1	CA-2	MSE	ESE	Total	
VSE	PB254401	Seminar			6	6	20	20		60	100	3
EL	PB254601	Internship/ Project			42	42	50	50		100	200	21
Total					48	48					300	24

SEM-I

SYLLABUS

Course Title: Management Practices and Organizational Dynamics		
Course Code: PB251001		Course Category: Program Core Course
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester I)	ESE	60 Marks
Course Prerequisite: Students are expected to come prepared with theoretical knowledge pertaining to business environment and management, enabling the Course owner/mentor to guide them in understanding its practical applications. rewrite in effective and appealing way		
Course Description: This course introduces the principles of management and organizational behavior, emphasizing both classical foundations and modern practices. It covers the evolution of management thought, managerial roles, and the nature of management as art and science. Students explore individual behavior through concepts of perception, learning, attitudes, personality, motivation, and decision-making. The course also examines interpersonal dynamics such as emotional intelligence, group behavior, teamwork, conflict management, negotiation, and leadership. At the organizational level, it addresses change management, organizational design, stress management, and corporate social responsibility. The course prepares students to understand, analyze, and manage human behavior effectively in organizational contexts.		
Course Objectives: 1. To acquaint students with the fundamentals of management and organizational behavior, including evolution of management thought, managerial roles and functions, and behavioral processes at individual, group and organizational levels 2. To develop the ability to understand and manage individual and interpersonal behavior at work through concepts such as perception, learning, personality, attitudes, motivation, emotional intelligence, team dynamics, conflict and leadership. 3. To enable students to analyze organizational systems and contemporary issues related to structure, design, organizational change, resistance, stress management and corporate social responsibility for enhancing organizational effectiveness.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall and describe the evolution of management thoughts, fundamental concepts, and various managerial roles, skills, and functions.	Remember (Level 1)
CO2	Explain and interpret key concepts of Organizational Behavior, including individual and group behavior, perception, learning, and attitude formation within organizational contexts.	Understand (Level 2)
CO3	Apply motivation theories, personality assessments, and decision-making tools to real-life organizational situations for effective management of individual behavior.	Apply (Level 3)
CO4	Analyze interpersonal and organizational dynamics—including emotional intelligence, conflict management, team processes, leadership, structure, change, stress, and CSR—to enhance group performance and organizational effectiveness.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	1	1	-	-	1	-
CO2	2	2	2	1	1	-	3	1
CO3	3	3	2	1	2	-	3	2
CO4	2	3	3	1	3	-	3	1
CO5	3	2	2	3	2	1	1	-

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Management thought and Conceptualization: Introduction to Management -Evolution of Management thoughts -Managerial Process-Functions, Skills and role of Manager -Management as Art, Science and Profession. -Introduction to Organizational Behavior: Assumptions – levels of OB -Applications of OB-Historical Development of OB -Emerging Trends in OB	6 Hrs.
Unit 2	Management of Individual Behavior-I: Perception: understanding perception, Basic elements of perception, Factors affecting perception, perceptual selection, Perceptual biases in social perception, Attribution Theory Organizational application of Perception Management-Learning: Learning Principles- Learning Styles-classical and operant conditioning theory of Learning – Attitude: Conceptualization, Components of Attitude-Major employee Job attitudes.	6 Hrs.
Unit 3	Management of Individual Behavior-II Personality: Concept, Myer Brigg's type indicator, Big five personality model, Psychodynamic theory, social learning theory, self-theory, Trait and type theories Motivation: Concept, Process of Motivation, Motivation Theories (Process and Content theories), Employee Engagement, Individual decision making and problem-solving, problem-solving tools	6 Hrs.
Unit 4	Interpersonal Dynamics Emotional Intelligence-Group Dynamics :Groups and Teams, Types of Teams ,Stages in group development, problems in team work (Free riding, social loafing, group think)- Psychological Contract, Trust and trust building, Prosocial behavior, Cooperation Vs Competition, Conflict management, Levels and types of conflict at workplace, Conflict management Styles, Managing Negotiations-Leadership : Managers Vs Leaders, Trait and Type approach to leadership ,Leadership style	6 Hrs.
Unit 5	Organizational Dynamics Organization Change, Types of change, overcoming resistance to Change, Change Models, - Organizational Structure and Design: Basic dimensions of structure, Departmentalization, Organizational life cycle, Organizational design and its impact on employees-Stress Management-CSR.	6 Hrs.

Sr. No.	Textbooks
1.	Management -Robbins S.P & Judge, T.A
2.	Principles of Management: A Global Perspective- Koontz, H & Weihrich , H
3.	Organisational Behaviour: K Aswathappa & G.Sudarsana Reddy
4	Behaviour in Organizations by Jerald Greenberg and Robert A. Baron, PHI learning private Ltd, New Delhi (Ninth Edition).
5	Understanding Organizational Behaviour by Udai Pareek, Oxford University Press (Third Edition).
	Reference Books
1.	K. Aswathappa – Organizational Behaviour: Text, Cases and Games (Himalaya Publishing House, latest edition)
2.	L.M. Prasad – Principles and Practices of Management (Sultan Chand & Sons, latest edition)

	Web Resources
1.	Decision Making, NPTEL, https://youtu.be/B96-Gpn56sU
2.	Power and Leadership, NPTEL, https://youtu.be/wn2LRXhdn0U
3.	Group Dynamics, NPTEL, https://youtu.be/AM9TbT6OIRo

Course Title: Business Statistics		Course Category: Program Core Course	
Course Code: PB251002			
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs / week		CA-1	10 Marks
Tutorial: 02 hrs / week		CA-2	10 Marks
Credits: 03		MSE	20 Marks
Semester: First Year (Semester I)		ESE	60 Marks
Course Prerequisite: • Basic arithmetic and algebra skills including averages and simple equations. • Understanding of different data types and ability to organize data effectively. • Fundamental knowledge of probability concepts and simple counting methods. • Familiarity with measures of central tendency and data dispersion. • Logical reasoning and analytical skills to interpret statistical relationships and results			
Course Description: This course introduces the principles and methods of Statistics with applications in business, economics, and decision-making. It covers data organization, measures of central tendency and dispersion, correlation and regression, time series, probability, and hypothesis testing. Emphasis is on interpreting results and applying statistical reasoning to real-world problems, preparing students for data-driven decision-making and advanced studies in analytics, economics, and operations research.			
Course Objectives: 1. To explain the fundamental concepts of data organization, measures of central tendency, and dispersion. 2. To apply correlation, regression, and time series methods for analyzing relationships and forecasting. 3. To understand probability concepts, theorems, and probability distributions for decision-making under uncertainty. 4. To perform hypothesis testing and use statistical inference techniques for solving business and economic problems.			

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain the basic concept of business statistics, correlation, time series and probability.	Understand (Level 2)
CO2	Apply statistical tools in business economic and commercial areas.	Apply (Level 3)
CO3	Analyze the data and draw inferences from statistical findings for various business solutions.	Analyze (Level 4)
CO4	Evaluate alternative business decisions using statistical evidence for effectiveness and efficiency.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	-	1	-	1	1	1	-
CO2	3	2	-	2	-	3	-	2
CO3	3	3	2	2	2	3	2	2
CO4	3	3	2	3	2	3	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction to Statistics, Types of data, Types of Scales: Nominal, Ordinal, Interval and Ratio scales, Meaning of Variable; Discrete and Continues variable. Measures of Central Tendency: Mean-mode-median, Measures of Dispersion: Range, Mean Deviation and Standard Deviation and Variance.	8 Hrs.
Unit 2	Correlation analysis: Meaning and Types of Correlation, Methods of studying Correlation (Karl-Pearson's coefficient of Correlation and Rank Correlation Coefficient) Regression analysis: Meaning and two lines of Regression, Use of Regression analysis, Two regression equations. Relationship Between Correlation and Regression Coefficients.	8 Hrs.
Unit 3	Time series analysis: Use of time series analysis, Components of Time series, Methods of measurement of moving averages and methods of Least Squares. Forecasting.	8 Hrs.
Unit 4	Probability: Three approaches probability (Classical, Axiomatic, Empirical), Addition and Multiplication Theorems of Probability, Probability distribution (Binomial, Poisson and Normal)	8 Hrs.
Unit 5	Statistical inference: Procedure of Testing of Hypothesis, Formulation of null and alternate hypothesis, Determining level of significance, Two types of Error in testing of Hypothesis, two tailed and one Tailed tests of Hypothesis, Chi-square test.	8 Hrs.

Sr. No.	Textbooks
1.	"Statistics for Management", Levin R.I., Rubin S. David, , Pearson.
2.	"Fundamentals of Statistics", Gupta S.C.
3.	"Statistics for Management", Keller G, Cengage Learning
4.	"Complete Business Statistics", Amir D. Aczel and Jayavel Sounder pandian.
5.	"Business Statistics", J.K Sharma, 2004.
Reference Books	
1.	Statistics for Management, Richard I. Levin & David S. Rubin
2.	Fundamentals of Mathematical Statistics, S.C. Gupta & V.K. Kapoor
3.	Statistics for Business and Economics, Paul Newbold, William Carlson, Betty Thorne

Web Resources	
1.	Probability and Statistics, NPTEL, https://nptel.ac.in/courses/111105041
2.	Business Statistics, NPTEL, https://nptel.ac.in/courses/110106083
3.	Statistics for Business, Coursera, https://www.coursera.org/learn/statistics-for-business

Course Title: Managerial Economics (ME)		
Course Code: PB251003		Course Category: Program Core Course
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs. / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester I)	ESE	60 Marks
Course Prerequisite: • Basic Understanding of terms such as Supply and Demand functions. • General Business Concepts –Basic Understanding of different business functions like HR, Marketing • Analytical Reasoning Skills-The ability to think logically and critically about problems is crucial for applying economic principles • Graph Interpretation-Understanding how to read and interpret simple economic graphs is crucial.		
Course Description: This course focuses on applying business Economics principles to help in management decision making within the business and organisations. The syllabus covers topics like demand and supply analysis, production and cost functions, market structures, pricing strategies, and forecasting.		
Course Objectives: 1. To integrate the basic concepts of Economics with Managerial Decision Making 2. To introduce the students to various economic concepts 3. To acquaint the students with concepts and techniques used in Economics and to enable them to apply the knowledge in business decisions making. 4. To develop students critical thinking skills and analytical abilities in resolving business problems by employing various tools and techniques of economics		

Course Outcomes:		
Cos	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain the basic concepts of Managerial Economics and their applications in business Decision Making	Understand (Level 2)
CO2	Apply demand and supply analysis to determine the market equilibrium and forecast the demand for the products.	Apply (Level 3)
CO3	Analyze production and cost functions to optimize resource allocation and minimize the business costs.	Analyze (Level 4)
CO4	Evaluate price and output determination across various market structures like monopoly and oligopoly.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1			-	2	2	2	1	1
CO2	3	2	-	-	-	2	1	1
CO3			-	3	-	2	1	1
CO4	3	2	-	-	-	3	1	1

Assessment	
CA-1 (a) - (10M)	PPT / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	PPT/ Assignment/ MCQ Test etc.
MSE (c) - (20M)	Internal Exam

Course Contents		
Unit 1	Basic of Managerial Economics and Theory of Firm Concept of Economy, Economics, Micro Macroeconomics. Nature and Scope of Managerial Economics, Managerial Economics and decision making - The basic process of decision making; Concept of Firm, Market; Theories of Firm :- Principal and Agent Problem ,Forms of Ownership	6 Hrs.
Unit 2	Consumer Behaviour And Utility Analysis Cardinal utility approach, equi- marginal utility principle, ordinal utility analysis, Determinants of Demand / Supply, Law of Demand and Supply, /Supply, Exception to Law of Demand; Determinants of Supply, Change in Demand / Supply, market mechanism and price determination, Impact of Price Ceiling & Price Floor	6 Hrs.
Unit 3	Demand Forecasting ,Elasticity Of Demand And Supply Significance of demand forecasting, Various Approaches Qualitative and Quantative Methods of Demand Forecasting concept of elasticity of demand, Types of elasticity of demand, types of price and income Elasticity of demand, factors affecting elasticity of demand. Elasticity of supply, factors determining elasticity of supply.	6 Hrs.
Unit 4	Production And Cost Function Production Function, Law Of Diminishing Marginal Return (Short Run), Laws Of Returns To Scale (Long Run), Isoquant, Optimization Analysis Types Of Cost, Estimation Of Cost Function, Cost Output Analysis - Short Run Cost Curves & Long Run Cost Curves , Learning Curve, Economies Of Scale; Break- Even Analysis; Determination Of Break-Even Level	6 Hrs.
Unit 5	Market Structures Market Morphology, Features Of Perfect Competition, Market And Firm Demand Curve, Monopoly Features And Types, Price Discrimination, Oligopoly And Its Features, Duopoly ,Cartel and Factor Affecting It, Types of Price Leadership	6 Hrs.

No.	Textbooks
1.	Managerial Economics: Theory and applications: D.M.Mithani-Himalaya Publishing House.
2.	Managerial Economics- Prof.A.K.Seth and Dr.Shalini Devi-International book house pvt.ltd
3.	Managerial Economics- Dr.S.L.Gupta-International book house pvt.ltd
Reference Books	
1.	Froeb & McCann's "Managerial Economics,"
2.	Baye & Prince's "Managerial Economics & Business Strategy,"
3.	Salvatore's "Managerial Economics in a Global Economy,"
4.	Hirschey & Pappas' "Managerial Economics"

Web Resources	
1.	Foundation Courses in Managerial Economics NPTEL, https://nptel.ac.in/courses/110105075
2.	Introduction to Managerial Economics https://nptel.ac.in/courses/110101005

Course Title: Applied Accounting for Business Managers (AABM)		
Course Code: PB251004		Course Category: Program Core Course
Teaching Scheme		Examination Scheme
Lectures: 02 hrs / week		CA-1 10 Marks
Tutorial: 02 hrs / week		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester I)		ESE 60 Marks
Course Prerequisite: - Basics of Calculus – Profit, percentage, basic math. - Fundamental accounting knowledge – financial accounting principles and the preparation of financial statements.		
Course Description: The subject typically covers the principles, practices, and tools of financial, cost, and management accounting with an emphasis on their application for managerial decision- making and control in organizations. These tools equip managers with financial insights needed for planning, decision-making, controlling costs, and measuring performance, which are crucial for organizational success		
Course Objectives: - To acquaint students with accounting concepts, principles, and standards, covering financial and cost methods relevant for managers. - To enable students to prepare, analyze, and interpret financial statements and budgets for evaluating organizational performance and making business decisions. - To develop the ability to apply accounting tools and techniques in managerial decision- making, including the use of cost data, Budgeting for problem solving		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain financial accounting concepts, including business organizations, accounting equation, and preparation of journal, ledger, trial balance, and financial statements with adjustments.	Understand (Level 2)
CO2	Prepare final accounts and apply basic cost accounting principles, such as cost elements, classification, cost sheets, and relevant costs for decision-making.	Apply (Level 3)
CO3	Analyze marginal costing techniques, including contribution, P/V ratio, break-even point, and CVP analysis for short-term decisions like product mix, make-or-buy, special orders, and shutdowns.	Analyze (Level 4)
CO4	Evaluate budgetary control through functional budgets (cash, flexible) and standard costing, including variance analysis for performance measurement.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	3	1	-	1	-	3	-	-
CO2	3	3	-	1	1	3	-	-
CO3	3	3	-	2	1	3	-	1
CO4	3	3	1	2	1	3	1	1

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ Presentations etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ Presentations etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Concepts of Financial Accounting Forms of Business Organization. Meaning and Importance of Accounting in Business Organization, Basic concepts and terms used in accounting, Capital & Revenue Expenditure, Capital & Revenue Receipts, Users of Accounting Information. Accounting Concepts and Conventions, Fundamental Accounting Equation, Journal, Ledger and Trial Balance.	10 Hrs.
Unit 2	Preparation of Financial Statements Meaning of Financial Statements, Importance and Objectives of Financial Statements. Preparation of Final Accounts with simple adjustments	08 Hrs.
Unit 3	Cost Accounting Basic Concepts of Cost Accounting, Objectives, Importance and Advantages of Cost Accounting, Cost Centre, Cost Unit, Elements of Cost, Classification and Analysis of Costs, Relevant and Irrelevant Costs, Differential Costs, Sunk Cost, Opportunity Cost, Preparation of Cost Sheet.	06 Hrs.
Unit 4	Marginal Costing Meaning, Principles, Advantages and Limitations, Contribution, P/V Ratio, Break-Even Point (BEP), Cost Volume Profit (CVP) Analysis, Short Term Business Decisions–Product Mix Decisions, Make or Buy (Outsourcing) Decisions, Accept or Reject Special Order Decisions, Shutting Down Decisions..	06 Hrs.
Unit 5	Budgetary Control & Standard Costing Meaning of Budget and Budgeting, Importance, Advantages and Disadvantages, Cash Budget and Flexible Budget. Standard Costing: Meaning, Importance, Advantages and Disadvantages, Cost Variance Analysis	10 Hrs.

Sr. No.	Textbooks
1.	Book-Keeping and Accountancy STD XI, Commerce, Maharashtra State Bureau of Textbook Production and Curriculum Research, Pune
2.	Cost Accounting- As per NEP 2020, M.P Gupta and Ajay Gupta, S.Chand Publications
Reference Books	
1.	Accounting for Management, S. N. Maheshwari
2.	Financial Cost and Management Accounting, P. Periasamy
3.	Accounting for Managers, Dearden and Bhattacharya
4.	Atrill, P. and McLaney, E. (2020), Accounting & Finance for Non-Specialists, Financial Times Prentice Hall, Harlow.
5.	Atrill, P., & McLaney, E. (2019). Management Accounting for Decision Makers (6th ed.). Essex, Pearson Education Ltd.
Web Resources	
1.	https://onlinecourses.swayam2.ac.in/nou25_cm12/preview

Course Title: International Business Environment (IBE)		
Course Code: PB251005		Course Category: Program Core Course
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester I)	ESE	60 Marks
Course Prerequisite: • A basic understanding of Principles of Management and Business. • Foundational knowledge of Business Environment. • Familiarity with Globalization concept. • Foundational understanding International Financial Environment.		
Course Description: This course is to equip students with an understanding of the various environmental factors that significantly influence business, and to develop their ability to observe, analyze, and adapt to the dynamic changes that continually shape the global business landscape.		
Course Objectives: 1. To develop a strong foundation to International Business with all basics concept. 2. To provide the student with a background of various environment factors that has major repercussions on international business. 3. To apply multiple integrals to sharpen their mind to watch and update the changes in international business. 4. To provide insights into international trade, investment, marketing, finance, and cultural dynamics.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall the relevance of International Business in global trade	Remember (Level 1)
CO2	Explain the concept related to Capital, Production, International Business Environment and Global Value.	Understand (Level 2)
CO3	Apply concepts of the international business environment to address problems related to international business, international finance, and FDI.	Apply (Level 3)
CO4	Analyze the significance of WTO, IMF and World Bank considering contemporary global business environment.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	1	–	2	–	2	1	2
CO2	2	1	1	2	–	1	1	1
CO3	3	2	2	2	2	2	1	2
CO4	2	3	–	3	1	–	–	–

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction to International Business Importance, nature and scope of international business; modes of entry into International Business, Stages of Internationalization. Advantages and Disadvantages of International Business.	6 Hrs.
Unit 2	Globalization Meaning, Implications, Globalization, Globalization of Markets, Globalization of Production, Globalization of Investments and Technology. Globalization as a driver of International Business.	6 Hrs.
Unit 3	International Business Environment Environment of International Business and its significance – Economic Environment – Socio- Cultural Environment –Political Environment -Natural Environment –Technological Environment, Ethics and CSR in International Business	6 Hrs.
Unit 4	International Financial Management Concept, Meaning, Definition, Characteristics, Benefits of MNCs, Demerits of MNCs – Determinants of Foreign Direct Investment (FDI) - Pattern, Structure and effects of FDI. Modes of FDI, Mergers and Acquisitions, Motives of FDI, Regional Economic Integration	6 Hrs.
Unit 5	Global Trade and International Institutions WTO, IMF, World Bank, Tariff and Non-tariff Barriers. Balance of Payment Account: Concept and significance of balance of payments, Current and capital account components. Introduction to Basic Concept of IFRS.	6 Hrs.

Sr. No.	Textbooks
1.	Charles W.L. Hill & G. Tomas M. Hult – International Business: Competing in the Global Marketplace (McGraw Hill)
2.	Subba Rao P. – International Business: Text and Cases (Himalaya Publishing House)
3.	John D. Daniels, Lee H. Radebaugh & Daniel P. Sullivan – International Business: Environments and Operations (Pearson)
Reference Books	
1.	Vyuptakesh Sharan – International Business: Concept, Environment and Strategy (Pearson India)
2.	Justin Paul – International Business (PHI Learning)
3.	Michael R. Czinkota, Ilkka A. Ronkainen & Michael H. Moffett – International Business (Cengage Learning)
4.	Debra L. Nelson & James Campbell Quick – Understanding Business in the Global Environment
5.	Alan M. Rugman & Simon Collinson – International Business (Pearson)

Sr. No.	Web Resources
1.	International Business,NPTEL, https://nptel.ac.in/courses/110107145
2.	Globalization and Culture,NPTEL, https://nptel.ac.in/courses/109105113
3.	International Finance,NPTEL, https://nptel.ac.in/courses/110105057

Course Title: Environment Management		Course Category: Program Core Course	
Course Code: PB251006			
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs. / week		CA-1	10 Marks
Tutorial: Nil		CA-2	10 Marks
Credits: 02		MSE	20 Marks
Semester: First Year (Semester I)		ESE	60 Marks
Course Prerequisite: Basic knowledge of environmental studies and general awareness of social, economic, and ecological issues.			
Course Description: This course introduces the principles of environmental management, sustainable development, and the impact of human activities on ecosystems. It covers energy resources, biodiversity, climate change, environmental laws, ethics, and sustainable business practices.			
Course Objectives:			
1. Understand key concepts of environmental management and SDGs.			
2. Analyze issues of energy use, biodiversity, pollution, and climate change.			
3. Apply environmental systems, laws, and impact assessment tools.			
4. Promote sustainability through green practices, ethics, and stakeholder roles.			

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain key concepts of Environmental Management and Sustainable Development, and examine the need for Environmental Management in B-Schools.	Understand (Level 2)
CO2	Apply knowledge of various energy sources, ecosystem and ecological concepts, biodiversity management, industrial and agro-ecology, and recycling practices to address environmental issues.	Apply (Level 3)
CO3	Analyze the structure and effectiveness of Environmental Management Systems (EMS), environmental laws and policies, pollution control and waste management practices, green initiatives, the role of NGOs, and the impacts of climate change and global warming.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	2	2	1	-	1	-
CO2	2	2	2	3	1	-	-	2
CO3	3	3	3	3	2	2	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Fundamentals of Environment Management; Sustainable Development and SDG, Implications of human population growth, Environment and Business Schools.	4 Hrs.
Unit 2	Energy Management-Fossil Fuels use, Nuclear — Wind — Hydro Energy, Bio-fuels Ecosystem Concepts; Ecology -Industrial Ecology, Agro- ecology; Biodiversity Management; Recycling Industry.	4 Hrs.
Unit 3	Environment Management System; EMS Standards; EMS Audit Scheme; Clearance/Permissions for establishing industry; Environmental Accounting; Environmental impact Assessment; Green Funding; Green Banking; Environmental Ethics; Carbon Credit.	4 Hrs.
Unit 4	Environmental Laws - The Environment (Protection) Act 1986, The Air (Prevention & Control of Pollution) Act, 1981, The Water (Prevention & Control of Pollution) Act, 1974.	4 Hrs.
Unit 5	Pollution; Waste Management, Bharat Stage 6; Role of NGO 's, Global-warming and climate change.	4 Hrs.

Sr. No.	Textbooks
1.	Uberoi, N.K.; Environmental Management, Excel Books, A-45, Naraina Pahse-1, New Delhi, 2000.
2.	Pandey, G,N,; Environmental Management, Vikas Publishing House New Delhi, 1997.
Reference Books	
1.	Gupta, N. Dass: Environmental Amounting, Wheeler Publishing 19, K.G. Marg, New Delhi, 1997.
2.	Mahanty, S.K. Environment & Pollution Law Manual, Universal Law Publishing, G.T. Karnal Road,

Web Resources	
1.	Sustainable Development Goals (SDGs), United Nations, https://sdgs.un.org/goals
2	Environmental Management, NPTEL, https://nptel.ac.in/courses/120108004
3	Climate Change: Science and Global Impact, Coursera, https://www.coursera.org/learn/climate-change
4	ISO 14000 Environmental Management Standards, ISO, https://www.iso.org/iso-14001-environmental-management.html

Course Title: Creativity & Innovation		
Course Code: PB251301		Course Category: Open Elective
Teaching Scheme		Examination Scheme
Lectures: 02 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 02		MSE 20 Marks
Semester: First Year (Semester I)		ESE 60 Marks
Course Prerequisite: Basic understanding of management concepts, along with a willingness to engage in analytical thinking, collaborative discussions, and activity-based learning.		
Course Description: This course equips students with the skills to think creatively and apply innovative approaches as essential managerial capabilities for organizational growth, effective leadership, and problem-solving. It covers key creativity techniques, including brainstorming, mind mapping, Six Thinking Hats, SCAMPER, and lateral thinking, emphasizing their practical application to organizational challenges. The course also explores various types and approaches of innovation, such as incremental, sustaining, radical, disruptive, open, and closed innovation, to support informed managerial decision-making.		
Course Objectives: 1. To Understand different types of thinking, creativity, and innovation, and their relevance to managerial decision-making and problem-solving. 2. To Gain insights into theories, models, and structured creativity techniques such as brainstorming, mind mapping, lateral thinking, and Six Thinking Hats. 3. To Apply creative and innovative thinking tools effectively to address organizational challenges.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain the nature, types, and role of thinking, creativity, and innovation in business contexts.	Understand (Level 2)
CO2	Apply creative thinking techniques and mind mapping to generate solutions for simple business problems.	Apply (Level 3)
CO3	Distinguish creativity vs. innovation and lateral vs. vertical thinking for effective decision-making.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	-	-	-	1	1
CO2	2	2	1	-	1	-	1	1
CO3	2	3	-	1	2	1	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Thinking and Creativity Basics Nature & Types of Thinking (Analytical, Critical, Creative, Strategic); Convergent vs. Divergent Thinking; Creativity vs. Innovation: Definitions, Differences & Business Relevance. Group activities: Management games on Creative thinking.	4 Hrs.
Unit 2	Creativity Techniques Brainstorming, Lateral Thinking, Mind Mapping and SCAMPER. Structured Thinking Models - Six Thinking Hats and Attribute Analysis. Group activities: Brainstorming exercise on a simple business problem/case lets.	4 Hrs.
Unit 3	Theories & Models of Creativity Creativity Process (Wallas' Model), Creative Problem-Solving Process (CPS), Design Thinking Framework. Creativity in Management: Qualities of a Creative Manager and Perpetual Creative Organizations.	4 Hrs.
Unit 4	Introduction to Innovation Definition, Scope, and Importance in Modern Business, Relationship of Innovation to Competitive Advantage & Strategy. Types of Innovation (Based on Impact): Incremental, Sustaining, Radical and Disruptive Innovation.	4 Hrs.
Unit 5	Types of innovation (Based on Focus): Product, Process, Service, Business Model and Architectural Innovation. Innovation Approaches: - Open Innovation: Inbound, Outbound, Hybrid. - Closed Innovation. Integration Exercise: Preparing Mind Maps	4 Hrs.

Sr. No.	Textbooks
1.	P.N. Khandwalla – Corporate Creativity: The Winning Edge – Tata McGraw-Hill.
2.	Tony Proctor – Creative Problem Solving for Managers – Routledge.
3.	Idris Mootee – Design Thinking for Strategic Innovation – Wiley
4.	Abhinav Sharma – Design Thinking for Business Innovation – Pearson Education India.
5	Clayton M. Christensen – The Innovator's Dilemma – Harvard Business School Press.
Reference Books	
1.	P.N. Khandwalla – Fourth Eye: Excellence Through Creativity – Wheeler Publishing, New Delhi.
2.	Edward de Bono – Lateral Thinking: Creativity Step by Step – Harper & Row
3.	Tony Buzan – The Mind Map Book – BBC Books.

Web Resources	
1.	Innovation, Business Models and Entrepreneurship, NPTEL, https://nptel.ac.in/courses/110107094
2.	Innovation in Marketing and Marketing of Innovation, https://nptel.ac.in/courses/110107432
3.	Introduction to Creative Thinking: Tools for Success https://www.coursera.org/learn/introduction-to-creative-thinking

Course Title: Social Entrepreneur		Course Category: Open Elective	
Course Code: PB251302			
Teaching Scheme		Examination Scheme	
Lectures: 01 hrs / week		CA-1	10 Marks
Tutorial: Nil		CA-2	10 Marks
Credits: 02		MSE	20 Marks
Semester: First Year (Semester I)		ESE	60 Marks
Course Prerequisite:			
Basic understanding of management principles, business environment, and entrepreneurship concepts			
Course Description:			
This course introduces the concepts and practices of social entrepreneurship, focusing on how innovative business models create social and economic value. It helps students understand, design, and manage social ventures for sustainable impact.			
Course Objectives:			
- To understand the basic concepts and role of social entrepreneurship. - To study how social enterprises address market and social issues. - To develop skills for identifying opportunities and designing social ventures. - To analyze business models and strategies for sustainable social impact.			

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall key terms, concepts, and theories related to social entrepreneurship.	Remember (Level 1)
CO2	Explain and interpret the purpose, structure, and functioning of social enterprises.	Understand (Level 2)
CO3	Critically examine strategies, models, and innovation systems in social entrepreneurship.	Analyze (Level 3)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	2	1	1	-	2	1
CO2	2	2	2	2	1	2	2	2
CO3	3	2	1	1	2	-	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Basic Concepts of Social Entrepreneurship, Social Impact Theory, Concept of Social Entrepreneurship, Socio-economic Concept of Social Entrepreneurship.	6 Hrs.
Unit 2	Social Enterprises: as agents of correcting market failures, Mission & Strategic Identification	6 Hrs.
Unit 3	Industry Analysis and Design Process, Life Cycle of Social Enterprises, Organizational Design for Innovation,	6 Hrs.
Unit 4	Strategy for Social Entrepreneurs, Identifying Opportunity, Systems thinking for Social Innovation, Profile of the Social Entrepreneur,	3 Hrs.
Unit 5	Business Models, Enterprising Models for Social Entrepreneurship. Types of Models & its Application, Sectorial Studies on Social Entrepreneurship, Social Venture Models & its Marketing. Value Proposition	3 Hrs.

Sr. No.	Textbooks/ Reference books/ Cases
1	Bornstein, D., & Davis, S. (2010). Social Entrepreneurship: What Everyone Needs to Know. Oxford University Press
2	Dees, J. G., Emerson, J., & Economy, P. (2001). Enterprising Nonprofits: A Toolkit for Social Entrepreneurs. Wiley.
3	Martin, R. L., & Osberg, S. (2007). Social Entrepreneurship: The Case for Definition. Harvard Business Review Press.
4	Nicholls, A. (2006). Social Entrepreneurship: New Models of Sustainable Social Change. Oxford University Press.

	Web Resources
1	NPTEL – Social Entrepreneurship, https://nptel.ac.in/courses/110/106/110106150/
2	NSRCEL, IIM Bangalore, https://nptel.ac.in/courses/120108004
3	NPTEL – Innovation, Business Models and Entrepreneurship https://onlinecourses.nptel.ac.in/noc25_mg95/preview
4	NPTEL – Entrepreneurship and IP Strategy, https://onlinecourses.nptel.ac.in/noc20_hs66/preview

Course Title: Life Skills		Course Category: Open Elective	
Course Code: PB251303			
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs / week		CA-1	10 Marks
Tutorial: Nil		CA-2	10 Marks
Credits: 02		MSE	20 Marks
Semester: First Year (Semester I)		ESE	60 Marks
Course Prerequisite: • Basic understanding of management principles – introductory exposure to organizational behavior and communication concepts (as covered in foundation MBA orientation). • Proficiency in English communication – ability to read, write, and present ideas clearly in academic and professional settings. • Openness to self-exploration and reflection – willingness to engage in personal assessments, group discussions, and experiential learning activities. • Basic digital literacy – familiarity with MS Office or equivalent tools for preparing presentations, reports, and reflective journals.			
Course Description: This course aims to develop essential life and managerial skills that enhance personal and professional effectiveness among student. It focuses on self-awareness, communication, emotional intelligence, critical thinking, leadership, and adaptability—skills vital for success in today’s dynamic business environment. Through case studies, role plays, and reflective exercises, students will learn to manage themselves and work effectively in teams, preparing them for real-world managerial challenges.			
Course Objectives: 1. Develop self-awareness and emotional intelligence for personal and professional growth. 2. Enhance communication, interpersonal, and teamwork skills. 3. Strengthen decision-making, problem-solving, and stress management abilities. 4. Foster leadership, adaptability, and resilience in dynamic business environments. 5. Promote lifelong learning and ethical professional behavior.			

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	To Understand key concepts of self-awareness, emotional intelligence, communication, critical thinking, stress, and leadership for effective managerial behavior.	Understand (Level 2)
CO2	Apply life skill tools and techniques such as SWOT, Johari Window, time management, and decision-making models in real managerial contexts.	Apply (Level 3)
CO3	Analyze interpersonal situations, stressors, communication barriers, and team dynamics to identify causes and improvement areas.	Analyze (Level 4)
CO4	Evaluate different approaches to decision-making, leadership, conflict resolution, and adaptability to enhance managerial effectiveness and performance.	Evaluate (Level 5)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	-	-	2	1	-	1	1
CO2	2	1	1	1	3	-	2	-
CO3	1	3	-	2	2	-	3	1
CO4	1	3	1	3	2	2	1	3

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit I	Self-Awareness and Emotional Intelligence: Meaning and importance of life skills in management. Self-awareness: concept, importance, and methods. Personality assessment tools – SWOT, Johari Window, MBTI. Emotional Intelligence: definition, components, and importance Role of emotional intelligence in managerial effectiveness.	4
Unit II	Communication and Interpersonal Skills: Process and types of communication verbal, non-verbal, and written. Barriers to effective communication and overcoming them. Listening skills, Business etiquette, presentation skills, and grooming. Interpersonal relationships, assertiveness, and conflict resolution.	4
Unit III	Critical Thinking and Decision Making: Concept and importance of critical thinking for managers. Techniques, Decision-making models and styles, Ethical and data-driven decision making.	4
Unit IV	Time, Stress, and Conflict Management: Time management techniques: goal setting, prioritization, delegation, Tools, Stress: causes, symptoms, and impact on productivity. Stress management techniques: relaxation, mindfulness, physical fitness. Conflict management: causes, handling styles	4
Unit V	Leadership, Teamwork, and Adaptability: Leadership: concept, traits, and contemporary styles, Team building and group dynamics in organizations. Motivation, collaboration, and trust-building. Adaptability and resilience: concepts and importance	4

Sr. No.	Textbooks
1.	Daniel Goleman (1995). Emotional Intelligence: Why It Can Matter More Than IQ. Bantam Books.
2.	Subba Rao, P. (2020). Management and Organisational Behaviour. Himalaya Publishing House.
3.	S. K. Mandal (2012). Effective Communication and Soft Skills. Jaico Publishing House.
4.	Stephen P. Robbins & Timothy A. Judge (2022). Organizational Behavior. Pearson Education India.
	Reference Books
1.	David R. Caruso & Peter Salovey (2004). The Emotionally Intelligent Manager. Jossey-Bass.
2.	Krishna Mohan & Meera Banerji (2013). Developing Communication Skills. Macmillan Publishers India.
3.	Harold Koontz & Heinz Weihrich (2010). Essentials of Management. Tata McGraw- Hill.
4.	Peter G. Northouse (2018). Leadership: Theory and Practice. Sage Publications.

	Web Resources
1.	Communication Skills https://nptel.ac.in/courses/109/106/109106050
2.	Life Skills (NPTEL) https://youtu.be/l1D_0UFmJHY?si=wWIpk0QmRaYRzDFL
3.	Leadership and Team Management (NPTEL – IIT Kharagpur) https://nptel.ac.in/courses/110105112

Course Title: Indian Ethos, Ethics & Corporate Governance		
Course Code: PB251501		Course Category: Indian Knowledge System
Teaching Scheme		Examination Scheme
Lectures: 02 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 02		MSE 20 Marks
Semester: First Year (Semester I)		ESE 60 Marks
Course Prerequisite: Basic understanding of management functions, organizational structures, ethical values, social responsibility, business decision-making, and corporate governance involving companies, stakeholders, and regulatory bodies		
Course Description: This course provides a comprehensive understanding of Indian ethos, ethics and corporate governance. Furthermore, it explores the principles, practices, and challenges with a focus on the Indian and global contexts. Students will learn the roles of boards, independent directors, committees, and regulatory bodies, while also examining the importance of ethics, transparency, and corporate social responsibility. The students will develop their ability to interpret governance frameworks, analyze board practices, and propose governance-enhancing strategies.		
Course Objectives: 1. To introduce to the foundations of Indian ethos, morals, values, ethical principles, and their relevance to business and management. 2. To familiarize with ethical theories, professional ethics, ethical decision-making processes, and corporate governance concepts. 3. To develop awareness about regulatory frameworks, corporate governance practices, ethical leadership, CSR, and emerging ethical issues in Indian business organizations.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall the concepts of Indian ethos, morals, values, ethical principles, ethical theories, and basic corporate governance concepts.	Remember (Level 1)
CO2	Explain ethical theories, ethical decision-making processes, professional ethics, and principles of corporate governance in business contexts.	Understand (Level 2)
CO3	Apply ethical reasoning and governance principles to identify ethical issues, governance challenges, CSR practices, and ethical leadership cases in organizations.	Apply (Level 3)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	-	-	2	1	-	-	1	-
CO2	1	2	2	3	1	-	2	-
CO3	2	3	3	2	2	1	3	1

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Foundations of Indian Ethos and Ethics: Morals, Ethics, and Values, Indian Heritage on Ethics, Fundamental Principles of Ethics, Values in Business, Need for Ethics in the Context of Global Change, Indian vs. Western Thinking.	4 Hrs.
Unit 2	Ethical Theories and Decision-Making: Ethical theories and frameworks (Deontology, Utilitarianism, Virtue Ethics), Professional ethics for managers, Ethical decision-making and dilemmas.	4 Hrs.
Unit 3	Principles of Corporate Governance: Definition and importance of corporate governance, Principles of corporate governance, Major corporate governance challenges, corporate governance in India – overview, Basic governance models.	4 Hrs.
Unit 4	Regulatory Framework and Governance Structures: Regulatory framework of corporate governance in India, Roles and responsibilities of directors and board, recommendation committees in corporate governance, Corporate Social Responsibility,	4 Hrs.
Unit 5	Business Ethics in Governance and Management: Importance of ethics in Indian business organizations, Ethical leadership and decision-making in India, corporate codes of ethics and compliance programs, Whistleblowing mechanisms, Emerging ethical issues in India, anecdotes of corporate governance failures.	4 Hrs.

Sr. No.	Textbooks
1.	Biswanath Ghosh – Indian Ethos & Values for managers, Vikas Publishing House
2.	C.S.V. Murthy – Business Ethics and Corporate Governance, Himalaya Publishing House
3.	A.C. Fernando – Business Ethics: An Indian Perspective, Pearson Education India
4.	B.N. Ghosh – Business Ethics and Corporate Governance, McGraw Hill Education India
5.	S.K. Mandal – Ethics in Business and Corporate Governance, Tata McGraw Hill
6.	K. Aswathappa, J. Ushar Rani, Sunanda Gundavajhala – Business Ethics: Concepts and Cases, Himalaya Publishing House
	Reference Books
1.	M.C. Kuchhal – Corporate Governance, Vikas Publishing House
2.	Velasquez, M. G. – Business Ethics: Concepts and Cases, Pearson
3.	A.C. Fernando – Corporate Governance: Principles, Policies, and Practices, Pearson Education India
4.	Subhash Sharma – Corporate Governance and Social Responsibility of Business, PHI Learning
5.	Marianne M. Jennings – Business Ethics: Case Studies and Selected Readings, Cengage Learning

	Web Resources
1.	Business Ethics and Corporate Governance, SWAYAM https://onlinecourses.swayam2.ac.in/imb25_mg150/preview
2.	Business Ethics, NPTEL, https://nptel.ac.in/courses/110105079
3.	Corporate Social Responsibility, NPTEL, https://nptel.ac.in/courses/110105081

Course Title: Research Methodology Course Code: PB251601 Course Category: Experiential Learning		
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester I)	ESE	60 Marks
Course Prerequisite: • Curiosity and Ambition: A genuine intellectual drive to learn and gain recognition is crucial for a researcher. • Open-mindedness: A researcher must approach the subject with an open mind, free from preconceived notions or biases. • Clear Research Topic/Problem: A well-defined and focused research problem or topic is the starting point for any study. • Data Analysis Methods: You need to know how to analyze the collected data using relevant statistical or qualitative methods.		
Course Description: • Foundational Concepts: Introduction to the nature of scientific research, its significance, different research types, and ethical considerations. • Research Design: Learning to choose and apply appropriate research designs for various study types and theoretical frameworks. • Literature Review: Developing skills to conduct comprehensive literature reviews to identify research gaps and build on existing knowledge. • Data Collection: Understanding and applying various data collection techniques, such as surveys, interviews, and observations, for both qualitative and quantitative data.		
Course Objectives: 1. The objective of the course is to introduce the basic mode of conducting research 2. To explore ideas in formulating research hypotheses & objectives and sample framework for taking up research studies in structured manner. 3. This subject should help researchers to use practices to present unique research.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain the role and importance of research in the social sciences.	Understand (Level 2)
CO2	Apply the issues and concepts salient to the research process	Apply (Level 3)
CO3	Analyze the complex issues inherent in selecting a research problem, selecting an appropriate research design, and implementing a research project.	Analyze (Level 4)
CO4	Evaluate and conduct research (advanced project) in a more appropriate manner	Evaluate (Level 5)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	-	3	-	2	-	2
CO2	-	2	2	2	1	3	1	2
CO3	2	3	1	2	1	3	3	3
CO4	3	3	3	2	3	3	3	3

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Research – Definition: Thesis, Hypothesis, Literature Review, Research methods vs Methodology, Need of Research in Business and Social Sciences, Objectives of Research, Issues and Problems in Research, Characteristics of Research: Systematic, Valid, Verifiable, Empirical and Critical.	6Hrs.
Unit 2	Basic Research, Applied Research, Descriptive Research, Analytical Research, Empirical Research, Qualitative and Quantitative Approaches	6 Hrs.
Unit 3	Research Design – Meaning, Types and Significance, Sample Design – Meaning and Significance Essentials of a good sampling Stages in Sample Design Sampling methods/techniques: Random sampling, stratified sampling, systematic sampling and cluster sampling. Sampling Errors.	6 Hrs.
Unit 4	Methods of Data Collection-Sources of data-Use of secondary data- Methods of collecting primary data-Observation-Interviews, Questionnaires and Schedules. Types of Analysis-Presentation and Interpretation of Data Editing, Classification and Tabulation-Interpretation. Quantitative Tools-Measures of Central Tendency-Dispersion Measures of Correlation-Simple and Multiple Correlation-testing of Hypothesis-Tests based on t-P, Z and Chi-square-Time Series Analysis-Trend Measurement- Moving Averages.	6 Hrs.
Unit 5	Introduction – Objectives –Hypothesis – Research methodology – Analysis and chapter wise test – Testing of hypothesis- Findings - Conclusions - Suggestions and recommendations.	6 Hrs.

Sr. No.	Textbooks
1	Kothari C. R Research Methodology
2	Steven G. Carley: Research Methodology: An Introduction
3	John W. Creswell's Research Design
	Reference Books
1	Donald Cooper and PS Schindler (2009) Business Research Methods, 9th edition, Tata McGraw Hill.
2	Uma Sekaran (2010) Research Methods for Business, 4th edition, Wiley.
3	Fred N. Kerlinger : Foundations of Behavioral Research
4	Naresh Malhotra and S Dash (2009) Marketing Research, 5th edition, Pearson Prentice Hall. 6 Michael V. P Research Methodology.

	Web Resources
1	https://prog.lmu.edu.ng/colleges_CMS/document/books/EIE%20510%20LECTURE%20NOTES%20first.pdf
2	https://mrcet.com/downloads/digital_notes/CSE/Mtech/I%20Year/RESEARCH%20METHODOLOGY.pdf
3	https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_research_method_final.pdf

Course Title: Design Thinking for Social Innovation		
Course Code: PB251701		Course Category: Liberal Learning
Teaching Scheme	Examination Scheme	
Lectures: Nil	CA-1	20 Marks
Tutorial: Nil	CA-2	20 Marks
Practical: 2 hrs./ week	-	-
Credits: 02	-	-
Semester: First Year (Semester I)	ESE	60 Marks
Prerequisite: An open mind and willingness to work in team.		
Course Objectives: 1. Introducing students of MBA to the concept and process of design thinking approach 2. Encourage the students to identify the real world social challenges. 3. Culminate the empathy driven skills among the students for identifying the critical issues and solving the real world social problems. 4. To foster the creativity , problem solving skills and team work		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Identify the real world social based problems using an empathetic approach (tools/techniques) to generate user centered insights.	Understand (Level 2)
CO2	Analyze and define clear problem statements (SMART) through client /user/ designer point of view.	Analyze (Level 4)
CO3	Generate, Evaluate and select multiple innovative and feasible ideas with structure brainstorming techniques.	Apply and evaluate (Level 3&5)
CO4	Develop low cost, low fidelity prototype to communicate the ideas and test through the potential user feedback.	Create and Evaluative (Level 6&5)
CO5	Work effectively in a team and communicate the problem solution through presentation and documentation.	Apply (Level 3)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	2	-	1	-	2	-	1
CO2	1	2	1	1	-	3	-	1
CO3	-	1	2	-	-	-	2	-
CO4	-	1	2	1	1	1	1	1
CO5	-	-	1	-	-	3	3	3

Assessment

CA- I (a) (20M)	Identify the problem faced by society/community. Empathize with the design thinking approach. Synthesize with empathy map. Identify the constraints and enlist the objectives as a designer point of view. Define the problem statement with SMART technique.
CA – II (b) (20M)	Ideate the solution for the defined problem/challenge. Use the principle of SCAMPER/brainstorming/six thinking hats to generate the multiple ideas. Select and filter the ideas by using convergent thinking method. Implement and test the low fidelity prototype

Sr. No.	List of Activities
1	To Identify the Social problems
2	To conduct the empathy research and synthesize with the empathy map
3	To formulate the point of view statement for design challenge
4	To develop the feasible and multiple ideas for the selected problem through brainstorming.
5	To develop low fidelity prototype to represent the idea
6	To implement and test the designed prototype developed based on generated idea.

Sr. No.	Reference books
1	"Design Thinking" – Understanding How Designers think and work, 2 nd edition, Nigel Cross
2	"New age Design Thinking" , Rishabh Anand
3	"An Illustrated Guide to Sustainable Development Goals" Renu Paswan

SEM-II

SYLLABUS

Course Title: Business Policy and Strategic Management		
Course Code: PB252001		Course Category: Program Core Course
Teaching Scheme		Examination Scheme
Lectures: 03 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: Basic knowledge of business management and organizational concepts.		
Course Description: This course provides an in-depth understanding of strategic management and its role in achieving competitive advantage. It covers the evolution and concepts of strategy, strategic intent, and environmental analysis using modern frameworks. Students will learn portfolio analysis tools, competitive and growth strategies, and approaches for effective implementation, including the Balanced Scorecard, change management, and leadership. The course emphasizes both traditional and contemporary strategies such as digital, global, and sustainable approaches.		
Course Objectives: 1. To Explain the fundamentals, evolution, and levels of strategy along with strategic intent (vision, mission, goals, stretch, leverage, and fit). 2. To Apply tools for environmental and industry analysis, including PESTEL, ETOP, Porter's Five Forces, Value Chain, and VRIO. 3. To Analyze portfolio and competitive strategies such as BCG, GE 9-Cell, Ansoff, Blue/Red Ocean, digital, global, and sustainable strategies. 4. To Evaluate corporate and grand strategies, including diversification, mergers, acquisitions, alliances, retrenchment, and implementation methods like the Balanced Scorecard.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain core concepts, evolution, levels, processes, Mintzberg's 5Ps, and strategic intent in strategic management.	Understand (Level 2)
CO2	Apply tools such as PESTEL, Porter's Five Forces, Value Chain, VRIO, and ETOP to analyze the business environment and internal capabilities	Apply (Level 3)
CO3	Analyze portfolios and strategic options using BCG, GE, Ansoff matrices, and competitive strategies including Blue/Red Ocean, digital, global, and sustainable strategies.	Analyze (Level 4)
CO4	Evaluate corporate and grand strategies and implementation frameworks like the Balanced Scorecard for strategic suitability and impact.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	2	2	1	1	1	1
CO2	3	3	1	2	1	2	1	2
CO3	3	3	2	3	2	2	2	3
CO4	3	3	3	3	3	3	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Strategy and the Quest for Competitive Advantage: Military origins of Strategy, Concept and Characteristics of strategic management— Defining strategy — Mintzerbg's 5Ps of strategy — Corporate, Business and Functional Levels of strategy - Strategic Management Process.	6 Hrs.
Unit 2	Strategic Intent & Strategy Formulation: Vision, mission and purpose — Business definition, objectives and goals. Stretch Leverage and Fit.	6 Hrs.
Unit 3	Analyzing Company's Environment: Environmental appraisal — Scenario planning, PESTEL, Preparing an Environmental Threat and Opportunity Profile(ETOP) —Industry Analysis - Porter's Five Forces Model and value chain analysis, VRIO Framework.	6 Hrs.
Unit 4	Corporate Portfolio Analysis: Business Portfolio Analysis - BCG Matrix — GE 9 Cell Model - Generic Competitive Strategies: Low cost, Differentiation, Focus, Ansoff matrix, Blue & Red ocean Strategy, Digital, Global and Sustainable Strategy.	6 Hrs.
Unit 5	Grand Strategies: Stability, Growth (Diversification Strategies, Vertical Integration Strategies, Mergers, Acquisition & Takeover Strategies, Strategic Alliances & Collaborative Partnerships), Retrenchment. Strategy implementation- Balanced Scorecard, Measuring performance, Change management and Leadership.	6 Hrs.

Sr. No.	Textbooks
1.	A.A. Thompson A.J. Shrikland J.E. Gamble, Crafting and Executing Strategy — Atest for competitive advantage, Tata Me Graw Hill, 4th Edition 20052.Ranjan Das, Crafting the strategy: concept and cases in strategic management, TataMc Graw Hill, 2004.
2.	Kazmi Azher , Business Policy and Strategic Management , Tata Mc Graw HiII2nd Edition 2003,
3.	Subha Rao P, Business Policy and Strategic Management , Himalaya PublishingHouse 1st Edition reprint 2004

Reference Books	
1.	Strategic Management: A South Asian Perspective – Michael A. Hitt, R. Duane Ireland, Robert E. Hoskisson, 9th Edition, Cengage Learnin
2.	Strategic Management: Concepts and Cases – Fred R. David & Forest R. David, Pearson Education.
3.	Crafting and Executing Strategy: The Quest for Competitive Advantage – Arthur A. Thompson, A.J. Strickland, John E. Gamble, McGraw Hill Education.

Web Resources	
1.	Strategic Management, NPTEL, https://nptel.ac.in/courses/110107146
2.	Strategic Management: An Introduction, NPTEL https://nptel.ac.in/courses/122105025
3.	Strategic Planning (Short Course), Oxford Home Study Centre, https://www.oxfordhomestudy.com/courses/online-management-courses/strategic-planning-free-course

Course Title: Optimization Techniques		
Course Code: PB252002		Course Category: Program Core Course
Teaching Scheme		Examination Scheme
Lectures: 02 hrs / week		CA-1 10 Marks
Tutorial: 02 hrs / week		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: - Simple arithmetic and data analysis skills - Introductory knowledge of problem-solving methods - Familiarity with basic mathematical logic and terminology - General awareness of real-world business decision-making scenarios		
Course Description: This course offers a comprehensive introduction to Operations Research (OR), a scientific approach to decision-making that helps managers optimize resources and solve complex problems in business, engineering, and public systems. Students will explore the theoretical foundations, methodologies, and real-world applications of OR to enhance strategic and operational efficiency.		
Course Objectives: - Understand and apply the principles and methodologies of Operations Research in real-life managerial problems. - Formulate and solve linear programming problems using graphical and simplex methods. - Use assignment and transportation models for effective resource allocation. - Analyze strategic situations using Game Theory and apply replacement models. - Apply inventory control techniques and effectively manage projects using PERT and CPM.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain Operations Research concepts and models	Understand (Level 2)
CO2	Apply methods like Linear Programming, Assignment, Transportation, Replacement, Game Theory, Inventory, and Project Management to solve managerial problems	Apply (Level 3)
CO3	Analyze alternative solutions and assess optimization outcomes using quantitative methods.	Analyze (Level 4)
CO4	Evaluate and develop effective decision-making strategies by integrating appropriate Operations Research tools.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	-	1	-	1	2	-	-
CO2	3	3	-	2	-	3	1	2
CO3	3	3	2	2	2	3	2	2
CO4	3	3	2	3	2	3	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction: The Historical Development, Nature, Meaning and Management Application of Operations research. Modelling, Its Principal and Approximation of O.R. Models, Main characteristic and phases, Scope, Role on Decision Making and Development of Operation Research in India.	8 Hrs.
Unit 2	Linear Programming: LPP Formulation, Graphical solution, standard and matrix form of linear programming problems, Simplex method and its flow chart, Duality in LPP: Definition of Dual Problem, General Rules for converting any Primal into its Dual.	8 Hrs.
Unit 3	Assignment Model: Hungarian Method, Unbalanced Assignment Problems. Transportation Model: Northwest Corner Method, Least Cost Method, Vogel's Approximation Method , MODI (Modified Distribution) method. Unbalanced Transportation Problems.	8 Hrs.
Unit 4	Replacements Models, Game Theory: Introduction, Terminology of Game Theory; Players, Strategies, Payoff matrix, Maximin-Minimax Principle, Saddle point. Types of Games. Two Person Zero sum games, Pure strategy Games.	8 Hrs.
Unit 5	Inventory Management Techniques; Introduction to inventory control problem, types of inventory, different cost is inventory problem. Project Management by PERT/CPM: Basic steps in PERT/CPM, Techniques, Network Diagram Representation, Forward and Backward Pass-computation, Representation in Tabular form, Determination of Critical path, Critical activity, Floats and Slack Times,	8 Hrs.

Sr. No.	Textbooks
1.	Introduction to Operations Research, Frederick S. Hillier & Gerald J. Lieberman
2.	Operations Research: Applications and Algorithms, Wayne L. Winston & Jeffrey B. Goldberg
3.	Operations Research: An Introduction, Hamdy A. Taha
Reference Books	
1.	Operation Research, Sharma J.K, Himalaya Publications house, New Delhi.
2.	Operations Research-An Introduction, Taha H.A, Mc-Millan, New York.
3.	Operations Research, Prem Kumar Gupta, D.S. Hira, S Chand and Co Ltd, New Delhi.
4.	Operations Research, Kalawati, Vikas Publication Pvt. Ltd, New Delhi

Web Resources	
1.	Operations Research, NPTEL (IIT Kharagpur), https://onlinecourses.nptel.ac.in/noc25_ag15/preview
2.	Introduction to Operations Research, NPTEL (IIT Madras), https://onlinecourses.nptel.ac.in/noc20_ma23/preview
3.	Fundamentals of Operations Research, NPTEL (IIT Roorkee), https://onlinecourses.nptel.ac.in/noc22_ma48/preview

Course Title: Legal Aspects of Business (LAB) Course Category: Program Core Course Course Code: PB252003		
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester II)	ESE	60 Marks
Course Prerequisite: • Basic understanding of management fundamentals and functional areas of business. • Awareness of the economic and regulatory environment in which businesses operate • Proficiency in communication skills to interpret, discuss, and summarize legal and business cases.		
Course Description: This course provides an overview of the legal frameworks governing business in India, including contract law, company law, consumer protection, negotiable instruments, and intellectual property. It focuses on applying these laws to business transactions, compliance, and dispute resolution, preparing students to make legally sound and ethical business decisions.		
Course Objectives: 1. To introduce students to the fundamental legal frameworks governing business transactions in India. 2. To develop understanding of key legislations including the Indian Contract Act, Sale of Goods Act, Negotiable Instruments Act, Companies Act, Consumer Protection Act, and Intellectual Property laws. 3. To enable students to apply legal provisions in resolving business disputes, ensuring compliance, and protecting stakeholder interests. 4. To enhance analytical skills for interpreting legal cases and evaluating their implications for business operations and decision-making.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall Legal aspects of Business concepts and provisions of business laws including Contract Law, Sales of Goods Act, Negotiable Instrument Act, Companies Act, and Consumer Protection Act.	Remember (Level 1)
CO2	Explain the legal principles governing business transactions and discuss their implications for business operations.	Understand (Level 2)
CO3	Apply appropriate legal provisions to address business disputes and ensure regulatory compliance	Apply (Level 3)
CO4	Analyze legal situations in business contexts to detect potential risks and suggest legally sound solutions	Analyze (Level 4)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	1	-	3	-	2	2	1
CO2	2	3	1	3	-	2	3	2
CO3	3	2	1	3	2	2	3	2
CO4	2	3	1	3	3	2	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction to Legal Aspects of Business and Indian Contract Act, 1872: Meaning and Scope of Business Laws -Nature and Types of Contracts - Essentials of a Valid Contract -Offer and Acceptance- Consideration- Capacity to Contract- Free Consent- Legality of Object- Void Agreements- Contingent Contracts- Performance of Contracts- Discharge of Contracts- Remedies for Breach of Contracts- Indemnity and Guarantee	6 Hrs.
Unit 2	Sales of Goods Act, 1930: Nature of Contract of Sale- Conditions and Warranties- Transfer of Ownership- Performance of Contract of sale- Rights of Unpaid Seller- Remedies for Breach of Contract of sale	6 Hrs.
Unit 3	Negotiable Instruments Act: Nature of Negotiable Instruments- Promissory notes, Bills of Exchange and Cheques- Parties to Negotiable instruments and their Capacity- Holder and Holder in due course- Presentment, dishonor of Negotiable Instruments- Liability of parties	6 Hrs.
Unit 4	Companies Act, 2013: Definition, Meaning of Company- Features and Types of Companies- Incorporation of Company- Memorandum of Association- Article of Association- Prospectus- Share Capital- Membership of a company-Company Meetings	6 Hrs.
Unit 5	Consumer Protection Act, 1986: Introduction and Definition- Consumer Dispute Redressal Agencies- Complaint and Procedure of Redressal- Unfair Trade Practices Intellectual Property Legislation: Introduction- The Patent Act, 1970, Kinds of Patents, Administration of Patents System in India	6 Hrs.

Sr. No.	Textbooks
1.	N.D. Kapoor – Elements of Mercantile Law (Sultan Chand & Sons)
2.	M.C. Kuchhal & Vivek Kuchhal – Business Law (Vikas Publishing)
3.	P.C. Tulsian & Bharat Tulsian – Business Law (McGraw Hill Education)
	Reference Books
1.	Ravinder Kumar – Legal Aspects of Business (Cengage Learning)
2.	S.N. Maheshwari & S.K. Maheshwari – Business Law (Himalaya Publishing House)
3.	Bulchandani, K.R. – Business Law for Management (Himalaya Publishing)
4.	Bare Acts – Indian Contract Act, Sale of Goods Act, Negotiable Instruments Act, Companies Act, Consumer Protection Act, and Patent Act (latest editions).

	Web Resources
1.	Offer Case Study, SWAYAM, https://youtu.be/R2E0HDetaIc
2.	Indemnity and Guarantee Part- I, SWAYAM, https://youtu.be/dbMLMdt23q
3.	Indemnity and Guarantee Part- II, SWAYAM, https://youtu.be/fMBemlcAi4

Course Title: Financial Management (FM)		
Course Code: PB252101		Course Category: Program Elective Course
Teaching Scheme		Examination Scheme
Lectures: 02 hrs. / week		CA-1 10 Marks
Tutorial: 02 hrs. / week		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: - Basic Understanding of terms such as Present Value and Future Value used in Decision Making - Specific Business Concepts –Basic Understanding of different decision-making techniques like Capital Budgeting and Capital Structure. - Analytical Reasoning Skills-The ability to think logically and critically about financial problems is crucial for applying Financial Management Skills - Data Interpretation-Understanding how to read and interpret simple Financial Data is crucial.		
Course Description: A financial management course teaches individuals and businesses to strategically plan, organize, control, and oversee financial activities to achieve financial goals, such as maximizing profit, ensuring sustainability, and managing risk. Key topics include financial planning, budgeting, and managing cash flow, analyzing financial reports, investment decisions, Raising capital through debt and equity, and controlling costs.		
Course Objectives: - To enable the students to understand the fundamentals of Financial Management - To introduce the students to various Concepts of Decision Making from Financial perspective. - To acquaint the students with concepts and techniques used in Financial Management and to enable them to apply that knowledge in business decisions making. - To develop students critical thinking skills and analytical abilities in resolving business problems by employing various tools and techniques of Financial Management		
Course Outcomes:		
Cos	After completion of the course: Students will be able to	Bloom's Level
CO1	Explain the scope, objectives and functions of Financial Management, including the role of finance in business decision- making.	Understand (Level 2)
CO2	Apply fundamental time value of money concepts and Capital Budgeting Techniques for Business Decision Making.	Apply (Level 3)
CO3	Analyze working capital management decisions, including cash, inventory, receivables, and payables management for operational efficiency.	Analyze (Level4)

CO-PO Mapping

CO-PO Mapping								
Cos	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	-	2	-	1	1	1
CO2	3	2	1	-	2	1	1	1
CO3	2	3	-	-	-	1	1	1

Assessment	
CA-1 (a) - (10M)	PPT / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	PPT/ Assignment/ MCQ Test etc.
MSE (c) - (20M)	Internal Exam

Course Contents		
Unit 1	Basics Of Financial Management Introduction to Business Finance, Objectives of Financial Management, Roles and Responsibilities of Finance Manager, Types of Financing Decisions Finance and it's Functions with other Disciplines.	8 Hrs.
Unit 2	Planning And Analysis Time Value of Money Basics Concept of Future Value, Present Values with Numerical, Financial Statement Analysis using Ratio Analysis, Meaning and importance of financial planning, Preparation of Pro-forma Income Statement and Balance Sheet, Computation of external financing requirements	8 Hrs.
Unit 3	Capital Structure and Working Capital Requirement Cost of Capital ,WACC,Determination of Optimal Capital Structure ,Decision making on parameters of PE,ROI ,EPS MPS Approach, Sources of Long and Short term Finance , Working Capital Management Components ,Short and Long term Planning ,Cash Management	8 Hrs.
Unit 4	Capital Budgeting Meaning and Importance of Capital Budgeting, Types and Features of Capital Budgeting, Techniques of Capital Budgeting, Payback Period, ARR, NPV, PI, IRR, Profitability Index.	8 Hrs.
Unit 5	Leverage And Dividend Decisions Types of leverages and Decisions, Business Risk, Operating and Financial Risk and other types of Risks, Dividend Policies and its Determinants affecting the Dividend Decisions.	8 Hrs.

No.	Textbooks
1.	Financial Management—I M Pandey (Vikas Publishing House)
2.	Financial Management---Prassana Chandra (Tata McGraw Hill)
3.	Financial Management-Rajiv Srivastava and Anil Mishra (Oxford University press)
Reference Books	
1.	Financial ManagementTheory & Practice and Eugene F. Brigham/Michael C. Ehrhardt's
2.	Fundamentals of Financial Management by James C. VanHorne
3.	Financial Management: Text and Problems---MY Khan and PK Jain
4.	Brealey.,& Myers., Principles of corporate finance (710h ed.). Tata McGraw Hill Publications

Web Resources	
1.	Financial Management for Managers—Prof.Anil K Sharma https://onlinecourses.nptel.ac.in/noc20_mg31/preview
2.	Corporate Finance---By Prof.Abhijeet Chandra IIT Kharagpur https://onlinecourses.nptel.ac.in/noc21_mg93/preview

Course Title: Marketing Management		
Course Code: PB252102		Course Category: Program Elective Course
Teaching Scheme		Examination Scheme
Lectures: 03 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: Basic knowledge of business fundamentals and management principles is recommended. Familiarity with introductory economics and communication skills will be helpful for understanding marketing concepts and applications.		
Course Description: This course provides an overview of marketing principles and practices, covering core concepts, consumer behavior, segmentation, targeting, positioning, and the marketing mix (4Ps). It emphasizes brand management, competitive analysis, and the impact of digital trends. Students will also learn to measure marketing effectiveness through key metrics and develop a comprehensive marketing plan through practical activities and case studies.		
Course Objectives: 1. To introduce the fundamental concepts, philosophies, and scope of marketing in the business environment. 2. To develop an understanding of consumer behavior, segmentation, targeting, and positioning strategies. 3. To apply marketing mix (4Ps) strategies in designing effective marketing solutions. 4. To analyze branding approaches, product life cycle, and competitive strategies for gaining market advantage. 5. To evaluate marketing performance using key metrics and to formulate a comprehensive marketing plan.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall core concepts, philosophies and marketing environment.	Remember (Level 1)
CO2	Demonstrate market segmentation, targeting and positioning strategies.	Understand (Level 2)
CO3	Identify marketing mix (4Ps) strategies	Apply (Level 3)
CO4	Analyze Product life cycle and competitive strategies for the product and design a marketing plan.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	1	2	1	1	1	2
CO2	3	2	2	2	2	1	1	3
CO3	3	3	3	3	2	2	1	3
CO4	3	3	3	3	3	2	2	3

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction to Marketing and Core Concepts Definition and Scope of Marketing, Understanding the role of marketing in business. Marketing Philosophies: Production, product and service marketing, selling, marketing, and societal marketing concepts. Core Marketing Concepts: Needs, wants, demand, market offerings, customer value, and satisfaction. The Marketing Environment: Micro and macro-environmental factors.	6 Hrs.
Unit 2	Market Segmentation Market Segmentation: Bases for segmentation — geographic, demographic, psychographic, and behavioral. Targeting and Positioning: Choosing the right target market and creating a positioning strategy. Practical Activity: Developing a segmentation, targeting, and positioning (STP) strategy for a product.	6 Hrs.
Unit 3	Marketing Mix Strategies (4Ps) Product Strategy: Product classification, product life cycle (PLC), new product development, and product differentiation. Pricing Strategies: Factors affecting pricing decisions, pricing approaches (cost-based, value-based, and competition-based), and psychological pricing. Place (Distribution) Strategy: Channels of distribution, types of intermediaries, and logistics management. Promotion Strategy: Integrated marketing communication (IMC), advertising, sales promotion, public relations, and personal selling. Practical Activity: Designing a marketing mix (4Ps) strategy for a real or hypothetical product/service.	6 Hrs.
Unit 4	Competitive Analysis Competitive Analysis: Identifying competitors, competitive advantage, and strategies for positioning against competitors. Sustainable, Cross Culture and Global Marketing. Practical Activity: Case study on successful brand positioning and analysis of competitors.	6 Hrs.
Unit 5	Marketing Metrics and Marketing Plan Marketing Metrics: Understanding key performance indicators (KPIs), customer acquisition cost, customer lifetime value, and return on marketing investment (ROMS), Developing a Marketing Plan: Structure and components of a marketing plan — situation analysis, marketing objectives, strategies, action plan, and budget.	6 Hrs.

Sr. No.	Textbooks
1.	Philip Kotler, Gary Armstrong – Principles of Marketing, Pearson Education.
2.	Michael R. Czinkota & Masaaki Kotabe – Marketing Management, Cengage Learning.
3.	William M. Pride & O.C. Ferrell – Marketing, Cengage Learning.
Reference Books	
1.	Philip Kotler, Kevin Lane Keller – Marketing Management, Pearson.
2.	Lamb, Hair, McDaniel – Marketing, Cengage Learning.
3.	Crafting and Executing Strategy: The Quest for Competitive Advantage – Arthur A. Thompson, A.J. Strickland, John E. Gamble, McGraw Hill Education.

Sr. No.	Web Resources
1.	Marketing Management – I, NPTEL, https://onlinecourses.nptel.ac.in/noc22_mg57/preview
2.	NOC: Marketing Management – I, IIT Kanpur, NPTEL, https://nptel.ac.in/courses/110104068
3.	Integrated Marketing Management, NPTEL, https://onlinecourses.nptel.ac.in/noc25_mg30/preview

Course Title: Production and Operations Management (POM)		
Course Code: PB252103		Course Category: Program Elective Course
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs / week	CA-1	10 Marks
Tutorial: Nil	CA-2	10 Marks
Credits: 03	MSE	20 Marks
Semester: First Year (Semester II)	ESE	60 Marks
Course Prerequisite: • Professional Experience: For postgraduate degrees, relevant professional experience is often valued as it provides practical context and enhances an applicant's profile. • Open to All Disciplines: Many Production and Operations Management programs are open to students from various backgrounds, including engineering, business, and other disciplines.		
Course Description: • Core Focus: To understand how to design, plan, control, and improve production and service systems. • Goal: To increase operational efficiency, reduce waste, optimize resource use, and enhance quality to gain a competitive advantage. • Broad Applicability: Applicable to both manufacturing and service industries, including healthcare, transportation, and technology.		
Course Objectives: 1. Introduces the concepts and theories of operations management, with an emphasis on production of goods. 2. Applications of the concepts are illustrated through real-life cases. 3. It is expected to equip students with relevant insights and analytical skills		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Identify and explain the roles and responsibilities of operations managers in various organizational contexts.	Remember (Level 1)
CO2	Demonstrate knowledge of managing production and service operations, including process types and capacity planning.	Understand (Level 2)
CO3	Apply principles of Just-In-Time (JIT) and design effective material handling and inventory systems.	Apply (Level 3)
CO4	Analyze different production techniques, plant layout designs, and quality management systems.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	-	1	3	-	2	3	2
CO2	2	1	1	2	-	2	2	2
CO3	2	2	-	2	2	1	1	-
CO4	1	3	-	2	2	2	1	-

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Scope of Production Management, Production System, Types of Production, Benefits of Production Management, Responsibility of a Production Manager, Layouts, Make or Buy Analysis	6 Hrs.
Unit 2	Facility Location and factors affecting facility location, Types of Production: Project, jobbing, batch, line, mass, continuous; Capacity Planning	6 Hrs.
Unit 3	Overview, Inventory Management, MRP, Material Management, JIT, Stores Management, Vendor Evaluation, Principles of Material Handling, 5S, Kanban, Kaizan, Poka Yoke, TPS, Ergonomics, ABC Analysis, VED Analysis,	6 Hrs.
Unit 4	Quality Concepts – Definition of Quality, Dimensions of Quality, Cost of Quality and Quality Gurus. TQM Philosophy – Principles of TQM, Deming's Philosophy, Juran's Philosophy & Crosby's Philosophy. Quality Management System – ISO. Customer Focus, Supplier partnership and Employee Involvement.	6 Hrs.
Unit 5	Productivity Improvement Techniques: Work study; Method study; Work measurement: time study: stop watch time study; Work sampling. Maintenance: maintenance policies for facilities and equipment; Preventive versus breakdown maintenance; Procedure for maintenance, total productive maintenance (TPM)	6 Hrs.

Sr. No.	Textbooks
1	Everette E. Adam, Jr. Ronald J. Ebert; Publisher: Prentice Hall of India
2	Production and Operations Management by N.G. Nair; Publisher: Tata Mc. Graw Hill
3	Production and Operations Management by Panneerselvam R; Publisher: Prentice Hall of India
Reference Books	
1	Operations Management by Shafer Scott M; Publisher: John Wiley
2	Succeeding in Project-Driven Organizations by Knutson Joan; Publisher: John Wiley
3	Operations Management" by William J. Stevenson
4	Production and Operations Management" by R. Panneerselvam
5	Production and Operations Management 6th Edition: S N Chary

Web Resources	
1	www.yourarticlelibrary.com/industries/plant-layout/plant-layout...importance/90129
2	https://bizfluent.com/info-7899360-types-manufacturing-systems
3	http://public.kenanflagler.unc.edu/2017msom/MSOM%20and%20SIG%20Program/Track%205/C/MSOM2017_1_0199.pdf

Course Title: Human Resource Management (HRM) Course Code: PB252104 Course Category: Program Elective Course		
Teaching Scheme		Examination Scheme
Lectures: 03 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: Basic knowledge of how organizations operate, the roles of employees and managers, and workplace awareness related to technology, ethics, and diversity		
Course Description: This course introduces the principles and practices of Human Resource Management (HRM). It covers the fundamentals of managing people, HR planning and staffing, employee development, compensation, and industrial relations. The course also explores contemporary HR trends such as HR analytics, diversity, ethics, and international HRM, helping students understand how HR contributes to organizational success.		
Course Objectives: 1. To provide a strong conceptual understanding of Human Resource Management, its evolution, and strategic role in organizations. 2. To develop knowledge of HR planning, staffing, talent acquisition, and human resource development practices, including training, performance appraisal, and compensation. 3. To enable students to understand and analyze industrial relations, trade unions, grievance handling, and conflict resolution mechanisms. 4. To expose students to contemporary HRM issues such as HR analytics, diversity and inclusion, ethical challenges, and global HR practices		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, functions, evolution, and strategic importance of Human Resource Management, including HRM architecture and its linkage with organizational vision.	Remember (Level 1)
CO2	Explain HR planning and staffing processes such as job analysis, recruitment, selection, onboarding, succession planning, retention, and the use of e-recruitment and AI in hiring.	Understand (Level 2)
CO3	Apply HRD and compensation concepts—including training, performance appraisal, career planning, job evaluation, and compensation strategies—to basic organizational scenarios while considering legal aspects	Apply (Level 3)
CO4	Analyze industrial relations systems and contemporary HRM issues such as trade unions, collective bargaining, conflict management, HR analytics, DEI, E-HRM, employee engagement, and international HR practices.	Analyze (Level 4)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	1	-	2	-	-	3	-
CO2	3	2	-	1	2	-	3	-
CO3	3	3	2	2	3	1	3	-
CO4	2	3	3	3	3	-	3	1

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Fundamentals of Human Resource Management Conceptualization and Fundamentals of Managing people in the organization-Nature of HRM-Functions of HRM-Evolution of HRM- Difference between HRA, IR, HRP and HRD- HRM Architecture and its linkage with Organizational Vision- Factors affecting HRM in an organization-Strategic Human Resource Management	6Hrs.
Unit 2	Human Resource Planning and Staffing Job Analysis -Job Design -Human Resource Planning- Recruitment and Selection-onboarding – Employer branding and talent acquisition- E- recruitment and use of AI in hiring- Succession planning- Promotion- Transfer & Demotion – Retention & Retrenchment -Exit Interviews	5Hrs.
Unit 3	Human Resource Development and Compensation Training & Development- Career Planning -Performance Appraisal – Organizational Climate-Organizational Culture- Organizational Development -Job Evaluation -Wages & Salary Administration-Compensation strategies: fixed, variable, and incentives-Employee benefits and rewards systems- Legal Consideration in compensation	6Hrs.
Unit 4	Industrial Relation Dynamics of Employer, Employee and the State; Trade Unions: Past, present and the future; Industrial Harmony: Workers’ Participation, Collective Bargaining, Grievance, Discipline; Dispute Resolution and Conflict Management	6 Hrs.
Unit 5	Contemporary Issues in HRM HR analytics and data-driven decision-making- Diversity, equity, and inclusion (DEI)- E-HRM-Ethical issues and future of HRM with AI- Employee Engagement; International Dimensions of HRM	7Hrs.

Sr. No.	Textbooks
1.	Gary Dessler – Human Resource Management (Pearson)
2.	Michael Armstrong – Armstrong’s Handbook of Human Resource Management Practice
3.	Aswathappa – Human Resource Management: Text and Cases (McGraw Hill)
4.	VSP Rao – Human Resource Management: Text and Cases (Excel Books)
Reference Books	
1.	Dr. C.B. Mamoria, Dr. P. Subba Rao, Dr. Satish Mamoria Dynamics of Industrial Relations Himalaya Publishing House 2023
2.	Dr T.V. Rao – Human Resource Development Handbook
3.	Dave Ulrich, Jon Younger, Wayne Brockbank, Mike Ulrich HR from the Outside In McGraw-Hill Professional 2012
4.	Arun Monappa – Industrial Relations and Labour Laws McGraw Hill Education

Sr. No.	Web Resources
1.	Human Resource Management NPTEL https://nptel.ac.in/courses/122105020
2.	Principles of Human Resource Management NPTEL https://www.digimat.in/nptel/courses/video/110105069
3.	AI in Human Resource Management course NPTEL Youtube https://youtu.be/SoRhqer6EJI?si=22sIGSLOOgepiJVk

Course Title: Business Analytics		
Course Code: PB252201		Course Category: Multi-Disciplinary
Teaching Scheme		Examination Scheme
Lectures: 03 hrs / week		CA-1 10 Marks
Tutorial: Nil		CA-2 10 Marks
Credits: 03		MSE 20 Marks
Semester: First Year (Semester II)		ESE 60 Marks
Course Prerequisite: - Students are expected to have a basic understanding of management principles, organizational processes. - Familiarity with fundamentals of information technology including computer applications and database concepts. - Familiarity with basic decision-making processes and business operations.		
Course Description: This course provides a comprehensive introduction to Business Analytics, focusing on how data-driven insights support effective decision-making across business functions. It covers the fundamentals of analytics, Big Data concepts, and analytical decision-making processes, along with applications in marketing, finance, HR, and operations. Students will learn how to interpret and utilize data for business improvement, understand ethical considerations in data handling, and explore real-world case studies demonstrating the strategic value of analytics in organizations.		
Course Objectives: - To provide a foundational understanding of business analytics concepts, evolution, and its growing role in modern organizations. - To distinguish between analytics, business analysis, business intelligence, and data science. - To familiarize students with basic tools of business analytics, including data exploration and visualization techniques. - To explore the applications of business analytics in functional areas such as marketing, finance, HR, and operations.		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Remember Basic concepts of business analytics, big data, and analytical decision-making used in organizations.	Remember (Level 1)
CO2	Understand the role of data, types of analytics, big data characteristics, and ethical issues in business analytics.	Understand (Level 2)
CO3	Apply analytical thinking to simple business problems in business domains like marketing, finance, HR, and operations.	Apply (Level 3)
CO4	Analyze business situations using analytics to support decision-making in business domains like marketing, finance, HR, and operations.	Analyze (Level 4)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	–	1	–	1	–	–
CO2	1	2	–	2	–	2	2	2
CO3	3	2	2	2	2	2	2	2
CO4	2	3	1	1	2	1	1	1

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Business Analytics Basics Definition of analytics, The Growing Role of Business Analytics, Types of Analytics - Descriptive, Diagnostic, Predictive, Prescriptive, Concept of insights. Importance of data in business analytics, Differences between data, information and knowledge, Quality of data	6 Hrs.
Unit 2	Big Data 5Vs of Big Data, Big Data Collection and Ethics, Data sources and collection methods, Data privacy, security, and ethical considerations.	6 Hrs.
Unit 3	Analytical decision-making: Analytical decision-making process, characteristics of the analytical decision-making process. Breaking down a business problem into key questions that can be answered through analytics, Characteristics of good questions, Skills of a good business analyst,	6 Hrs.
Unit 4	Business Analytics in Marketing and Finance: Marketing Analytics, , targeting and positioning, Campaign management and ROI measurement, Data-driven marketing strategies. Financial Analytics - Risk management, Financial forecasting and planning, Financial performance improvement through analytics (Non-Statistical - Conceptual Treatment only).	6 Hrs.
Unit 5	Business Analytics in HR and Operations: HR Analytics, Workforce planning and talent management, Employee engagement and performance measurement Operations Analytics - Process optimization and efficiency improvement, Supply chain analytics and logistics management,	6 Hrs.

Sr. No.	Textbooks
1.	Davenport, T. H., & Harris, J. G. (2007). "Competing on analytics: The new science of winning". Harvard Business School Press.2.
2.	Provost, F., & Fawcett, T. (2013). "Data science for business: What you need to know about data mining and data-analytic thinking". O'Reilly Media.3.
	Reference Books
1.	Sharda, R., Delen, D., & Turban, E. (2019). "Business intelligence, analytics, and data science: A managerial perspective" (4th ed.). Pearson.
2.	Winston, W. L. (2014). "Marketing analytics: Data-driven techniques with Microsoft Excel". Wiley.10.
3.	Narayanan, A., & Bhattacharya, A. (2023). "Big data in finance: Data analytics in financial services and banking". Wiley.11.
4.	Fitz-enz, J. (2010). "The new HR analytics: Predicting the economic value of your company's human capital investments". AMACOM
5	Sharda, R., Delen, D., & Turban, E. (2019). "Business intelligence, analytics, and data science: A managerial perspective" (4th ed.). Pearson.

Sr. No.	Web Resources
1.	Business Analytics For Management Decision, NPTEL, https://nptel.ac.in/courses/110105089
2.	Business analytics and data mining Modeling using R, NPTEL, https://nptel.ac.in/courses/110107092
3.	Business Analytics & Text Mining Modeling using Python, NPTEL, https://nptel.ac.in/courses/110107129

Course Title: Artificial Intelligence for Managerial Decision		
Course Code: PB252401		Course Category: VSEC
Teaching Scheme	Examination Scheme	
Lectures: 02 hrs / week	CA-1	10 Marks
Practical: Nil	CA-2	10 Marks
Credits: 02	MSE	20 Marks
Semester: First Year (Semester II)	ESE	60 Marks
Course Prerequisite: - A basic understanding of computers and operating systems. - Foundational knowledge of Understanding of simple business/management concepts. - Basic skills in IT. - Familiarity with Microsoft Office Excel at a fundamental level.		
Course Description: This course is designed to provide an introductory understanding of Artificial intelligence (AI) concepts, tools, technologies and applications in business contexts. Through lectures and case studies students will explore how Artificial intelligence is transforming industries, driving innovation and shaping business strategies		
Course Objectives: - To provide a strong foundation in Artificial Intelligence concepts and their role in organizations and business processes. - To understand the role of artificial intelligence and machine learning in business and decision-making. - To introduce Artificial Intelligence tools and techniques for data-driven decision-making. - To gain knowledge on AI-based governance, business analytics, and change management		

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Remember the concepts, components, and applications of Artificial Intelligence in business and management.	Remember (Level 1)
CO2	Understand the concepts an role of AI techniques in applicable to business contexts	Understand (Level 2)
CO3	Apply basic Artificial Intelligence techniques to support managerial decision-making.	Apply (Level 3)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	–	1	1	1	1	1
CO2	2	2	–	2	1	2	2	2
CO3	3	3	2	2	2	2	2	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (c) - (20M)	Subjective Test

Course Contents		
Unit 1	Introduction to Artificial Intelligence (AI) Concepts, Meaning and terminology, Types of AI: Narrow AI and General AI Foundations of Artificial Intelligence, Benefits and limitations of AI for managers	4 Hrs.
Unit 2	AI Applications in Business AI in marketing and customer analytics, AI in finance and investment analysis, AI in supply chain management and logistics, AI in human resources and talent management.	4 Hrs.
Unit 3	Strategic Integration of AI Understanding generative and other forms of AI, Use of AI into Business their: products, processes and overall business strategies, Insight use of AI as a core element shaping business decision-making processes.	4 Hrs.
Unit 4	AI Techniques in Business Machine Learning, Natural Language Processing, Predictive Analytics, and Decision Support Systems and Recommendation systems in business.	4 Hrs.
Unit 5	Ethical, Legal, and Strategic Aspects of AI: Ethical and Legal Implications of AI in Business, Data Privacy, fairness and transparency in AI systems	4 Hrs.

Sr. No.	Textbooks
1.	Russell, S. & Norvig, P. – Artificial Intelligence: A Modern Approach, Pearson Education.
2.	Turban, E., Sharda, R., & Delen, D. – Decision Support and Business Intelligence Systems, Pearson Education.
3.	Davenport, T. & Kirby, J. – Only Humans Need Apply: Winners and Losers in the Age of Smart Machines, Harper Business.
Sr. No.	Reference Books
1.	Bhatnagar, S. – Artificial Intelligence and Business Analytics, Oxford University Press.
2.	Nilsson, N. J. – Principles of Artificial Intelligence, Morgan Kaufmann
3.	Haenlein, M. & Kaplan, A. – AI and Machine Learning in Management, Springer.
4.	Chaffey, D. – Digital Business and E-Commerce Management, Pearson.
5.	Bhatnagar, S. – Artificial Intelligence and Business Analytics, Oxford University Press.

Sr. No.	Web Resources
1.	An Introduction to Artificial Intelligence, NPTEL, https://nptel.ac.in/courses/106102220
2.	Artificial Intelligence for Economics, NPTEL, https://nptel.ac.in/courses/106105470
3.	Fundamentals of Artificial Intelligence, NPTEL, https://nptel.ac.in/courses/112103280

Course Title: Personality Development			
Course Code: PB252701		Course Category: Value Added Course	
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs / week		CA-1	25 Marks
Practical: Nil		CA-2	25 Marks
Credits: AU			
Semester: First Year (Semester II)			
Course Prerequisite:			
Basic proficiency in English and a general understanding of communication in academic or everyday contexts.			
Course Description:			
This course develops essential communication skills required for professional and managerial effectiveness. It focuses on verbal, non-verbal, listening, written, and presentation skills, along with resume preparation, interviews, group discussions, and debates to enhance clarity, confidence, and workplace communication competence.			
Course Objectives:			
- To develop foundational knowledge of verbal, non-verbal, and written communication and their role in professional and managerial contexts. - Enhance communication, interpersonal, and teamwork skills. - To enhance understanding of effective speaking, listening, presentation, resume writing, and interview skills required for workplace communication. Foster leadership, adaptability, and resilience in dynamic business environments.			

Course Outcomes:		
COs	After completion of the course: Students will be able to	Bloom's Level
CO1	Recall basic concepts of communication, listening, non-verbal cues, resumes, emails, interviews, group discussions, and debates.	Remember (Level 1)
CO2	Explain the importance and role of effective speaking, listening, written communication, presentations, and interview skills in professional contexts.	Understand (Level 2)
CO3	Apply communication skills to prepare resumes and emails, deliver presentations, and participate effectively in interviews, group discussions, and debates.	Apply (Level 3)

CO-PO Mapping

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	1	-	-	1	1	-	1	1
CO2	2	2	2	3	2	1	3	2
CO3	3	2	3	3	3	-	3	3

Assessment	
CA-1 (a) - (25M)	Subjective Test / Assignment/ MCQ Test etc.
CA-2 (b) - (25M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Foundations of Communication: Significance, types, process and barriers to communication. Effective Speaking: Effective speaking, Clarity and Conciseness' in communication, organizing thoughts into speech, understanding audience, practicing articulation, speech and intonation. Non-verbal Communication: Body language, facial expressions and gestures, vocal intonation: tone, pitch and pace; Aligning verbal and non-verbal communication.	4 Hrs.
Unit 2	Listening Skills: Active listening, techniques to improve listening, identifying and overcoming listening barriers, Non-verbal cues in listening. Communication barriers: Verbal barriers, strategies to overcome misunderstandings, Feedback role and systematic method. Managing nervousness and building confidence. Presentation Skills: Designing effective visual aids, slide design and content clarity, time and engaging audience. Interviews - I: Purpose and preparation; Types of Interviews: Behavioural, situations and technical; Non-verbal communication in interviews.	4 Hrs.
Unit 3	Introduction to Resume: Purpose of a resume in Job application process, understanding the employer expectations, difference between resume and curriculum-vitae. Structure of a resume: Components, highlighting key qualifications and achievements, use of action verbs and quantifiable terms, differentiating between soft and hard skills and tailoring them to match job descriptions. Aesthetics: Use of bullet points and narratives, formatting how to present additional qualifications and volunteering achievements. Customizing a resume, using templates, AI and tools.	4 Hrs.
Unit 4	Fundamentals: Importance of written communication; types of business documents, fundamental principles of writing. Active vs. passive voice, common pitfalls of business writing. Professional Emails: Structure and skeleton, clarity and concise, email etiquette and tone, effective subject lines, salutations and greetings.	4 Hrs.
Unit 5	Group Discussion: Concept, Objectives of GD, Types and process for GD, Skills for effective participation in GDs; evaluation criteria, do's & don'ts. Debate: Concept, format and relevance of debate in managerial communication; role of debates in developing analytical thinking, persuasion, and professional speaking skills	4 Hrs.

Sr. No.	Textbooks
1.	Daniel Goleman (1995). Emotional Intelligence: Why It Can Matter More Than IQ. Bantam Books.
2.	Subba Rao, P. (2020). Management and Organizational Behavior. Himalaya Publishing House.
3.	S. K. Mandal (2012). Effective Communication and Soft Skills. Jaico Publishing House.
4.	Stephen P. Robbins & Timothy A. Judge (2022). Organizational Behavior. Pearson Education India.
Sr. No.	Reference Books
1.	David R. Caruso & Peter Salovey (2004). The Emotionally Intelligent Manager. Jossey-Bass.
2.	Krishna Mohan & Meera Banerji (2013). Developing Communication Skills. Macmillan Publishers India.
3.	Harold Koontz & Heinz Weihrich (2010). Essentials of Management. Tata McGraw-Hill.
4.	Peter G. Northouse (2018). Leadership: Theory and Practice. Sage Publications.

Sr. No.	Web Resources
1.	Communication Skills https://nptel.ac.in/courses/109/106/109106050
2.	Life Skills (NPTEL) https://youtu.be/l1D_0UFmJHY?si=wWIpK0QmRaYRzDFL
3.	Leadership and Team Management (NPTEL – IIT Kharagpur) https://nptel.ac.in/courses/110105112

SEM-III

SYLLABUS

Course Title : Entrepreneurship Development**Course Code: PB253001****Course Category: PCC**

Teaching Scheme		Examination Scheme	
Lectures: 04hrs./ week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Prerequisite: Students are expected to have basic knowledge of management principles and business environment.			
Course Description: Entrepreneurship integrates theoretical foundations with practical tools. The course emphasizes legal, ethical, and regulatory aspects of entrepreneurship along with leadership and innovation in dynamic business environments. Through case studies and real-world applications, students are prepared to identify opportunities and build sustainable entrepreneurial ventures.			
Course Objectives 1. To examine the concepts, evolution, theories, and types of entrepreneurships along with entrepreneurial mindset and business nature. 2. To analyse opportunity identification, idea generation, idea validation, and feasibility analysis for entrepreneurial ventures. 3. To evaluate business models, business planning, startup approaches, and institutional support systems for new venture development. 4. To assess financial planning, funding sources, startup valuation, and the role of incubators and accelerators in entrepreneurial growth. 5. To examine legal, ethical, technological, and strategic aspects of startup growth, sustainability, and entrepreneurial exit strategies.			

Course Outcomes:

COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, types, theories, and support systems of entrepreneurship.	Remember (Level 1)
CO2	Explain the processes of opportunity identification, idea validation, business planning, and growth strategies, distinguishing entrepreneurs from managers and startups from family businesses.	Understand (Level 2)
CO3	Make use of appropriate tools to plan new ventures, startup valuation and legal registration in India.	Apply (Level 3)
CO4	Analyze ethical issues, risks, failure causes, exit strategies and recent trends to assess growth challenges, IPR implications, and turnaround options.	Analyze (Level 4)

CO PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	1	1	-	3	1	1
CO2	3	3	1	2	2	3	3	2
CO3	2	2	1	3	2	3	3	1
CO4	3	3	2	2	2	2	1	3

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/ Group projects etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test /Business Plan/PPT/Case Studies etc.

Course Contents		
Unit 1	Introduction to Entrepreneurship 1.1 Concept, Nature, and Importance of Entrepreneurship 1.2 Evolution of Entrepreneurship: Global and Indian Perspective 1.3 Types of Entrepreneurs 1.3.1 Individual 1.3.2 Social 1.3.3 Corporate (Intrapreneurship) 1.4 Nature of Business 1.4.1 Startups 1.4.2 Family Business 1.4.3 Women Entrepreneurship 1.5 Entrepreneurial Mindset and Characteristics 1.6 Entrepreneur and Manager 1.7 Myths of entrepreneurship 1.8 Entrepreneurship Theories 1.8.1 Innovation Theory 1.8.2 Risk-Bearing Theory 1.8.3 Opportunity-Based Theory	8 Hrs.
Unit 2	Opportunity Identification and Feasibility Analysis 2.1 Opportunity Identification and Idea Generation 2.1.1 Opportunity Recognition Process 2.1.2 Sources of Business Ideas 2.1.3 Market Need Analysis 2.1.4 Problem–Solution Fit 2.2 Idea Validation 2.2.1 SWOT 2.2.2 PESTLE analysis 2.3 Idea Screening and Feasibility Analysis 2.3.1 Technical Feasibility 2.3.2 Market Feasibility 2.3.3 Financial Feasibility	8 Hrs.
Unit 3	New Ventures Financing and Support system 3.1 Business Model Canvas (BMC) 3.2 Writing an Effective Business Plan 3.2.1 Executive Summary 3.2.2 Market Analysis 3.2.3 Operations Plan 3.2.4 Financial Projections 3.3 Pitch Deck Preparation 3.4 Lean Startup Approach 3.5 Minimum Viable Product (MVP) 3.6 Government and non-government training institutions 3.6.1 NIESBUD 3.6.2 MCED	8 Hrs.

Unit 4	Financial Planning and Startup Valuation 4.1 Financial Planning for Startups 4.1.1 Sources of Finance 4.1.1.1 Bootstrapping 4.1.1.2 Angel Investors 4.1.1.3 Venture Capital 4.1.1.4 Bank Finance 4.1.1.5 Government Schemes 4.2 Startup Valuation Methods 4.3 Break-even Analysis 4.4 Role of Incubators and Accelerators	8 Hrs.
Unit 5	Managing Growth with Legal, Ethical, and Regulatory Framework 5.1 Startup Registration and Licensing in India 5.2 Intellectual Property Rights (IPR) 5.2.1 Patents 5.2.2 Trademarks 5.2.3 Copyrights 5.3 Ethical Issues in Entrepreneurship 5.4 Corporate Governance for Startups 5.5 Growth Strategies for Startups 5.5.1 Scaling Operations and Markets 5.5.2 Building Entrepreneurial Teams 5.5.3 Leadership in Entrepreneurial Organizations 5.5.4 Technology and Digital Entrepreneurship 5.5.5 Global Entrepreneurship and Internationalization	8 Hrs.
Unit 6	Entrepreneurship Exit Strategies and Recent Trends 6.1 Common Causes of Startup Failure 6.2 Learning from Entrepreneurial Failures 6.3 Risk Management and Crisis Handling 6.4 Turnaround Strategies 6.5 Exit Strategies 6.5.1 Mergers and Acquisitions 6.5.2 IPO 6.5.3 Strategic Sale 6.6 Succession Planning 6.6.1 Social Entrepreneurship 6.6.2 Sustainable and Green Entrepreneurship 6.6.3 Women and Rural Entrepreneurship 6.7 Technology-Driven Startups 6.7.1 AI 6.7.2 FinTech, 6.7.3 AgriTech, 6.7.4 HealthTech	8 Hrs.

Sr. No.	Textbooks
1.	Abhishek Kumar Mukherjee and Shaunak Roy, Introduction to Entrepreneurship Development, 1st Edition, Oxford University Press India.
2.	Vasant Desai, Dynamics of Entrepreneurial Development and Management, 6th Edition, Himalaya Publishing House Pvt. Ltd.
3.	Peter F. Drucker, Innovation and Entrepreneurship: Practice and Principles, Reprint Edition, Harper Business / HarperCollins Publishers.
4.	S. S. Khanka, Entrepreneurial Development, 4th Edition, S. Chand and Company Ltd., New Delhi, 2001.

Sr. No.	Reference Books
1.	W. Chan Kim and Renée Mauborgne, Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant, Expanded Edition, Harvard Business Review Press.
2.	S. K. Mohanty, Fundamentals of Entrepreneurship, 2nd Edition, PHI Learning Pvt. Ltd.
3.	R. C. Bhatia, Entrepreneurship: Business and Management, 2020 Edition, Sultan Chand and Sons Pvt. Ltd.
4.	Donald F. Kuratko, Entrepreneurship: Theory, Process, Practice, 11th Edition, Cengage Learning.
5.	Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, and Sabyasachi Sinha, Entrepreneurship, 10th Edition, McGraw Hill Education (India) Pvt. Ltd.

Sr. No.	Web Resources
1.	https://nptel.ac.in/courses/127105007
2.	https://onlinecourses.nptel.ac.in/noc26_mg11/preview
3.	https://onlinecourses.swayam2.ac.in/e-learning/preview/cec26_cm11
4.	https://mced.co.in/Training/Upcomming_Training/
5.	https://www.niesbud.nic.in/forthcoming-trainings.html
6.	http://di.maharashtra.gov.in/_layouts/15/doistaticsite/English/investors_guide_dic.html
7.	https://www.sidbi.in/en/
8.	https://msme.gov.in/

Course Title: Consumer Behavior Course Code: PB253011			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 04 hrs./ week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: An understanding of basic marketing principles, knowledge of consumer choice theory, utility, demand, and price elasticity helps in understanding how economic forces shape consumer decisions. Students should familiar with data analysis, survey design, and basic statistical techniques are important for analyzing consumer behavior research.			
Course Description: This course examines the underlying psychological, social, and cultural factors that influence consumer behavior and decision-making processes. Students will explore how individuals and groups make purchasing decisions, the role of emotions and perceptions in shaping these decisions, and how marketers can apply this knowledge to create effective marketing strategies.			
Course Objectives: 1. To understand the concepts and theories of Consumer behavior. 2. To analyze the consumer decision-making process. 3. To explore the psychological and emotional drivers of Consumer Behavior. 4. To examine social, cultural, and demographic influences on Consumer Behavior. 5. To evaluate the impact of digital and social media on Consumer Behavior.			

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define consumer behavior concepts, consumer research methods, market segmentation, and consumer profiling for effective marketing decision-making.	Remember (Level 1)
CO2	Describe digital consumer behavior, AI-driven consumer insights, ethics, sustainability, and sector-specific consumer behavior.	Understand (Level 2)
CO3	Apply psychological, social, cultural, and economic factors to consumer buying behavior and purchasing decisions.	Apply (Level 3)
CO4	Analyze consumer decision-making processes, types of buying behavior, and emerging consumer trends in both traditional and digital marketplaces.	Analyze (Level 4)
CO 5	Compare consumer behavior strategies and marketing practices based on ethical, social, and technological factors for informed decision-making.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	2	2	2	1	1
CO2	2	2	1	2	2	3	2	2
CO3	3	3	1	2	2	3	2	2
CO4	3	3	1	2	3	3	2	2
CO 5	2	2	1	2	2	3	2	2

Assessment	
CA-1 (a) - (10M)	Power Point Presentation/Assignment/MCQ Test etc.
MSE(b) - (20M)	Subjective test.
CA-2 (c) - (10M)	Power Point Presentation/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Foundations of Consumer Behavior 1.1 Introduction to Consumer Behavior 1.1.1 Meaning, Scope, and Importance 1.1.2 Urban and Rural Consumers 1.1.3 Role of Consumer Behavior in Marketing Strategy 1.2 Consumer Research Methods 1.2.1 Primary and Secondary Data 1.2.2 Surveys, Focus Groups and Observation 1.2.3 Consumer Insight Generation 1.3 Market Segmentation and Consumer Profiling 1.3.1 Consumer Personas 1.3.2 Lifestyle Analysis (Value Added Life style Framework)	8 Hrs.
Unit 2	Psychological Influences on Consumer Behavior 2.1 Motivation 2.1.1 Maslow's Hierarchy of Needs 2.1.2 Buying Motives 2.1.3 Emotional and Rational Decisions 2.2 Perception 2.2.1 Selective Attention 2.2.2 Distortion 2.2.3 Retention 2.2.4 Sensory Marketing 2.3 Learning and Memory 2.3.1 Classical and Operant Conditioning 2.3.2 Cognitive Learning 2.3.3 Brand Recall and Recognition 2.3.4 Psychological Model 2.4 Attitudes, Beliefs and Personality 2.4.1 Attitude Formation and Change 2.4.2 Brand Personality 2.4.3 Self-Concept and Consumption	8 Hrs.
Unit 3	Social and Cultural Influences 3.1 Culture and Subculture 3.1.1 Cultural Values 3.1.2 Cross-Cultural Consumer Behavior 3.1.3 Sociological Model 3.2 Social Class and Lifestyle 3.2.1 Income 3.2.2 Occupation 3.2.3 Consumption Patterns 3.2.4 Economic Model 3.3 Reference Groups and Family 3.3.1 Opinion Leaders 3.3.2 Influencer Marketing 3.3.3 Family Decision Roles 3.3.4 Howard-Sheth Model	8 Hrs.

Unit 4	Consumer Decision-Making 4.1 Consumer Decision-Making Process 4.1.1 Need Recognition 4.1.2 Information Search 4.1.3 Evaluation of Alternatives 4.1.4 Purchase and Post-Purchase Behavior 4.2 Types of Buying Behavior 4.2.1 Routine 4.2.2 Limited 4.2.3 Extensive 4.2.4 Impulse Buying	8 Hrs.
Unit 5	Ethical Issues in Marketing 5.1 Consumer Protection 5.2 Sustainable Consumption 5.3 Emerging Trends 5.3.1 Experience Economy 5.3.2 Neuromarketing 5.3.3 Gen-Z Consumers 5.3.4 Virtual Shopping 5.3.5 Global Consumer Trends	8 Hrs.
Unit 6	Digitalization and AI in Consumer behavior 6.1 Online and Digital Consumer Behavior 6.1.1 E-Commerce Decision Process 6.1.2 Social Media Influence 6.1.3 Reviews, Ratings and Influencers 6.1.4 Omnichannel Behavior 6.2 Data-Driven Consumer Insights 6.2.1 AI and Analytics 6.2.2 Personalization 6.2.3 Customer Relationship Management and Customer Data 6.3 Sectoral Consumer Behavior 6.4 Services Consumers 6.4.1 Retail and Luxury Consumers 6.4.2 Green and Ethical Consumers	8 Hrs.

Sr. No.	Textbook
1.	Engel, James F., Roger D. Blackwell, and Paul W. Miniard, Consumer Behavior, 3rd Edition, Cengage Learning.
2.	Raju, M. S., Dominique Xardel, and Others, Consumer Behavior: Concepts, Applications and Cases, Vikas Publishing House, 2008 Edition.
3.	Suja R. Nair, Consumer Behavior: Text and Cases, Himalaya Publishing House, 2009 Edition.
4.	Schiffman, Leon G., Leslie Lazar Kanuk, and S. Ramesh Kumar, Consumer Behavior, 10th Edition, Pearson Education, 2010.
Sr. No.	Reference Book
1.	S. Ramesh Kumar and Anup Krishnamurthy, Advertising, Branding and Consumer Behavior, Sage Publications, 2021 Edition.
2.	Fred Luthans, Organizational Behavior, Tata McGraw Hill, 11th Edition, 2007.
3.	David L. Loudon and Albert J. Della Bitta, Consumer Behavior, TMH, 4th Edition.

Sr. No.	Web Resources
1.	https://hbr.org/topic/subject/consumer-behavior
2.	https://mpbou.edu.in/uploads/files/PAPER-02_CB
3.	https://www.stir.ac.uk/about/faculties/health-sciences-sport/research/research-groups/institute-for-social-marketing/

Course Title: Sales and Distribution Management		
Course Code: PB253012		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students must have familiarity with Consumer and Market Concepts and introductory awareness of Communication and Branding concepts.		
Course Description: Sales and Distribution Management is designed to provide students with a comprehensive understanding of the principles, strategies, and practices involved in managing sales operations and distribution channels. The course explores the role of sales management in achieving organizational objectives, including sales planning, forecasting, territory design, recruitment, training, motivation, compensation, and performance evaluation of sales personnel.		
Course Objectives: 1 To provide foundational knowledge of sales management, personal selling, and the selling process in contemporary business environments. 2 To develop understanding of sales planning, forecasting, budgeting, and effective sales force management practices. 3 To familiarize with distribution management, marketing channels, logistics, warehousing, inventory control, and channel relationship management. 4 To introduce to modern developments in sales and distribution, including CRM, digital selling, AI applications, technological innovations, and ethical issues in sales management.		

Course Outcomes:		
COs	After completion of the course, students will be able to	Bloom's Level
CO1	Identify the fundamentals of sales management, personal selling, selling processes, and various forms of selling in modern business environments.	Remember (Level 1)
CO2	Explain sales planning, forecasting, budgeting, sales force recruitment, training, motivation, and performance management techniques in sales management.	Understand (Level 2)
CO3	Apply distribution management systems, marketing channels, logistics, warehousing, inventory management, and channel conflict resolution strategies for efficient product distribution.	Apply (Level 3)
CO4	Analyze emerging trends in sales and distribution, including CRM, e-selling, digital channels, AI applications, technological advancements, and ethical issues in sales management.	Analyze (Level4)

CO PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	1	2	2	1	1
CO2	3	2	-	2	3	3	2	2
CO3	3	3	1	2	3	3	2	2
CO4	3	3	1	2	3	3	2	2

Assessment	
CA-1(a) (10M)	Power Point Presentation/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective test.
CA-2(c) (10M)	Power Point Presentation/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Fundamentals of Sales Management 1.1 Foundations of Sales Management 1.2 Concept, Nature, Scope, Importance and Objectives 1.3 Personal Selling – Meaning, Nature and Importance 1.4 Selling Process 1.4.1 Prospecting 1.4.2 Pre-approach 1.4.3 Approach 1.4.4 Presentation 1.4.5 Objection Handling 1.4.6 Closing and Follow-up 1.5 Types of Selling 1.5.1 Industrial 1.5.2 Consumer 1.5.3 Service Selling 1.6 Customer Relationship Management – Meaning and Role in Sales	8 Hrs.
Unit 2	Sales Planning 2.1 Sales Planning and Sales Force Management 2.2 Sales Forecasting 2.2.1 Meaning, Importance and Methods 2.3 Sales Budget: Concept and Types 2.3.1 Fixed Sales Budget 2.3.2 Flexible Sales Budget 2.3.3 Incremental Sales Budget 2.3.4 Zero-Based Sales Budget 2.3.5 Performance or Target Sales Budget	8 Hrs.
Unit 3	Sales Force Management 3.1 Sales Territories – Meaning, Need and Designing 3.2 Sales Quotas: Types and Administration 3.2.1 Sales Volume Quota 3.2.2 Sales Revenue Quota 3.2.3 Profit Quota 3.2.4 Activity Quota 3.2.5 Combination Quota 3.3 Sales Force Organization 3.3.1 Line 3.3.2 Line and Staff 3.3.3 Functional 3.4 Recruitment and Selection of Sales Force 3.5 Training and Development of Sales Personnel 3.6 Motivation and Compensation of Sales Force	8 Hrs.
Unit 4	Distribution Management Channels and Warehousing 4.1 Sales Force Evaluation and Control 4.2 Marketing Channels: Concept, Importance and Functions 4.3 Types of Marketing Channels 4.3.1 Direct Indirect 4.3.2 Dual/Hybrid	8 Hrs.

	4.3.3 Reserve 4.3.4 Wholesaling 4.3.5 Retailing 4.4 Retailer Types 4.4.1 Department Stores and Supermarkets 4.4.2 Convenience Stores and Specialty Stores 4.4.3 Discount Stores and E-Retailers 4.4.4 Online Retailers 4.4.5 Wholesale Retailers 4.4.6 Cash-and-Carry 4.5 Channel Conflict: Causes and Types 4.5.1 Interpersonal Conflict 4.5.2 Intragroup and Intergroup Conflict 4.5.3 Organizational Conflict 4.5.4 Conflict Management 4.6 Physical Distribution: Meaning and Components	
Unit 5	Inventory Management and Transportation 5.1 Inventory Management: Meaning and Techniques 5.2 Logistics Management: Concept and Importance 5.3 Transportation: Modes and Selection 5.3.1 Road Transport 5.3.2 Rail Transport 5.3.3 Water Transport 5.3.4 Air Transport 5.3.5 Pipeline Transport 5.4 Warehousing: Functions and Types 5.4.1 Private Warehouses 5.4.2 Public Warehouses 5.4.3 Bonded Warehouses 5.4.4 Cold Storage 5.4.5 Government Warehouses	8 Hrs.
Unit 6	Modern Trends in Sales and Distribution 6.1 Unfair Competition 6.2 Bribery and Kickbacks 6.3 Pressure Selling 6.4 Confidentiality Violations	8 Hrs.

Sr. No.	Textbooks
1.	Edward W. Cundiff, Richard R. Still, and Norman A. P. Govoni, Sales Management: Decisions, Strategies and Cases, 5th Edition, Pearson Education.
2.	Tapan K. Panda and Sunil Sahadev, Sales and Distribution Management, 2nd Edition, Oxford University Press.

Sr. No.	Reference Books
1.	Philip Kotler and Kevin Lane Keller, Marketing Management, 15th Edition, Pearson Education.
2.	S. L. Gupta, Sales Management: Shaping Future Leaders, 1st Edition, Excel Books.
3.	Anne T. Coughlan, Erin Anderson, Louis W. Stern, and Adel I. El-Ansary, Marketing Channels, 8th Edition, Pearson Education.

Sr. No.	Web Resources
1.	https://openstax.org/details/books/principles-marketing
2.	https://www.coursera.org/learn/sales-strategy
3.	https://nptel.ac.in/courses/110/105/110105094

Course Title: Digital and Social Media Marketing Course Code: PB253013			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 04 hrs/week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Students should have basic understanding of Marketing Management concepts, fundamental knowledge of Business Environment, basic computer and internet usage skills.			
Course Description: This course provides understanding of digital marketing concepts, digital platforms, website management, search engine marketing, social media marketing, e-commerce, media planning and emerging digital trends. It also focuses on ethical issues, digital innovation, AI applications and strategic approaches to customer engagement and online branding.			
Course Objectives: 1. To understand concepts, tools and evolution of digital marketing and digital platforms. 2. To explain website management, E-commerce, search engine marketing and social media strategies. 3. To apply digital marketing concepts for online branding, customer engagement and campaign planning. 4. To analyze digital marketing performance, emerging trends, ethical issues and AI-driven digital practices.			

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall fundamental concepts, platforms, tools, digital marketing strategies, website management and emerging digital technologies.	Remember (Level 1)
CO2	Explain digital marketing processes including SEO, SEM, social media marketing, e-commerce, content marketing, media planning and AI-enabled digital practices.	Understand (Level 2)
CO3	Apply digital marketing tools for website management, online branding, campaign planning, customer engagement and digital communication.	Apply (Level 3)
CO4	Analyze digital marketing strategies, campaign effectiveness, ethical issues, consumer engagement, emerging trends, and AI-driven innovations in digital marketing.	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	1	1	2	1	3	2	1
CO2	2	2	1	2	2	3	3	1
CO3	3	3	1	2	2	3	3	2
CO4	3	3	2	2	2	3	3	2

Assessment	
CA-1(a) (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective test.
CA-2(c) (10M)	Case Study/Power Point Presentation/Assignment etc.

Course Contents		
Unit 1	Fundamentals of Digital Marketing 1.1 Introduction 1.1.1 Meaning and Definition 1.1.2 Evolution 1.1.3 Landscape 1.2 Traditional Marketing and Digital Marketing 1.2.1 Advantages and Limitations of Digital Marketing 1.2.2 10 Cs of Internet Marketing 1.3 Digital Marketing Strategy and Planning 1.3.1 Digital Marketing Funnel 1.3.2 POEM Framework (Paid, Owned, Earned Media) 1.3.3 Marketing Plan and KPIs 1.4 Careers and Skills in Digital Marketing 1.4.1 Career Roles in Digital Marketing 1.4.2 Skills Required for Digital Marketing Professionals	8 Hrs.
Unit 2	Digital Presence and Website Management 2.1 Importance and Types 2.2 Website Fundamentals 2.2.1 Booking of Website Domain 2.2.2 Web Hosting Concepts 2.2.3 Content Management System (CMS) 2.3 Website Design and Customer Experience (CX) 2.3.1 Website Themes and Layouts 2.3.2 Plug-ins and Applications 2.3.3 Plug-ins for Security, Backup, 2.4 Emailing and Social Media 2.4.1 Retail Swatches 2.5 Basics of E-commerce 2.5.1 Types of E-commerce 2.5.2 Visual Content and A+ Content	8 Hrs.
Unit 3	Search Engine and Paid Digital Marketing 3.1 Search Engine Marketing Concepts 3.1.1 Search Engine Marketing (SEM) 3.1.2 Search Engine Optimization (SEO) 3.1.3 Pay Per Click (PPC) 3.2 SEO Techniques 3.2.1 On-Page Optimization 3.2.2 Content Optimization 3.2.3 Off-Page Optimization 3.2.4 Keyword Research and Google Trends 3.3 Google Ads and Paid Campaigns 3.3.1 Digital Ad Networks (Google and Meta) 3.3.2 Google Ads: Search and Display	8 Hrs.

	3.3.3 Remarketing and Branding via Paid Networks	
Unit 4	Social Media, Content, Email and Digital Innovation 4.1 Social Media Marketing Fundamentals 4.1.1 Importance 4.1.2 Building a Social Media Strategy 4.1.3 Content Planning 4.1.4 Content Writing 4.2 Platform-Based Social Media Marketing 4.2.1 Facebook Marketing and Advertising 4.2.2 LinkedIn Marketing and Campaigns 4.2.3 X Marketing 4.2.4 Instagram, 4.2.5 YouTube and Snapchat Basics 4.3 Email and Affiliate Marketing 4.3.1 Types of Email Marketing	8 Hrs.
Unit 5	Digital Media Planning and Emerging Trends 5.1 Media Planning and Campaign Management 5.1.1 Programmatic and Mobile Advertising 5.1.2 Campaign Measurement and ROI 5.2 Digital Transformation, Ethics and Trends 5.2.1 Online PR and Reputation Management 5.2.2 Digital Innovation and Emerging Trends 5.2.3 Security, Privacy and Ethical Issues	8 Hrs.
Unit 6	AI in Digital Marketing 6.1 Introduction to AI in Marketing 6.1.1 AI Chatbots and Conversational Marketing 6.1.2 AI-generated Content and Personalization 6.2 Predictive Analytics and Sentiment Analysis 6.2.1 Future Trends 6.2.2 Opportunities and Challenges	8 Hrs.

Sr. No.	Textbooks
1.	Dr. Manoj, Digital Marketing, Chandralok Prakashan, 2015 Edition.
2.	Dr. V. Suresh, Online Marketing, APH Publishing Corporation, 2019 Edition.
3.	Dr. V. K. Sawant, Social Media Marketing, International Publications, 2018 Edition.
4.	Manoj Patni, Digital Marketing, Literature House, 2018 Edition.
Sr. No.	Reference Books
1.	Kenneth C. Laudon and Carol Guercio Traver, E-Commerce: Business, Technology, Society, Pearson Education, 2010 Edition.
2.	D. P. Sharma, E-Retailing: Principles and Practice, Himalaya Publishing House, 2009 Edition.

Sr. No.	Web Resources
1.	SWAYAM Digital Marketing: https://onlinecourses.swayam2.ac.in/imb26_mg23/preview
2.	Google Digital Garage, Fundamentals of Digital Marketing: https://learndigital.withgoogle.com
3.	NPTTEL, Fundamentals of Digital Marketing: https://onlinecourses.nptel.ac.in/noc26_mg06/preview

Course Title: Advertising and Brand Management
Course Code: PB253014

Course Category: PEC

Teaching Scheme	Examination Scheme	
Lectures: 04hrs /week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Course Prerequisite:

Students should have basic knowledge of marketing management and consumer behavior. Familiarity with principles of management and business communication will be beneficial.

Course Description:

The Advertising and Brand Management course covers advertising strategy, consumer insights, brand equity, creativity, media planning, and integrated marketing communications. The course also examines brand growth, ethics, digital advertising, and contemporary branding practices. Through case studies and practical applications, students develop skills to build and sustain strong brands.

Course Objectives:

1. To introduce understanding of advertising, branding and integrated marketing communication concepts.
2. To familiarize students with consumer insights, brand positioning, media planning and advertising creativity.
3. To acquaint student's with knowledge of strategic brand management, communication channels and customer engagement practices.
4. To encourage analytical understanding of advertising effectiveness, ethical issues and emerging trends in branding and digital communication.

Course Outcomes

COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall concepts, terminology, models and frameworks related to advertising, branding, media and consumer behavior.	Remember (Level 1)
CO2	Explain advertising strategies, brand equity, positioning approaches, media planning, and integrated marketing communication practices..	Understand (Level 2)
CO3	Apply branding, advertising creativity and media planning concepts for effective communication and customer engagement.	Apply (Level 3)
CO4	Examine brand strategies, advertising effectiveness, ethical issues and emerging trends in advertising and branding.	Analyze (Level4)

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	1	2	1	3	1	1
CO2	3	2	1	2	2	3	2	2
CO3	3	3	1	2	2	3	2	2
CO4	3	3	2	3	2	3	2	3

Assessment	
CA-1(a) (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective test.
CA-2(c) (10M)	Case Study/Power Point Presentation/MCQ Test etc.

Course Contents		
Unit 1	Foundations of Advertising and Branding 1.1 Advertising: Concept, Role, and Importance 1.1.1 Meaning and Scope of Advertising 1.1.2 Advertising as a Marketing Communication 1.1.3 Role of Advertising in Competitive Markets 1.2 Evolution of Advertising 1.2.1 Traditional to Modern Advertising 1.2.2 Advertising in the Digital Age 1.2.3 Indian Advertising Industry Overview 1.3 Advertising Objectives and Strategy 1.3.1 DAGMAR Approach 1.3.2 Sales Objectives 1.3.3 Advertising Strategy Framework 1.4 Advertising Agency Structure and Functions 1.4.1 Full-Service and Specialized Agencies 1.4.2 Client–Agency Relationship	8 Hrs.
Unit 2	Branding 2.1 Introduction to Branding 2.1.1 Concept and Importance of Brands 2.1.2 Brand and Product Differentiation 2.2 Strategic Role of Brands 2.2.1 Brands as Strategic Assets 2.2.2 Brand Equity Concept 2.2.3 Brand Value Creation 2.3 Consumer Insights, Brand Equity and Positioning 2.4 Consumer Behavior and Advertising Response 2.4.1 Psychological and Social Factors 2.4.2 Consumer Decision-Making Process 2.4.3 Role of Perception and Motivation 2.5 Brand Equity Models 2.5.1 Aaker’s Brand Equity Model 2.5.2 Keller’s Customer-Based Brand Equity (CBBE) Model	8 Hrs.
Unit 3	Brand Identity System and Positioning 3.1 Brand Identity Systems 3.1.1 Brand Vision 3.1.2 Brand Values 3.1.3 Brand Personality 3.1.4 Kapferer’s Brand Identity Prism 3.2 Brand Positioning 3.2.1 Meaning and Importance 3.2.2 Positioning Strategies 3.2.3 Points of Difference (Pod) and Parity (Pop) 3.3 Brand Mantras and Value Proposition 3.3.1 Brand Promise and Essence 3.3.2 Crafting Effective Brand Mantras	8 Hrs.

	3.4 Brand Architecture 3.4.1 Branded House and House of Brands 3.4.2 Sub-Brands and Endorsed Brands	
Unit 4	Advertising Creativity, Media Planning and IMC 4.1 Advertising Creativity 4.1.1 Creative Strategy 4.1.2 Copywriting Principles 4.1.3 Visual and Message Appeals 4.2 Advertising Appeals 4.2.1 Rational and Emotional 4.2.2 Moral and social Appeals 4.2.3 Fear and Humor 4.2.4 Celebrity Endorsement 4.3 Media Planning and Strategy 4.3.1 Media objectives and Selection 4.3.2 Reach, frequency and GRPs 4.3.3 Media scheduling 4.4 Traditional and Digital Media 4.4.1 Print and Television 4.4.2 Radio and Outdoor 4.4.3 Digital and Social Media 4.4.4 Influencer Marketing 4.5 Integrated Marketing Communication (IMC) 4.5.1 Concept and Importance 4.5.2 Consistency Across Touchpoints 4.6 Measuring Advertising Effectiveness 4.6.1 Pre-Testing and Post-Testing 4.6.2 Brand Tracking Studies	8 Hrs.
Unit 5	Brand and Contemporary Issues 5.1 Brand Extension and Brand Portfolio Management 5.1.1 Line and Category Extensions 5.1.2 Risks and Rewards of Brand Extension 5.2 Brand Revitalization and Repositioning 5.2.1 Managing Declining Brands 5.2.2 Rebranding Strategies 5.3 Brand Loyalty and Relationship Management 5.3.1 Brand Communities 5.3.2 Customer Engagement and Advocacy	8 Hrs.
Unit 6	Ethical Issues and Trends in Advertising 6.1 Legal and Ethical Issues in Advertising and Branding 6.1.1 Advertising Standards Council of India (ASCI) 6.1.2 Misleading Advertising 6.1.3 Social Responsibility 6.2 Global Branding Strategies 6.2.1 Standardization and Adaptation 6.2.2 Customization 6.2.3 Managing Brands Across Cultures 6.3 Contemporary Trends in Advertising and Branding 6.3.1 Digital-First Brands 6.3.2 AI In Advertising	8 Hrs.

Sr. No.	Textbooks
1.	Kevin Lane Keller, Strategic Brand Management, Pearson Education, 3rd Edition, 2008.
2.	S. Ramesh Kumar, Managing Indian Brands, Vikas Publishing House, 2009 Edition.
3.	S. A. Chunawalla and K. C. Sethia, Foundations of Advertising: Theory and Practice, Himalaya Publishing House, 2009 Edition.
	Reference Books
1.	Larry Percy and Richard Elliott, Strategic Advertising Management, Oxford University Press, 3rd Edition, 2005.
2.	Rajeev Batra, John G. Myers, and David A. Aaker, Advertising Management, Pearson Education, 5th Edition, 2010.

Sr. No.	Web Resources
1.	Advertising and Promotions, https://onlinecourses.nptel.ac.in/elearning/preview/noc25_mg04
2.	Harvard Business Review, Marketing and Branding, https://hbr.org/topic/marketing
3.	Advertising Standards Council of India (ASCI), https://www.ascionline.in/

Course Title: Service Marketing and Customer Relationship Management		
Course Code: PB253015		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04hrs./ week	CA-1	10Marks
Tutorial: Nil	MSE	20Marks
Credits:04	CA-2	10Marks
Semester: Second Year (Semester III)	ESE	60Marks
Course Prerequisite: Basic understanding of Principles of Marketing, Consumer Behaviour and Business Communication.		
Course Description: This course provides an understanding of services marketing, customer relationship management, service quality, customer experience, CRM technologies, digital service innovations, and emerging trends to enhance customer value and long-term business relationships.		
Course Objectives: 1. To familiarize students with the concepts and strategic importance of Services Marketing and Customer Relationship Management. 2. To develop understanding of service delivery, customer experience and service quality management. 3. To provide knowledge of CRM technologies, customer analytics and digital service innovations. 4. To enhance analytical abilities for evaluating service strategies, customer relationships and emerging trends in service industries.		

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Identify the concepts, characteristics, strategies and technologies of Services Marketing and Customer Relationship Management.	Remember (Level 1)
CO2	Interpret service marketing practices, customer expectations, service quality models and CRM processes across business sectors.	Understand (Level 2)
CO3	Utilize service marketing and CRM approaches to improve customer experience, service delivery and organizational performance.	Apply (Level 3)
CO4	Analyze CRM strategies, customer analytics, AI-enabled services and emerging trends for effective managerial decision-making.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	3	1	1
CO2	3	3	2	2	2	3	2	2
CO3	3	3	2	2	3	3	3	2
CO4	2	3	3	3	2	2	3	3

Assessment	
CA-1(a) (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective test.
CA-2(c) (10M)	Case Study/Power Point Presentation/MCQ Test etc.

Course Contents		
Unit 1	Foundations of Services Marketing and CRM. 1.1 Nature and Scope of Services 1.1.1 Concept and evolution of services 1.1.2 Service-Dominant Logic 1.1.3 Role of services in economic development 1.2 Characteristics of Services 1.2.1 Intangibility 1.2.2 Inseparability 1.2.3 Heterogeneity 1.2.4 Perishability 1.3 Strategic Implications for Marketing 1.4 Classification of Services 1.4.1 Consumer and Business 1.4.2 Professional and Public 1.4.3 Technology-based Services 1.5 Goods and Services Marketing 1.6 Meaning and Concept of CRM 1.6.1 Importance of CRM in Service Organizations 1.6.2 Relationship Marketing 1.6.3 Customer Lifetime Value (CLV)	8 Hrs.
Unit 2	Consumer Behavior and Service Marketing Mix. 2.1 Consumer Behavior and Marketing Mix in Services 2.1.1 Pre-purchase, Purchase and Post-purchase Stages 2.1.2 Perceived Risk in Services 2.2 Customer Expectations and Experience 2.2.1 Desired and Adequate Service 2.2.2 Zone of Tolerance 2.2.3 Moments of Truth 2.2.4 Customer Journey Mapping 2.3 Service Product Strategy 2.3.1 Core and Supplementary Services 2.3.2 Flower of Service Model 2.4 Pricing of Services 2.4.1 Value-based Pricing 2.4.2 Differential Pricing 2.4.3 Dynamic Pricing 2.4.4 Yield and Revenue Management 2.5 Service Distribution 2.5.1 Physical and Electronic Channels 2.5.2 Omni-channel Service Delivery 2.6 Promotion of Services 2.6.1 Trust-based Communication 2.6.2 Word-of-Mouth and Branding	8 Hrs.

	2.7 People, Process and Physical Evidence 2.7.1 Service Culture 2.7.2 Employee Branding 2.7.3 Service Design 2.8 Service Design and Operations 2.8.1 New Service Development (NSD) 2.8.2 Service Blueprinting 2.8.3 Technology in Service Delivery	
Unit 3	Service Quality and Internal Marketing. 3.1 Concept of Service Quality 3.1.1 Technical and Functional Quality 3.2 Service Quality Models 3.2.1 Service Quality Gaps 3.2.2 SERVQUAL Dimensions 3.2.3 RATER Model 3.3 Measuring Service Quality 3.3.1 Feedback Systems 3.3.2 Mystery Shopping 3.4 Complaint Handling and Service Recovery 3.4.1 Recovery Paradox 3.4.2 Service Guarantees 3.5 Internal Marketing and HR in Services 3.5.1 Role of Employees 3.5.2 Emotional Labour 3.5.3 Training 3.5.4 Empowerment 3.5.5 Service Culture	8 Hrs.
Unit 4	CRM Strategy and Contemporary Service Marketing. 4.1 CRM Strategy and Customer Retention 4.1.1 CRM Process 4.1.2 Loyalty Programs 4.1.3 Personalization 4.1.4 Customer Segmentation 4.2 Digital and E-Services Marketing 4.2.1 Online Service Delivery 4.2.2 Mobile Services 4.2.3 Social Media for Services 4.2.4 AI, Chatbots and Automation 4.2.5 Online Customer Experience 4.3 Sectoral Applications 4.3.1 Banking 4.3.2 Healthcare 4.3.3 Hospitality 4.3.4 Education 4.3.5 IT Services 4.4 Ethics, Sustainability and Emerging Trends 4.4.1 Ethical Issues in Services 4.4.2 Consumer Protection 4.4.3 Sustainable Service Practices 4.4.4 Future of Services Marketing	8 Hrs.

Unit 5	Advanced Customer Relationship Management. 5.1 CRM Technologies 5.1.1 Operational CRM 5.1.2 Analytical CRM 5.1.3 Collaborative CRM 5.2 Customer Analytics 5.2.1 Customer Data Management 5.2.2 Customer Segmentation Analytics 5.2.3 Predictive Analytics in CRM 5.3 Customer Engagement 5.3.1 Customer Satisfaction and Retention 5.3.2 Customer Loyalty and Advocacy 5.3.3 Customer Engagement Strategies 5.4 CRM Applications 5.4.1 CRM in Retail 5.4.2 CRM in Banking and Financial Services 5.4.3 CRM in Healthcare and Hospitality	8 Hrs.
Unit 6	AI, Innovation and Future Trends in Services Marketing. 6.1 Artificial Intelligence in Services 6.1.1 AI-enabled Customer Experience 6.1.2 Chatbots and Virtual Assistants 6.1.3 Personalization through AI 6.2 Emerging Technologies 6.2.1 Internet of Things (IoT) in Services 6.2.2 Big Data Analytics for Services 6.2.3 Cloud-based Service Platforms 6.3 Service Innovation 6.3.1 Digital Transformation in Service Organizations 6.3.2 Omnichannel Customer Experience 6.3.3 Smart Service Ecosystems 6.4 Future Trends 6.4.1 Sustainability in Services 6.4.2 Industry 5.0 and Service Innovation 6.4.3 Future of CRM and Intelligent Services	8 Hrs.

Sr. No.	Textbooks
1.	Christopher Lovelock and Jochen Wirtz, Services Marketing: People, Technology, Strategy, 8th Edition, Pearson Education India.
2.	V. Kumar and Werner J. Reinartz, Customer Relationship Management: Concept, Strategy and Tools, 3rd Edition, Springer.
Sr. No.	Reference Books
1.	Services Valarie A. Zeithaml, Mary Jo Bitner and Dwayne D. Gremler, Marketing: Integrating Customer Focus Across the Firm, 8th Edition, McGraw Hill Education.
2.	Adrian Payne and Pennie Frow, Strategic Customer Management: Integrating Relationship Marketing and CRM, Cambridge University Press.

Sr. No.	Web Resources
1.	Services Marketing, NPTEL, https://nptel.ac.in/courses
2.	Customer Relationship Management, SWAYAM, https://swayam.gov.in
3.	Salesforce CRM Learning Centre, https://www.salesforce.com/resources/
4.	HubSpot CRM Academy, https://academy.hubspot.com

Course Title: Rural and Agricultural Marketing
Course Code: PB253016

Course Category: PEC

Teaching Scheme	Examination Scheme	
Lectures: 02hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Course Prerequisite: Students are expected to have basic knowledge of marketing management, consumer behavior, and business environment concepts. Familiarity with principles of economics and management will be helpful.

Course Description:

The Rural and Agricultural Marketing course provides a comprehensive understanding of marketing principles applied to rural consumers and agricultural products. The course emphasizes agricultural marketing channels, value addition, and government initiatives supporting rural development. Students will also learn contemporary tools such as digital marketing, e-commerce platforms, and innovative rural business models.

Course Objectives:

1. To develop understanding of rural and agricultural marketing concepts, rural consumers and agricultural markets.
2. To familiarize students with rural market structure, segmentation, agricultural marketing channels and institutional framework.
3. To enhance knowledge of marketing strategies, distribution systems, pricing practices and promotional approaches in rural markets.
4. To strengthen analytical understanding of contemporary rural marketing trends, government initiatives and sustainable agricultural marketing practices.

Course Outcomes:

COs	After completion of the course students will be able to	Bloom's Level
CO1	Identify concepts, terminology, institutions, marketing channels, and government initiatives related to rural and agricultural marketing.	Remember (Level 1)
CO2	Describe rural consumer behavior, market segmentation, agricultural marketing systems, pricing, distribution, and promotional strategies.	Understand (Level 2)
CO3	Demonstrate marketing principles and strategic approaches for rural markets, agricultural products, value chains, and digital rural platforms.	Apply (Level 3)
CO4	Examine rural marketing challenges, agricultural marketing practices, government schemes, and emerging trends in rural and agri-business environments.	Analyze (Level 4)

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	1	2	1	3	1	1
CO2	3	2	1	2	2	3	2	1
CO3	3	3	1	2	2	3	2	2
CO4	3	3	2	3	2	3	2	3

Assessment	
CA-1(a) (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Case Study /Power Point Presentation /MCQ Test etc.

Course Contents		
Unit 1	Introduction to Rural and Agricultural Marketing 1.1 Rural Marketing: Concept and Importance 1.1.1 Definition, scope, and characteristics 1.1.2 Role of rural marketing in Indian economy 1.1.3 Rural and urban marketing 1.2 Rural Consumer Behavior 1.2.1 Demographic and Social factors 1.2.2 Cultural and economic factors 1.2.3 Needs, wants, and buying behavior 1.3 Agricultural Marketing 1.3.1 Concept and Importance 1.3.2 Definition and scope 1.3.3 Role in agricultural development 1.3.4 Challenges	4Hrs.
Unit 2	Rural Structure 2.1 Rural Market Structure and Segmentation 2.1.1 Rural households, villages, and markets 2.1.2 Segmentation 2.1.3 Targeting strategies 2.2 Challenges in Rural Marketing 2.2.1 Infrastructure 2.2.2 Literacy 2.2.3 Communication barriers 2.3 Emerging opportunities: 2.3.1 FMCG 2.3.2 Telecom 2.3.3 Agri-inputs 2.3.4 E-commerce	4Hrs.
Unit 3	Rural and Agri Marketing Strategy-I 3.1 Product Strategy 3.1.1 Product adaptation and innovation for rural needs 3.1.2 Packaging 3.2 Pricing Strategies 3.2.1 Cost-based 3.2.2 Value-based 3.2.3 Penetration pricing 3.3 Role of government subsidies and MSP 2.3.1 Pricing challenges in rural markets	4Hrs.
Unit 4	Rural and Agri Marketing Strategy-II 4.1 Distribution Strategies 4.1.1 Rural distribution channels 4.1.2 Role of cooperatives 4.1.3 Role of private players	4Hrs.

	4.1.4 Logistics and supply chain management 4.2 Promotion and Communication 4.2.1 Rural advertising 4.2.2 Role of folk media, community radio 4.2.3 Role of digital tools 4.2.4 Personal selling and sales promotion 4.3 Agricultural Marketing Channels 4.3.1 Farmer to consumer channels 4.3.2 Role of mandis and melas 4.3.3 Wholesalers and retailers 4.3.4 E-markets 4.3.5 Contract farming and direct marketing	
Unit 5	Agricultural Marketing Institutions 5.1 Types 5.1.1 APMC 5.1.2 Cooperatives 5.1.3 FPOs and private players 5.1.4 Warehousing 5.1.5 Cold storage, and logistics management 5.2 Marketing of Agricultural Inputs 5.2.1 Seeds 5.2.2 Fertilizers 5.2.3 Pesticides 5.2.4 Machinery 5.3 Marketing of Agricultural Produce 5.3.1 Commodity marketing 5.4 Agri-Processing and Value Chain 5.4.1 Processing of food and non-food products 5.4.2 Farmer, processor and retailer Linkages	4Hrs.
Unit 6	Contemporary Issues and Innovations in Rural and Agricultural Marketing 6.1 Digital and E-Rural Marketing 6.1.1 Role of E-commerce 6.1.2 Mobile apps 6.1.3 Social media 6.1.4 Government platforms like eNAM, Kisan Suvidha and E- Choupal 6.2 Sustainable and Ethical Marketing 6.2.1 Eco-friendly practices 6.2.2 CSR initiatives in rural marketing 6.3 Government Policies and Support 6.3.1 NABARD 6.3.2 FPO schemes 6.3.3 Subsidies and extension services 6.3.4 Role of agricultural marketing boards	4 Hrs.

Sr. No.	Textbooks
1.	Dr. Prakash M. Tayde, Cooperative Rural Development in India, Chandralok Prakashan, 2015 Edition.
2.	K. S. Habib-ur-Rahman, Rural Marketing in India, 2nd Edition, Himalaya Publishing House.
	Reference Books
1.	Pradeep Kashyap and Siddhartha Raut, Rural Marketing, 2nd Edition, Pearson Education.
2.	M. K. Purushothama, Rural and Agricultural Marketing, 2nd Edition, Himalaya Publishing House.

Sr. No.	Web Resources
1.	SWAYAM – Rural Marketing – https://onlinecourses.swayam2.ac.in/e-learning/preview/nou25_mg25
2.	NABARD Knowledge Hub — https://www.nabard.org
3.	eNAM (National Agriculture Market) — https://www.enam.gov.in

Course Title: Marketing Research and Analytics		
Course Code: PB253017		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 02 hrs./ week	CA-1	10 Marks
Tutorial: NIL	MSE	20 Marks
Credits:02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: The students should have Basic knowledge of Marketing Management principles, Fundamental understanding of Business Statistics or Quantitative Techniques and Basic computer proficiency, including spreadsheet software (e.g., Microsoft Excel).		
Course Description: Marketing Research and Analytics is a comprehensive course that equips students with the knowledge and skills required to collect, analyze, interpret, and apply marketing data for effective business decision-making.		
1. Understand the concepts, scope, and significance of marketing research in business decision-making. 2. Develop appropriate research designs and apply suitable methods for collecting primary and secondary marketing data. 3. Apply sampling techniques, questionnaire design principles, and statistical methods for marketing research. 4. Analyze and interpret marketing data using descriptive and inferential statistical techniques with analytical software.		

Course Outcomes		
COs	After completion of the course, students will be able to	Bloom's Level
CO1	Recall and define the fundamental concepts, terminology, processes, and methods of marketing research and marketing analytics.	Remember (Level 1)
CO2	Explain the role of marketing research and analytics in business decision-making, including research designs, data collection methods, sampling techniques, and ethical considerations.	Understand (Level 2)
CO3	Apply appropriate research methodologies, statistical techniques, and analytical tools to collect, organize, analyze, and interpret marketing data.	Apply (Level 3)
CO4	Analyze consumer, market, and business data using marketing analytics techniques to identify trends, relationships, patterns, and opportunities for managerial decision-making.	Analyze (Level4)

CO PO Mapping								
COS	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	1	2	2	1	1
CO2	3	2	-	2	3	3	2	2
CO3	3	3	1	2	3	3	2	2
CO4	3	3	1	2	3	3	2	2

Assessment	
CA-1(a) (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Case Study /Power Point Presentation /MCQ Test etc.

Course Contents		
Unit 1	Introduction to Marketing Research 1.1 Concept, scope, and importance of marketing research 1.2 Marketing research process 1.3 Role of marketing research in decision-making 1.4 Types of marketing research: Exploratory, Descriptive, and Causal 1.5 Ethics in marketing research 1.6 Emerging trends in marketing research	4 Hrs.
Unit 2	Research Design and Data Collection 2.1 Research problem identification and formulation 2.2 Research design: Qualitative and Quantitative research 2.3 Sampling design: Probability and Non-probability sampling 2.4 Sources of data: Primary and Secondary data 2.5 Data collection methods: Surveys, Interviews, Observation, Focus Groups, Experiments 2.6 Questionnaire design and scaling technique	4 Hrs.
Unit 3	Data Preparation and Statistical Analysis 3.1 Data editing, coding, classification, and tabulation 3.2 Data visualization techniques 3.3 Descriptive statistics: Mean, Median, Mode, Standard Deviation 3.4 Correlation and Regression Analysis 3.5 Hypothesis testing (t-test, Chi-square, ANOVA – introductory concepts) 3.5 Introduction to statistical software (Excel/SPSS/R)	4 Hrs.
Unit 4	Marketing Analytics 4.1 Introduction to Marketing Analytics 4.2 Customer Analytics and Customer Lifetime Value (CLV) 4.3 Market Basket Analysis 4.4 Sales and Demand Forecasting 4.5 Customer Segmentation using analytics 4.6 Digital Marketing Analytics: Web and Social Media Analytics	4 Hrs.
Unit 5	Advanced Marketing Analytics Techniques 5.1 Predictive Analytics in Marketing 5.2 Data Mining concepts 5.3 Sentiment Analysis and Text Analytics 5.4 Dashboard and Data Visualization Tools 5.5 Applications of AI and Machine Learning in Marketing 5.6 Marketing Performance Metrics and KPIs	4 Hrs.
Unit 6	Applications and Contemporary Issues 6.1 Consumer behavior analytics 6.2 Brand and Product Research 6.3 Pricing, Advertising, and Retail Analytics 6.4 CRM Analytics 6.5 Case Studies in Marketing Research and Analytics 6.6 Contemporary issues: Big Data, Privacy, Data Security, and Ethical Challenges	4 Hrs.

Sr. No.	Textbooks
1	Malhotra, N. K., Nunan, D., and Birks, D. F. Marketing Research: An Applied Approach. 6th/7th Edition, Pearson Education.
2	Aaker, D. A., Kumar, V., Leone, R. P., and Day, G. S. Marketing Research. 12th Edition, Wiley India
Sr. No.	Reference Books
1	Hair, J. F., Celsi, M., Ortinau, D. J., and Bush, R. P. Essentials of Marketing Research. 5th Edition, McGraw-Hill Education.
2	Wedel, M., and Kannan, P. K. Marketing Analytics for Data-Rich Environments. Journal of Marketing (Selected Readings).
3	Provost, F., and Fawcett, T. Data Science for Business. O'Reilly Media.

Sr. No.	Web Resources
1	https://www.researchandmarkets.com/?srsltid=AfmBOoq39h95ACc6JAjjHReiFuQxjWT9R6oSlrzEd2y0pLQeVnCC0P6C
2	https://www.coursera.org/in/articles/market-analysis
3	https://hbr.org/topic/subject/market-research

Course Title: Security Analysis and Portfolio Management Course Code: PB253011			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 04hrs/week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Students should possess a basic understanding of finance, accounting, economics, and quantitative techniques. Familiarity with financial statements, risk-return concepts, percentages, averages, and basic statistical tools will be beneficial for a better understanding of the course content.			
Course Description: This course provides an understanding of the investment environment, financial markets, risk and return, security valuation, and portfolio management. It covers fundamental and technical analysis, valuation of equity and bonds, modern portfolio theory, asset pricing models, and portfolio performance evaluation. The course helps students develop analytical skills for making sound investment decisions.			
Course Objectives: 1. To develop an understanding of the investment environment, financial markets, and risk–return dynamics in investment decisions. 2. To provide knowledge of fundamental and technical analysis techniques for evaluating financial securities and market trends. 3. To familiarize students with equity and bond valuation methods used in security analysis and investment decision-making. 4. To introduce portfolio theory, diversification, asset pricing models, and portfolio construction strategies. 5. To enable students to evaluate portfolio performance and use digital tools and financial platforms in investment analysis.			

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define concepts of the investment environment, financial markets, risk–return relationship, security analysis, portfolio management, and asset pricing.	Remember (Level1)
CO2	Describe the investment environment, financial markets, risk–return relationship, security and portfolio analysis, and investment tools.	Understand (Level 2)
CO3	Apply security valuation methods, technical indicators, risk–return measures, portfolio models, and digital tools in investment analysis.	Apply (Level 3)
CO4	Analyze securities and portfolios using fundamental analysis, technical analysis, and risk–return measures for investment decision-making.	Analyze (Level 4)

CO-PO Mapping								
Cos	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	-	1	-	3	1	-
CO2	3	2	-	2	1	2	1	-
CO3	3	2	1	2	2	3	3	1
CO4	3	3	1	2	2	3	2	1

Assessment	
CA-1 (a) - (10M)	Assignment/Mind Map/Case Study etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Stock Analysis Report/Subjective Test/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Investment Environment and Risk-Return Framework 1.1 Investment Basics 1.1.1 Meaning, nature, and objectives of investment 1.1.2 Investment, Speculation and Gambling 1.1.3 Types of investors 1.1.4 The Investment Process 1.2 Investment Avenues 1.2.1 Financial Assets 1.2.2 Real Assets 1.3 Financial Markets 1.3.1 Capital market and money market 1.3.2 Primary market and secondary market 1.3.3 Functions of stock exchanges 1.4 Risk and Return Framework 1.4.1 Meaning of risk and return 1.4.2 Types of risk 1.4.2.1 Systematic risk 1.4.2.2 Unsystematic risk 1.4.3 Measurement of Risk 1.4.4 Standard deviation 1.4.5 Beta	8 Hrs.
Unit 2	Fundamental Analysis and Security Valuation 2.1 Fundamental Analysis 2.1.1 Concept and Importance of Fundamental Analysis 2.2 Economic, Industry and Company Analysis(EIC Framework) 2.2.1 Economy Analysis 2.2.2 Industry Analysis 2.2.3 Company Analysis 2.2.4 SWOT Analysis in Company Analysis 2.3 Equity Valuation 2.3.1 Equity Valuation Concepts 2.3.2 Dividend Discount Model (DDM) (Numerical) 2.3.3 Price–Earnings (P/E) Ratio (Numerical) 2.4 Bond Valuation 2.4.1 Basic Bond Valuation (Numerical) 2.4.2 Yield to Maturity (YTM) (Numerical)	8 Hrs.
Unit 3	Technical Analysis of Securities 3.1 Technical Analysis 3.1.1 Meaning and assumptions 3.1.2 Dow Theory 3.2 Charts and patterns 3.2.1 Types of Charts 3.2.2 Line Chart 3.2.3 Bar Chart 3.2.4 Candlestick Chart 3.3 Support and Resistance Levels 3.4 Technical Indicators	8 Hrs.

	3.4.1 Moving Averages 3.4.2 Moving Average Convergence Divergence (MACD) 3.4.3 Bollinger Bands 3.4.4 Relative Strength Index (RSI)	
Unit 4	Portfolio Construction and Portfolio Management 4.1 Portfolio Management Basics 4.1.1 Meaning and Objectives of Portfolio Management 4.1.2 Benefit of diversification 4.1.3 Portfolio Risk and Return (Numerical) 4.2 Modern Portfolio Theory 4.2.1 Markowitz Portfolio Theory 4.2.2 Efficient Frontier 4.2.3 Optimal Portfolio Selection 4.3 Capital Market Theory 4.3.1 Capital Market Line (CML) 4.3.2 Capital Asset Pricing Model (CAPM) (Numerical) 4.3.3 Security Market Line (SML) 4.4 Portfolio Construction Strategies 4.4.1 Active Portfolio Management 4.4.2 Passive Portfolio Management	8 Hrs.
Unit 5	Portfolio Evaluation and Portfolio Revision 5.1 Portfolio Performance Measurement 5.1.1 Holding Period Return (HPR) 5.1.2 Time-Weighted Rate of Return (TWRR) 5.1.3 Money-Weighted Rate of Return (MWRR) 5.2 Risk-Adjusted Performance Measures 5.2.1 Sharpe Ratio (Numerical) 5.2.2 Treynor Ratio 5.2.3 Jensen's Alpha 5.3 Portfolio Evaluation and Revision 5.3.1 Concept and Objectives of Portfolio Evaluation 5.3.2 Benchmarking with Market Indices 5.3.3 Need for Portfolio Revision 5.3.4 Portfolio Rebalancing Strategies 5.4 Efficient Market Hypothesis and Forms of Market Efficiency 5.4.1 Meaning of EMH 5.4.2 Weak Form 5.4.3 Semi-strong Form 5.4.4 Strong Form	8 Hrs.
Unit 6	Technology and Practical Applications in Investment Analysis 6.1 Financial Data Platforms NSE and BSE India 6.1.1 NSE and BSE India: Market information and data access. 6.1.2 Use of digital platforms for investment information and market tracking. 6.2 Investment Analytics Tools 6.2.1 Stock screening and analysis using Screener.in, Trendlyne, or similar tools 6.2.2 Trend analysis and chart-based trading signals using Trading View or similar software 6.3 Spreadsheet Applications in Investment Analysis 6.3.1 Use of MS Excel / Google Sheets in investment analysis 6.3.2 Data organization and graphical presentation 6.4 Equity Analysis and Reporting 6.4.1 Analysis of listed companies using publicly available financial data. 6.4.2 Preparation of stock analysis reports	8 Hrs.

Sr. No.	Textbooks
1.	Prasanna Chandra, Investment Analysis and Portfolio Management, McGraw Hill Education, 5th Edition.
2.	V. A. Avadhani, Securities Analysis and Portfolio Management, Himalaya Publishing House, 14th Edition.
3.	Donald E. Fischer and Ronald J. Jordan, Security Analysis and Portfolio Management, Pearson Education, 6th Edition.

Sr. No.	Reference Books
1.	Frank K. Reilly and Keith C. Brown, Investment Analysis and Portfolio Management, Cengage Learning, 10th Edition.
2.	Sudhindra Bhat, Security Analysis and Portfolio Management, Excel Books, 2nd Edition.

Sr. No.	Web Resources
1.	Aswath Damodaran, NYU Stern School of Business, https://pages.stern.nyu.edu/~adamodar
2.	Security Analysis Portfolio Management, NPTEL, https://youtu.be/iMXpuMbvl10
3.	SEBI (Securities and Exchange Board of India), https://www.sebi.gov.in

Course Title: Financial Statement Analysis Course Code: PB253012			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 04 hrs/ week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Students should have basic knowledge of Financial Accounting, Business Finance, and Business Mathematics. This foundational understanding will help them effectively learn and apply concepts related to financial statement analysis and business decision-making.			
Course Description: This course focuses on understanding, interpreting, and evaluating financial statements of business organizations. It provides students with analytical tools such as ratio analysis, common-size analysis, trend analysis, and cash flow analysis to assess the financial health and performance of companies and support managerial decision-making.			
Course Objectives: 1. To understand the structure and components of financial statements. 2. To analyze financial statements using different analytical techniques. 3. To interpret financial information for managerial and investment decisions. 4. To develop the ability to evaluate the financial performance of organizations.			

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the basic concepts of financial statements analysis, funds and cash flow analysis, advanced analysis tools, and Emerging Technologies.	Remember (Level 1)
CO2	Explain the significance, applications of financial statement analysis, advanced techniques, and Emerging Technologies in evaluating financial performance for effective managerial decision-making.	Understand (Level 2)
CO3	Apply financial statement analysis techniques to interpret financial information and determine overall business performance for informed decision-making.	Apply (Level 3)
CO4	Analyze financial statements using analytical tools to support managerial decision-making.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	1	-	1	1	2	1	-
CO2	2	2	-	1	1	2	2	1
CO3	3	3	1	2	2	3	2	2
CO4	3	3	1	2	2	3	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Statement Analysis / Assignment/ MCQ Test etc.

Course Contents		
Unit-1	Introduction of Financial Statement Analysis 1.1 Meaning and objectives of financial statement analysis 1.2 Types of financial statements 1.2.1 Balance Sheet 1.2.1 Income Statement 1.2.3 Cash Flow Statement 1.3 Users of financial statements 1.4 Limitations of financial statements	8 Hrs.
Unit-2	Techniques of Financial Statement Analysis 2.1 Comparative financial statements 2.2 Common size financial statements 2.3 Financial Statement Analysis Techniques 2.3.1 Trend analysis, 2.3.2 Horizontal and 2.3.3 vertical analysis 2.4 Interpretation of financial information	8Hrs.
Unit-3	Ratio Analysis 3.1 Meaning and objectives of ratio analysis 3.2 Classification of ratios 3.2.1 Liquidity ratios 3.2.2 Profitability ratios 3.2.3 Solvency ratios 3.2.4 Activity / turnover ratios 3.3 Limitations of ratio analysis	8 Hrs.
Unit-4	Funds Flow and Cash Flow Analysis 4.1 Concept of funds flow statement 4.2 Preparation of statement 4.2.1 funds flow statement 4.2.2 Cash flow statement 4.3 Cash Flow Activities 4.3.1 Operating Activities 4.3.2 Investing Activities 4.3.3 Financing Activities 4.4 Importance of cash flow analysis in decision making	8 Hrs.
Unit-5	Advanced Financial Statement Analysis 5.1 DuPont analysis 5.2 Financial forecasting 5.2.1 Sales forecasting 5.2.2 Forecasting of income statement 5.2.3 Cash flow forecasting methods 5.3 Earnings quality and window dressing 5.4 Financial distress prediction models (Altman Z-Score) 5.5 Interpretation of financial reports for managerial decisions	8 Hrs.
Unit-6	AI and Emerging Technologies in Financial Statement Analysis 6.1 Use of Artificial Intelligence in financial analysis 6.2 AI tools for Balance Sheet and Cash Flow Analysis 6.2.1 Automated ratio analysis using AI 6.2.2 AI-based cash flow forecasting 6.2.3 Smart balance sheet interpretation 6.3 Data Visualization and Dashboard Reporting 6.3.1 Power BI and Tableau for financial analysis 6.3.2 Real-time financial reporting systems 6.4 Predictive analytics and automation in financial decision making	8 Hrs.

Sr. No.	Textbooks
1.	Satish Inamdar, Financial Management, Everest Publishing House, Latest Edition.
2.	M. Y. Khan and P. K. Jain, Financial Management: Text, Problems and Cases, McGraw Hill Education, 8th Edition.
3.	K. R. Subramanyam and John J. Wild, Financial Statement Analysis, McGraw Hill Education, 11th Edition.
4.	M. Y. Khan and P. K. Jain, Financial Statement Analysis, Tata McGraw Hill, Latest Edition.
Sr. No.	Reference Books
1.	S. K. Bhattacharya, Accounting for Management, Vikas Publishing House, 3rd Edition.
2.	M. Y. Khan and P. K. Jain, Management Accounting: Text, Problems and Cases, McGraw Hill Education, 8th Edition.
3.	Charles H. Gibson, Financial Reporting and Analysis, Cengage Learning, 14th Edition.
4.	Krishna G. Palepu and Paul M. Healy, Business Analysis and Valuation, Cengage Learning, 5th Edition.

Sr. No.	Web Reference
1.	Financial Statement Analysis and Reporting- https://nptel.ac.in/courses/110107073
2.	Financial Accounting – IIT- https://nptel.ac.in/courses/110106147
3.	Advanced Financial Analytics - https://nptel.ac.in/courses/110104624

Course Title: Direct and Indirect Taxation		Course Category: PEC	
Course Code: PB253013			
Teaching Scheme		Examination Scheme	
Lectures: 04 hrs. / week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 04		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Basic understanding of terms such as direct and indirect taxes, along with fundamental taxation concepts including different heads and sources of income. The ability to think logically and critically about problems related to the tax liabilities of individuals and corporations under current tax regulations will be beneficial.			
Course Description: The course introduces students to the basic concepts of taxation, computation of taxable income, tax planning, and compliance requirements for individuals and business entities. It also covers the structure and functioning of the GST system, including input tax credit, registration, filing procedures, and the impact of indirect taxes on pricing and supply chains.			
Course Objectives: 1. To introduce foundational concepts, definitions, and provisions of Indian Income Tax and Indirect Tax laws. 2. To enable practical computation of taxable income, GST liability, and customs Duties for various entities. 3. To cultivate analytical skills for evaluating tax liabilities of individuals and Corporations under current tax regulations. 4. To familiarize students with recent reforms and trends in direct and indirect Taxation, emphasizing their impact on economic governance.			

Course Outcomes:		
COS	After completion of the course: Students will be able to	Bloom's Level
CO1	Define the core concepts, provisions, and definitions under the Indian Income Tax Act and Indirect Tax Laws.	Remember (Level 1)
CO2	Describe provisions of Income Tax, GST, and Customs laws to compute taxable Income and duties.	Understand (Level 2)
CO3	Apply provisions and compute tax liabilities for individuals, corporate, and indirect tax transactions	Apply (Level 3)
CO4	Analyze ethical and legal dimensions of tax planning, avoidance, and evasion under both direct and indirect tax frameworks.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	2	-	2	1	1
CO2	2	3	1	2	-	2	1	1
CO3	2	3	1	3	1	2	1	1
CO4	2	3	1	3	1	3	1	1

Assessment	
CA-1 (a) - (10M)	Assignment/ MCQ Test/ Quiz/ PowerPoint Presentation etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Case Study/ Role Play Activity/ Open Book Test/ Excel Based Tax Working etc.

Course Contents		
Unit-1	Foundations of Direct Tax 1.1 Meaning, of Income and Person 1.1.1 Types of Persons 1.1.2 Types of Income 1.2 Concept and Importance of Financial Year 1.2.1 Types of Years 1.3 Residential Status of an Individual 1.4 Meaning and Importance of Regimes 1.4.1 Tax Computation by using two Regimes 1.5 Tax Rates and Rebates of Companies using two Regimes	8 Hrs.
Unit-2	Heads of Income 2.1 Different Heads of Income 2.1.1 Concept and importance of Heads and Sources of Income 2.2 Income from Salary 2.2.1 Concept of Allowance and Perquisites 2.2.2 Computation of HRA 2.3 Income from House Property 2.3.1 Types of House Property 2.4 Profit and Gains of Business or Profession 2.5 Income from Capital Gains 2.6 Income from Other Sources	8 Hrs.
Unit-3	Exemptions, Deductions and TDS 3.1 Different Incomes Exempt from Tax 3.2 Deductions under Chapter VIA 3.2.1 Income based Deductions 3.2.2 Payment Based Deductions (80C-80G) 3.3 Tax Deducted at Source 3.3.1 Different Section Related to TDS	8 Hrs.
Unit-4	Foundations of Indirect Tax 1.1 Concept and Importance of GST 1.2 Need and Benefits for GST in India 1.3 Basic Terminologies used in GST 1.3.1 CGST 1.3.2 SGST 1.3.3 UTGST 1.3.4 IGST 1.4 Compensation Cess 1.5 Input Tax Credit	8 Hrs.
Unit-5	Supply and Registration under GST 5.1 Meaning of Supply 5.1.1 Forms of Supply 5.1.2 Inclusions and Exclusions of Supply in GST 5.1.3 Parameters of Supply in GST 5.2 Meaning of Registration 5.2.1 Terms used in Registration 5.2.2 Types of Registrations and Types of Numbers under Registrations 5.3 Types of Taxpayers 5.4 Periods for Filing GST Returns for different Taxpayers	8 Hrs.
Unit-6	Tax Computation and GST Registration 6.1 Salary Computation of Individuals by Old and New Regimes using Applications with Tax Liability 6.2 Understanding GST Registration and Prepare sample GST return formats (GSTR-1/GSTR-3B)	8 Hrs.

Sr. No.	Textbooks
1.	V. K. Singhania and Monica Singhania, Students' Guide to Income Tax including GST, Taxmann Publications.
2.	Girish Ahuja and Ravi Gupta, Systematic Approach to Income Tax including GST, Wolters Kluwer.
Sr. No.	Reference Books
1.	H. C. Mehrotra and S. P. Goyal, Income Tax Law and Accounts, Sahitya Bhawan Publications, 65th Edition.
2.	V. S. Datey, Indirect Taxes Law and Practice – GST and Customs, Taxmann Publications, 11th Edition.
3.	Income Tax Act and GST Acts with Rules, Circulars and Notifications, Commercial Law Publishers / Taxmann.

Sr. No.	Web Resources
1.	Direct Tax - Laws and Practice By Prof. (Dr.) Subhrangshu Sekhar Sarkar https://onlinecourses.swayam2.ac.in/e-learning/preview/cec21_cm02
2.	Introduction to GST By Prof. Anil Sharma https://onlinecourses.nptel.ac.in/noc24_mg138/preview
3.	Institute of Cost and Management Accountants of India https://icmai.in/CIntStudents/Intermediate_Study_Materials
4.	Institute of Chartered Accountants of India https://boslive.icai.org/sm_module.php?module=137

Course Title: Business Valuation and Corporate Restructuring		
Course Code: PB253014		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs. / week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Basic Understanding of terms such as Mergers and Acquisitions. Basic Knowledge of financial management concepts, accounting principles, and corporate finance decisions. Familiarity with financial statements, time value of money, and basic valuation concepts will help in understanding business valuation techniques and restructuring strategies.		
Course Description: This course focuses on the concepts, techniques, and practical applications used to determine the economic value of businesses and to manage structural changes within organizations. The course provides students with a comprehensive understanding of valuation methodologies used in investment decisions, mergers and acquisitions, financial reporting, and strategic planning.		
Course Objectives: 1. To introduce the concept, objectives, and importance of business valuation incorporate finance decisions. 2. To familiarize students with different valuation methodologies, including asset, income, and market-based approaches 3. To enable practical application of dividend discount models and discounted cashFlow models in equity valuation. 4. To explain the strategic significance and forms of corporate restructuring, including mergers, acquisitions, divestitures, and alliances. 5. To impart detailed knowledge of the motives, classifications, and regulatory frameworks governing mergers and acquisitions.		

Course Outcomes:		
Cos	After completion of the course students will be able to	Bloom's Level
CO1	Define the fundamental concepts, principles, objectives, and approaches of business valuation and corporate restructuring.	Remember (Level 1)
CO2	Describe various valuation methodologies such as Dividend Discount Models, Discounted Cash Flow Models, Relative Valuation techniques, and their practical relevance in business decisions.	Understand (Level 2)
CO3	Apply valuation techniques and restructuring strategies to compute business value, evaluate mergers and acquisitions, and interpret financial outcomes in real business scenarios.	Apply (Level 3)
CO4	Analyse mergers, acquisitions, takeover tactics, due diligence processes, and post-merger integration issues for strategic decision-making and value creation.	Analyse (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	2	1	2	1	1
CO2	3	2	1	2	-	3	2	2
CO3	2	3	-	3	1	3	2	2
CO4	3	2	1	2	1	3	2	2

Assessment	
CA-1 (a) - (10M)	MCQ Test/ Quiz/ Power Point Presentation/ Assignment etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Case Study/ Role Play/Open Book Test/ Excel Based Financial Model etc.

Course Contents		
Unit 1	Foundations of Valuation 1.1 Meaning, Nature, and Scope of Valuation 1.1.1 Objectives of Valuation: 1.2 Importance of Business Valuation 1.3 Misconceptions About Valuation 1.4 Role of Valuation in Strategic Decision-Making 1.4.1 Core Financial Decisions 1.4.2 Investment Decisions 1.5 Elements and Approaches of Business Valuation 1.5.1 Future Cash Flow Projections 1.5.2 Growth Rate and Risk Earnings Quality and Profitability	8 Hrs.
Unit 2	Equity Valuation 2.1 Different models of Equity Valuation 2.2 Concept and importance of Models of Equity valuation 2.3 Dividend Discount Models 2.3.1 Zero Growth Model 2.3.2 Constant Growth Model 2.3.3 Two Stage Model (Numerical) 2.4 Valuation approaches: 2.4.1 Asset-based Valuation 2.4.2 Earnings-based Valuation 2.5 DCF Models 2.5.1 Equity DCF Model 2.5.2 Free Cash Flow to Equity Model	8 Hrs.
Unit 3	Relative Valuation 3.1 Concept and Importance of Relative Valuation 3.2 Steps in Relative Valuation: 3.2.1 Finding Comparable Companies 3.2.2 Selecting Appropriate Valuation Metrics 3.2.2.1 P/E 3.2.2.2 EV/EBITDA 3.3 Applications of Relative Valuation 3.4 Advantages and Limitations of Relative Valuation 3.5 Trading Multiples and Transaction Multiples	8 Hrs.
Unit 4	Corporate Restructuring Basics 4.1 Mergers and Acquisitions 4.1.1 Concept and Need 4.1.2 Importance and Objectives 4.2 Divestitures and Financial Reorganization 4.2.1 Value Creation through Strategic Financial Decisions 4.2.2 Case Studies on Indian and Global Corporate	8 Hrs.
Unit 5	Mergers and Acquisitions 5.1 Merger 5.1.1 Types with Examples 5.2 Acquisitions 5.2.1 Types with Examples 5.3 Merger Process 5.4 Identification of Targets 5.5 Takeover and Defense Tactics	8 Hrs.

	5.6 Scheme of Arrangement	
Unit 6	Analysis of Listed Companies 6.1 Students shall select any one listed company from the following sectors: 6.1.1 Banking 6.1.2 Fast Moving Consumer Goods (FMCG) 6.1.3 Information Technology (IT) 6.1.4 Automobile 6.1.5 Pharmaceutical 6.2 Students shall collect and compile relevant data pertaining to the selected company, including: 6.2.1 Annual Reports 6.2.2 Financial Statements 6.2.3 Stock Market Data 6.2.4 Dividend and Share Price Information 6.2.5 Industry and Competitor Information	8 Hrs.

Sr. No.	Textbooks
1.	P. Godbole, Mergers, Acquisitions and Corporate Restructuring, Vikas Publishing House, New Delhi, 2013.
2.	Rajinder S. Aurora, Kavita Shetty, and Sharad R. Kale, Mergers Acquisitions, Oxford University Press, New Delhi.
3.	Aswath Damodaran, Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, Wiley.
Sr. No.	Reference Books
1.	B. Rajesh Kumar, Mergers and Acquisitions: Text and Cases, Tata McGraw Hill Education Private Limited, New Delhi.
2.	Fred Weston, Kwang S. Chung, and Susan E. Hoag, Mergers, Restructuring and Corporate Control, 4th Edition, Pearson Education.
3.	Joshua Rosenbaum and Joshua Pearl, Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions.

Sr. No.	Web Resources
1.	Mergers, Acquisitions and Corporate Restructuring https://onlinecourses.nptel.ac.in/noc23_mg58/preview
2.	Damodaran Online https://pages.stern.nyu.edu/~adamodar/
3.	Competition Commission of India (CCI)—Press Releases https://www.cci.gov.in/combination/press-release
4.	NSE India(Merger and Acquisition Module) https://shorturl.at/YIESX

Course Title: Fintech and Digital Finance		
Course Code PB253015		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 4 hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Foundational knowledge of banking systems, financial markets, and digital payment mechanisms.		
Course Description: This course introduces students to FinTech and Digital Finance, explaining how technology is transforming banking, payments, lending, investments, and financial services. It covers digital payment systems, mobile banking, online platforms, FinTech business models, regulations, security issues, and managerial aspects. Students will understand the role of digital finance in improving efficiency, convenience, and financial inclusion, and analyze its opportunities and challenges in the financial sector.		
Course Objectives: 1. To understand the concepts, scope, and evolution of FinTech and Digital Finance. 2. To study digital payment systems, online banking platforms, and emerging financial technologies. 3. To analyze FinTech applications in banking, lending, investments, insurance, and wealth management. 4. To examine the regulatory framework, cybersecurity risks, and data privacy issues in digital finance. 5. To develop managerial and analytical skills for evaluating opportunities, challenges, and future trends in the FinTech sector.		

Course Outcomes:		
COs	After completion of the course: Students should be able to	Bloom's Level
CO1	Define the concepts, terms, evolution, and ecosystem of FinTech and Digital Finance.	Remember (Level1)
CO2	Explain digital payment systems, UPI, mobile wallets, internet banking, payment banks, and neo-banks	Understand (Level 2)
CO3	Use FinTech tools and digital financial platforms in banking, lending, and investment scenarios.	Apply (Level 3)
CO4	Analyze FinTech applications, regulatory issues, cybersecurity risks, and data privacy challenges in digital finance	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	3	1	–	1	–	3	1	-
CO2	3	2	–	2	–	3	2	1
CO3	3	2	1	1	1	3	3	1
CO4	2	3	1	3	1	2	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Subjective Test/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Introduction to FinTech and Digital Ecosystems 1.1 Meaning and definition of FinTech 1.2 Evolution of FinTech and digital finance 1.3 Traditional finance and FinTech 1.4 FinTech ecosystem and key players 1.5 Role of FinTech in financial inclusion 1.6 Overview of FinTech landscape in India	8 Hrs.
Unit 2	Digital Payments and Banking system in India 2.1 Digital payment systems: concept and importance 2.2 UPI, mobile wallets, cards, net banking 2.3 Payment banks and neo-banks 2.4 Core Banking Solutions (CBS) 2.5 Internet and mobile banking services 2.6 Role of NPCI in digital payments	8 Hrs.
Unit 3	Fintech Applications in Financial Services 3.1 FinTech Applications in Lending 3.2 Investments and Insurance 3.3 Digital lending platforms and P2P lending 3.4 Alternative credit scoring and data analytics 3.5 Robo-advisory services 3.6 Online trading and investment platforms 3.7 Insurtech and digital insurance models 3.8 Wealth Tech and personal finance applications	8 Hrs.
Unit 4	Regulation and Technology of FinTech 4.1 Regulatory framework for FinTech in India 4.2 Role of RBI, SEBI and other regulators 4.3 Cyber security in Digital Finance 4.4 Data privacy issues and Protection 4.5 Regulatory Sandbox and policies	8 Hrs.
Unit 5	Innovation and Future of Fintech 5.1 Introduction to blockchain and cryptocurrencies 5.2 Central Bank Digital Currency (CBDC) – Digital Rupee 5.3 Future trends and challenges in FinTech	8 Hrs.
Unit 6	Applications and Emerging Trends in FinTech and Digital Finance 6.1 Application of Artificial Intelligence and Machine Learning in FinTech 6.2 Generative AI and Large Language Models in Financial Services 6.3 Open Banking, Account Aggregators and Embedded Finance 6.4 Digital Financial Platforms and FinTech Super Apps 6.5 Case Studies of Emerging FinTech Business Models in India 6.6 Future Challenges and Opportunities: Financial Inclusion, Sustainability and Responsible FinTech	8 Hrs.

Sr. No.	Textbooks
1.	FinTech: The New DNA of Financial Services by Frederic S. Mishkin
2.	Digital Banking and Financial Innovation
3.	Digital Finance By N. K. Thingalaya
Sr. No.	Reference Books
1.	Fintech: The New DNA of Financial Services – Pranay Gupta T. Mandy Tham
2.	FinTech Future: The Digital DNA of Finance – Sanjay Phadke

Sr. No.	Web Resources
1.	https://www.rbi.org.in/
2.	https://www.npci.org.in/
3.	https://swayam.gov.in/

Course Title: Indian Financial System		
Course Code: PB253016		Course Category : PEC
Teaching Scheme	Examination Scheme	
Lectures: 02hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students are expected to possess a basic understanding of financial and economic concepts, along with familiarity with banking and financial terminology. A general awareness of the Indian financial system will be beneficial for effective learning in this course.		
Course Description: This course provides an overview of the structure, components, and functioning of the Indian Financial System. It introduces students to financial institutions, financial markets, financial instruments, and financial services that facilitate the mobilization and allocation of funds in the economy. The course also covers the Indian banking system, regulatory framework and recent developments such as digital payments and financial inclusion initiatives.		
Course Objectives: 1. To develop an understanding of the structure and functions of the Indian financial system. 2. To provide knowledge about financial institutions, banking system, and financial intermediaries in India. 3. To understand the role of regulatory bodies and financial sector reforms in the Indian economy. 4. To understand the functioning of the banking system and development financial institutions in India. 5. To introduce students to recent developments and reforms in the Indian financial sector.		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the concepts, structure, components and regulatory framework of the Indian financial system.	Remember (Level 1)
CO2	Explain the functioning of financial institutions, Indian banking system, and financial markets in India.	Understand (Level 2)
CO3	Examine the functioning of financial institutions, financial markets, financial services, regulatory authorities, and FinTech systems in India for financial analysis and decision-making.	Apply (Level 3)
CO4	Analyze the role and interrelationships of financial institutions, financial markets, financial services, and digital financial developments in the Indian financial system.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	1	-	2	1	-
CO2	2	2	-	2	-	2	2	1
CO3	3	3	1	2	1	3	2	2
CO4	2	3	1	2	1	3	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test/Assignment/MCQ Test etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Subjective Test/ Case Study/Assignment/MCQ Test etc.

Course Contents		
Unit-1	Overview of Financial System and Economic Linkages 1.1 Financial System Fundamentals 1.1.1 Meaning, Nature and Functions of Financial System 1.1.2 Structure and Components of Financial System 1.1.3 Organized and Unorganized Financial System 1.2 Components of Financial System 1.2.1 Financial Institutions (Overview) 1.2.2 Financial Markets (Overview) 1.2.3 Financial Instruments 1.3 Financial System and Economy 1.3.1 Role of Financial System in Economic Development 1.3.2 Financial System and Economic Growth	4 Hrs.
	Financial Institutions and Indian Banking System 2.1 Financial Institutions Overview 2.1.1 Classification of Financial Institutions 2.1.2 Banking and Non-banking Institutions 2.2 Development Financial Institutions (DFIs) 2.2.1 IDBI, IFCI 2.2.2 SIDBI, NABARD, EXIM Bank 2.3 Non-Banking Financial Companies (NBFCs) 2.3.1 Meaning, Functions and Business Models 2.4 Indian Banking System 2.4.1 Structure of Banking System 2.4.2 Commercial Banks, RRBs and Cooperative Banks	

Unit-3	Financial Markets in India 3.1 Introduction to Financial Markets 3.1.1 Meaning of Financial Markets 3.1.2 Role and Functions of Financial Markets 3.1.3 Importance in Economic Development 3.2 Types of Financial Markets 3.3 Money Market 3.3.1 Meaning and Features 3.3.2 Instruments 3.3.3 Participants and Functions 3.4 Capital Market Structure 3.4.1 Primary Market and its Functions 3.4.2 Secondary Market and its Functions 3.5 Stock Markets and Trading Mechanism 3.5.1 Stock Exchanges in India 3.5.2 Trading Process and Settlement Mechanism 3.5.3 Role of Brokers and Intermediaries 3.6 Debt Market and Government Securities 3.7 Regulatory Framework	4 Hrs.
Unit-4	Fund Based and Fee Based Financial Services 4.1 Fund-Based Financial Services 4.1.1 Meaning and Characteristics 4.1.2 Loans and Advances 4.1.3 Leasing and Types of Leases 4.1.4 Hire purchase: Meaning and Features of Hire Purchase 4.1.5 Venture capital 4.2 Fee-Based Financial Services 4.2.1 Meaning and Characteristics 4.2.2 Merchant Banking 4.2.3 Portfolio Management Services 4.2.4 Advisory Services	4 Hrs.
Unit-5	Financial Regulation, Mutual funds and FinTech 5.1 Financial Intermediaries 5.1.1 Mutual Funds: Meaning, Types 5.1.2 Net Asset Value (NAV) 5.2 Credit Rating Agencies 5.2.1 CRISIL 5.2.2 ICRA 5.3 Financial Regulation in India 5.4 Reserve Bank of India (RBI) 5.4.1 Functions of RBI 5.4.2 Monetary Policy Tools 5.4.3 Repo and Reverse Repo 5.4.4 CRR and SLR 5.5 Securities and Exchange Board of India (SEBI) 5.6 Insurance Regulatory and Development Authority of India (IRDAI) 5.6.1 Role of IRDAI 5.6.2 Types of Insurance policies	4 Hrs.

Unit-6	Emerging Technologies in Indian Financial System	4 Hrs.
	6.1 Artificial Intelligence in Finance 6.1.1 Meaning and Applications of AI In Financial Services 6.1.2 AI In Banking, Lending, Investment and Fraud Detection 6.2 Digital Banking and Fintech 6.2.1 Neo Banks and Digital Banking Models 6.2.2 Digital Payments (UPI) 6.2.3 Cybersecurity Challenges in Financial Systems 6.2.4 Fintech Ecosystem 6.2.4.1 Regulatory Sandbox and Policies 6.3 Blockchain and Cryptocurrency 6.3.1 Basics of Blockchain Technology 6.3.2 Cryptocurrency and Digital Assets 6.4 Central Bank Digital Currency (CBDC) in India 6.5 Financial Inclusion Initiatives 6.1.1 Direct Benefit Transfer (DBT)	

Sr. No.	Textbooks
1.	M. Y. Khan, Indian Financial System, McGraw Hill Education, 11th Edition.
2.	E. Gordon and K. Natarajan, Financial Markets and Services, Himalaya Publishing House, 12th Edition.
3.	L. M. Bhole and Jitendra Mahakud, Financial Institutions and Markets: Structure, Growth and Innovations, McGraw Hill Education, 6th Edition.
Sr. No.	Reference Books
1.	Bharati V. Pathak, The Indian Financial System, Pearson Education, 5th Edition.
2.	P. N. Varshney and D. K. Mittal, Indian Financial System, Sultan Chand Sons, 12th Edition.

Sr. No.	Web Resources
1.	Financial Institutions and Markets, NPTEL, https://youtu.be/88S1wZGfuqk
2.	Securities and Exchange Board of India (SEBI) https://www.sebi.gov.in
3.	Insurance Regulatory and Development Authority of India (IRDAI) https://www.irdai.gov.in

Course Title: Goods and Services Tax		Course Category: PEC	
Course Code: PB253017			
Teaching Scheme	Examination Scheme		
Lectures: 2 hrs/week	CA-1	10 Marks	
Tutorial: Nil	CA-2	10 Marks	
Credits: 02	MSE	20 Marks	
Semester: Second Year (Semester III)	ESE	60 Marks	
Course Prerequisite: Students should have a basic understanding of fundamental economic concepts, basic accounting and bookkeeping practices, elementary business and commercial laws, and general awareness of the Indian taxation system			
Course Description: This course provides a comprehensive understanding of the Goods and Services Tax (GST) system in India, focusing on its conceptual framework, structure, operational mechanisms, and compliance requirements. The course covers the evolution of GST, its principles, rate structure, and scope, along with practical aspects such as registration, documentation, supply classification, input tax credit, return filing, and record maintenance. Emphasis is placed on developing analytical and practical skills required for effective GST compliance and decision-making in a business environment.			
Course Objectives: 1. To introduce students to the concept, and framework of GST in India. 2. To explain the structure, and rate system of GST and its applicability. 3. To develop understanding of documentation, mechanisms, and special schemes. 4. To enable students to apply Input Tax Credit provisions and determine tax liability accurately.			

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the concept, structure, advantages, and registration process of the Goods and Services Tax (GST) in India.	Remember (Level1)
CO2	Explain the principles, rate structure, and scope of GST, including exempted taxes and taxation of services in India.	Understand (Level 2)
CO3	Apply GST provisions related to documentation, supply classification, composition scheme, and reverse charge mechanism.	Apply (Level 3)
CO4	Analyze the Input Tax Credit mechanism, GST return filing, and record maintenance requirements for compliance.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	–	–	2	–	3	–	1
CO2	2	2	–	3	–	3	–	1
CO3	3	2	–	2	1	3	2	1
CO4	3	3	1	2	2	3	2	2

Unit 2	GST Structure, Principles, and Tax Scope 2.1 Principles of GST 2.1.1 Destination-based consumption tax 2.1.2 Value-added taxation 2.1.3 Input tax credit 2.1.4 Uniformity in taxation 2.1.5 Transparency and self-compliance 2.2 Vijay Kelkar Shome Committee Recommendations 2.2.1 Role and of Key recommendations 2.2.2 Role and recommendations of Shome Committee 2.2.3 Impact of committee recommendations 2.3 GST Model in India 2.3.1 Single GST model 2.3.2 Dual GST model 2.3.3 Features of Dual GST adopted in India 2.3.4 Comparison between Single and Dual GST 2.3.5 Reasons for adopting Dual GST in India 2.4 GST Rate Structure (Slab System) 2.4.1 Meaning of GST rate slab system 2.4.2 Different GST rate slabs in India 2.4.3 Goods and services under zero-rated slab 2.4.4 Goods and services under standard and higher slabs 2.4.5 Objectives of multiple GST rate slabs 2.5 Taxes Exempted from GST 2.5.1 Goods exempted from GST 2.5.2 Services exempted from GST 2.5.3 Government notifications for exemptions 2.5.4 Impact of exemptions on revenue and consumers 2.6 Taxes and Duties outside the Purview of GST 2.6.1 Petroleum products outside GST 2.6.2 Alcohol for human consumption 2.6.3 Electricity and real estate transactions 2.6.4 Reasons for keeping certain taxes outside GST 2.7 Taxation of Services under GST 2.7.1 Time and place of supply of services 2.7.2 GST rates applicable to services 2.7.3 Input tax credit on services 2.7.4 Registration and compliance for service providers	4 Hrs.
Unit 3	GST Documentation and Supply Mechanism 3.1 Tax Invoice 3.1.1 Meaning and purpose 3.1.2 Mandatory contents of a tax invoice 3.1.3 Time limit for issue of tax invoice 3.1.4 Tax invoice for goods and services 3.1.5 Importance of tax invoice for Input Tax Credit (ITC)	4 Hrs.

	3.2 Bill of Supply 3.2.1 Meaning of bill of supply 3.2.2 Circumstances for issuing bill of supply 3.2.3 Contents of a bill of supply 3.2.4 Difference between tax invoice and bill of supply 3.2.5 Significance of bill of supply under GST 3.3 Transactions Covered under GST 3.3.1 Meaning of supply under GST law 3.3.2 Types of transactions treated as supply 3.3.3 Supplies with or without consideration 3.3.4 Taxable, exempt, and non-taxable supplies 3.3.5 Importance of supply concept in GST 3.4 Composition Scheme 3.4.1 Eligibility criteria for composition scheme 3.4.2 Rates of tax under composition scheme 3.4.3 Conditions and restrictions of the scheme 3.4.4 Advantages and limitations of composition scheme 3.5 Reverse Charge Mechanism (RCM) 3.5.1 Situations where RCM is applicable 3.5.2 Person liable to pay tax under RCM 3.5.3 Compliance requirements under RCM 3.5.4 Impact of RCM on registered persons 3.6 Composite Supply 3.6.1 Conditions for composite supply 3.6.2 Concept of principal supply 3.6.3 Tax treatment of composite supply 3.6.4 Examples of composite supply 3.7 Mixed Supply 3.7.1 Meaning and Conditions 3.7.2 Difference between composite and mixed supply 3.7.3 Tax liability on mixed supply 3.7.4 Examples of mixed supply	
Unit 4	Time and Value of Supply under GST 4.1 Time of Supply 4.1.1 Meaning and importance of Time of Supply 4.1.2 Time of Supply for Goods and Services 4.1.3 Rules relating to Advances and Continuous Supply 4.1.4 Significance of Time of Supply in determining GST liability 4.2 Value of Supply 4.2.1 Meaning and Definition of Value of Supply 4.2.2 Determination of Transaction Value 4.2.3 Components Included in Value of Supply 4.2.4 Adjustments for Discounts, Subsidies, and Taxes 4.2.5 Importance of Correct Valuation for GST Computation 4.3 Numerical Problems	4 Hrs.

	4.3.1 Computation of GST based on Time and Value of Supply	
Unit 5	Input Tax Credit (ITC) and Credit Management 5.1 Input Tax Credit (ITC) 5.1.1 Concept and Importance of ITC 5.1.2 Conditions for Claiming ITC 5.1.3 Documents Required for Availing ITC 5.1.4 Reversal of ITC in Case of Ineligible Credit 5.1.5 Benefits of ITC for Businesses 5.2 Distribution of Input Tax Credit 5.2.1 Apportionment of ITC between Goods and Services 5.2.2 Distribution of Credit in Case of Branch Transfers 5.2.3 Credit Allocation for Exempt and Taxable Supplies 5.2.4 Credit Distribution in Case of Joint Owners 5.2.5 Importance of Proper Credit Distribution 5.3 Matching and Cross Utilization of ITC 5.3.1 Matching of ITC with Supplier's Invoices 5.3.2 Automated Matching through GST Portal 5.3.3 Mismatches and Resolution Mechanism 5.3.4 Impact of Matching on ITC Claims 5.3.5 Cross Utilization of ITC between CGST, SGST, and IGST 5.3.6 Restrictions on Cross Utilization 5.3.7 Importance of Cross Utilization for GST Compliance 5.4 ITC in Special Circumstances 5.4.1 ITC on Capital Goods 5.4.2 ITC on Lost, Stolen, or Destroyed Goods 5.4.3 ITC for Personal Use and Exempt Supplies 5.4.4 ITC on Imports 5.5 Numerical Problems	4 Hrs.
Unit 6	6.1 GST Returns and Emerging Trends in GST and AI Applications 6.1.1 Monthly GST Returns 6.1.2 Quarterly Returns under Composition Scheme 6.1.3 Annual GST Returns 6.2 GST Compliance Mechanism 6.2.1 Filing Procedures and Due Dates 6.2.2 Interest, Late Fees, and Penalties for Non-Compliance 6.2.3 GST Portal and E-Filing Process 6.3 Records to be Maintained under GST 6.3.1 Records of Outward and Inward Supplies 6.3.2 Inventory and Stock Records 6.3.3 Retention Period of Records 6.3.4 Inspection, Audit, and Assessment by GST Authorities 6.4.1 Artificial Intelligence (AI) in GST Compliance and Tax Administration 6.4.2 Machine Learning for Invoice Matching and Fraud Detection 6.4.3 Robotic Process Automation (RPA) for GST Return Preparation and	4 Hrs.

	Reconciliation 6.4.4 Data Analytics and Business Intelligence for GST Decision-Making 6.4.5 AI-Based GST Compliance Software and Digital Tax Platforms 6.4.6 Future Trends in Indirect Taxation: Blockchain, Predictive Analytics, and Intelligent Tax Systems	
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Sr. No.	Text books
1.	Bansal, K. M. Taxmann's GST Customs Law (University Edition). Taxmann Publications, NEP-aligned Edition (2025).
2.	Goods and Services Tax (G.S.T). Sahitya Bhawan Publications, 10th Edition, 2022.
3.	Gupta, Nikhil, Anoop Modi, and Mahesh Gupta. Goods and Services Tax (GST). SBPD Publications, NEP-2020 Edition, 2023.
Sr. No.	Reference Books
1.	Girish Ahuja, Ravi Gupta, Systematic Approach to GST, Commercial Law Publishers, Revised Edition.
2.	G. Sekar, R. S. Balaji, Paduka's GST Manual (A Comprehensive Book on GST Law), Paduka / Commercial Law Publishers, Latest Edition (updated up to Finance Act, 2025).
Sr. No.	Web Resources
1.	https://gstcouncil.gov.in/
2.	https://services.india.gov.in/service/detail/gst-registration-1
3.	https://www.icaai.org/post/19155

Course Title: Strategic Human Resource Management		
Course Code: PB253011		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs / week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students should possess a basic understanding of Human Resource Management and Strategic Management concepts, including HR functions such as recruitment, training and development, performance management, organizational behavior, and organizational strategy formulation and implementation.		
Course Description: Strategic Human Resource Management (SHRM) focuses on aligning human resource policies and practices with organizational strategies to achieve competitive advantage. The course covers the foundations of SHRM, strategic alignment of HR functions, environmental factors affecting HR strategies, strategic training and development, and emerging trends in the global business environment.		
Course Objectives: 1. To understand the concepts, foundations, perspectives, and evolution of Strategic Human Resource Management. 2. To examine the strategic alignment between HR practices and organizational business goals. 3. To analyze the impact of environmental, technological, and global changes on HR strategies and workforce management. 4. To understand the strategic role of training, talent development, digital HR practices, and emerging trends in SHRM.		

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the concepts, models, and perspectives of Strategic Human Resource Management.	Remember (Level 1)
CO2	Explain strategic fit, HR alignment, and environmental influences on HR strategies.	Understand (Level 2)
CO3	Apply strategic HR practices for workforce planning, talent management, and employee development.	Apply (Level 3)
CO4	Analyze global trends, digital transformation, and HR analytics for strategic HR decision-making.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	—	1	1	3	1	1
CO2	3	2	—	2	1	3	2	2
CO3	3	2	2	1	3	3	2	3
CO4	2	3	2	2	2	2	3	2

Assessment	
CA-1(a)- (10M)	Assignment/MCQ Test/Case Study/Power Point Presentation etc.
MSE(b)- (20M)	Subjective Test
CA-2 (c)- (10M)	Situational Analysis/Assignment/Case Study etc.

Course Contents		
Unit 1	Foundations of Strategic Human Resource Management: 1.1 Concept of Strategic Human Resource Management (SHRM) 1.2 Evolution of SHRM 1.3 Nature and Scope of SHRM 1.4 Components of SHRM 1.5 Role and Importance of SHRM 1.6 Strategic HRM and Traditional HRM 1.7 Objectives of Strategic HRM	8 Hrs.
Unit 2	SHRM Perspectives and Strategic Approaches: 2.1 SHRM Perspective 2.1.1 Universalistic Perspective 2.1.2 Contingency Perspective 2.1.3 Configurational Perspective 2.2 Major SHRM Models 2.2.1 Harvard Model 2.2.2 Michigan Model 2.2.3 Guest Model 2.2.4 Warwick Model 2.3 SHRM Approaches 2.3.1 Best-Practice Approach 2.3.2 Best-Fit Approach 2.3.3 Resource-Based View (RBV) of SHRM 2.4 Strategic Role of Human Resources in Organizations	8 Hrs.
Unit 3	Strategic Fit and HR Alignment: 3.1 Concept of Strategic Fit 3.1.1 Vertical Fit and Alignment with Business Strategy 3.1.2 Horizontal Fit and Internal Consistency among HR Practice 3.2 Workforce Planning in SHRM 3.3 Strategic Hiring and Talent Acquisition 3.4 Strategic Performance Management 3.5 Strategic Rewards and Compensation 3.6 Strategic Learning and Development	8 Hrs.
Unit 4	Environmental Dynamism and Strategic HRM: 4.1 Environmental Dynamism and HR Strategy 4.1.1 Concept of Environmental Dynamism 4.1.2 Impact of Environmental Changes on HR Strategy 4.1.3 Strategic HR Response to Dynamic Business Environment 4.2 Workforce Diversity and Cross-cultural Management 4.2.1 Cross-cultural Management 4.2.2 Workforce Diversity Management 4.2.3 Challenges in Managing Diverse Workforce 4.3 Changing Workforce and Employment Practices 4.3.1 Changing Employment Relationships 4.3.2 Flexible Workforce Management 4.3.3 Managing Employee Shortages and Surplus 4.4 Modern HR Practices in Dynamic Environment 4.4.1 Modern Recruitment and Selection Practices 4.4.2 CSR and Sustainability in HRM 4.4.3 Digital HRM Practices	8 Hrs.

Unit 5	Strategic Training, Development, and Talent Management: 5.1 Strategic Training and Development 5.1.1 Strategic Role of Training and Development 5.1.2 Alignment of TandD with Business Strategy 5.1.3 Strategic TandD Framework	8 Hrs.
	5.2 Training Process and Evaluation 5.2.1 Training Needs Analysis (TNA) 5.2.2 Training Models and Methods 5.2.3 Training of Trainers (TOT) 5.2.4 Evaluation of Training Effectiveness 5.2.5 ROI of Training Programs 5.3 Career and Succession Management 5.3.1 Career Planning 5.3.2 Succession Planning 5.3.3 Employee Development for Future Roles	
Unit 6	Strategic HRM in Global and Future Business Environment: 6.1 Emerging Trends and Global Workforce Management 6.1.1 Emerging Trends in Strategic HRM 6.1.2 Demographical and Generational Shift in Workforce 6.1.3 Global Competition and Strategic Talent Management 6.2 Employee Engagement and Digital HRM 6.2.1 Employee Engagement Strategies 6.2.2 Digital Transformation and HR Practices 6.2.3 Artificial Intelligence in HR Functions 6.2.4 HR Analytics for Strategic Decision-Making 6.3 Future of Strategic HRM 6.3.1 Future Challenges in SHRM 6.3.2 Opportunities in SHRM 6.3.3 Future-ready HR Practices and Workforce Strategies	8 Hrs.

Sr. No.	Textbooks
1.	Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning India Pvt.Ltd.2019
2.	Das Gupta, A. (2020). Strategic Human Resource Management. Routledge India.
3.	Sharma, A., and Khandekar, A. (2006). Strategic Human Resource Management: An Indian Perspective. SAGE India.
4.	Rao, V. S. P. Strategic Human Resource Management. Himalaya Publishing House.
5.	Sharma, E. (2019). Strategic Human Resource Management and Development. Pearson India.
	Reference Books
1.	Aswathappa, K. Organisational Behaviour: Text, Cases and Games. Himalaya Publishing House.
2.	Prasad, L. M. Principles and Practice of Management. Sultan Chand and Sons.
3.	Rao, P. S. (2008). International Human Resource Management. Himalaya Publishing House.

Sr. No.	Web Resources
1.	HR Analytics, NPTEL, https://youtu.be/IW8OGR93AI
2.	Smart HRM, NPTEL https://youtu.be/GTlcaNmLrXE
3.	HRM Administration and Application, NPTEL, https://youtu.be/REV7kEwZ7Bg

Course Title: Performance and Compensation Management		
Course Code: PB253012		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students should have a basic understanding of human resource management, organizational behavior, and general management principles. Familiarity with employee performance, workplace practices, and fundamental HR functions will support better comprehension of the course.		
Course Description: This course introduces the concepts and practices of performance management and compensation in organizations. It covers appraisal methods, pay structures, incentives, payroll basics, and emerging trends such as global compensation, HR analytics, and AI, enabling students to understand and evaluate performance-linked reward systems.		
Course Objectives: 1. To understand the concepts, principles, and processes of performance management and appraisal systems. 2. To examine various performance appraisal methods and their application in organizational settings. 3. To develop knowledge of compensation management including wage concepts, job evaluation, pay structures, incentives, and payroll. 4. To analyze contemporary trends such as international compensation, gig economy, HR analytics, AI applications, and ethical issues in compensation.		

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall principles, methods, components, and frameworks of performance management, appraisal systems, compensation, payroll, incentives, and Contemporary HR practices.	Remember (Level 1)
CO2	Explain performance management processes, appraisal techniques, Compensation structures, payroll systems, reward mechanisms, and emerging trends in organizations.	Understand (Level 2)
CO3	Apply performance appraisal methods, compensation planning Techniques, payroll procedures, and incentive systems to solve organizational problems.	Apply (Level3)
CO4	Examine performance management systems, appraisal effectiveness, Compensation strategies, payroll structures, and contemporary issues in different organizational contexts.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	1	-	-	3	1	1
CO2	3	2	-	2	1	3	2	-
CO3	3	3	2	2	2	3	3	2
CO4	3	3	3	3	2	3	3	3

Assessment	
CA-1 (a) - (10M)	Assignment/MCQ Test/Case Study etc.
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Case Study/Assignment/PPT Presentation Activity etc

Course Contents		
Unit 1	Overview of Performance Management 1.1 Introduction to Performance Management 1.1.1 Concept and Principles 1.1.2 Contribution of Performance Management 1.2 Performance Management 1.2.1 Strategic issues 1.2.2 Appraisal to Performance Management. 1.2.3 Legal Issues in Performance Management 1.3 Performance Management 1.3.1 Role and Definition 1.3.2 Personal Development Plan 1.3.3 Performance Agreement 1.3.4 Performance Review 1.3.5 Balance Scorecard approach to PMS 1.3.6 Performance Management Cycle 1.4 Benchmarking process 1.5 Industry best practice	8 Hrs.
Unit 2	Performance and Potential Appraisal Systems 2.1 Introduction to Performance and Potential Appraisal System 2.1.1 Meaning, Features 2.1.2 Objectives of Performance Appraisal 2.2 Factors affecting Performance Appraisal 2.2.1 Employee Factors 2.2.2 Appraiser Factors 2.2.3 Job Factors 2.3 Benefits of Performance Appraisal 2.3.1 Improves Employee Performance 2.3.2 Facilitates Training and Development 2.3.3 Supports Promotions and Rewards 2.4 Problems with Performance Appraisal 2.4.1 Bias 2.4.2 Inconsistent 2.4.3 Employee Anxiety and Stress 2.4.4 Poor Feedback 2.4.5 Resistance to Change 2.5 Essentials of a Good Appraisal System 2.6 Evaluation of a Performance Appraisal System 2.6.1 Effectiveness in Measuring Performance. 2.6.2 Fairness and Objectivity 2.6.3 Impact on Employee Motivation 2.6.4 Alignment with Organizational Goals 2.6.5 Usefulness for HR Decisions 2.7 Concept of Potential Appraisal 2.8 Requirements for an Effective Potential Appraisal System	8 Hrs.

Unit 3	Appraisal Methods based on approaches 3.1 Traditional/Appraisal Methods 3.1.1 Ranking Method 3.1.2 Paired Comparison 3.1.3 Rating Scales 3.1.4 Forced Distribution 3.2 Modern/Appraisal Methods 3.2.1 Management by Objectives (MBO) 3.2.2 Behaviorally Anchored Rating Scales (BARS) 3.2.3 360-Degree Feedback 3.2.4 Rational of 360 Degree feedback 3.2.5 Assessment Centers 3.3 Employee-Centric Approaches 3.3.1 Self-Appraisal 3.3.2 Peer Appraisal 3.3.3 Critical Incident Method 3.3.4 Psychological Appraisal 3.4 Human Resource Accounting.	8 Hrs.
Unit 4	Compensation Management 4.1 Introduction 4.1.1 Concept and Objectives 4.1.2 Importance of Compensation 4.1.3 Components of Total Rewards 4.2 Wage and Salary Concepts 4.2.1 Minimum Wage, Fair Wage, Living Wage 4.2.2 Theories of Wages 4.2.3 Factors Influencing Wage Determination 4.3 Job Evaluation 4.3.1 Concept and Objectives 4.3.2 Methods of Job Evaluation 4.3.3 Role in Pay Structure Design 4.4 Market-Based Compensation 4.4.1 Salary Surveys 4.4.2 Benchmarking Practices 4.4.3 Wage Curve 4.5 Legal Framework (Overview) 4.5.1 Payment of Wages Act 4.5.2 Minimum Wages Act 4.5.3 Equal Remuneration Act	8 Hrs.
Unit 5	Pay Structure 5.1 Design 5.1.1 Pay Components: Fixed, Variable, Benefits 5.1.2 Pay Metrics, Pay Ranges, Bandwidths 5.1.3 Cost to Company (CTC) Structure 5.2 Incentive and Reward Systems 5.2.1 Individual Incentives 5.2.2 Group and Organization-wide Incentives 5.2.3 Profit Sharing and Gain Sharing 5.2.4 Pay for Performance 5.3 Modern Compensation Practices 5.3.1 Employee Stock Ownership Plan	8 Hrs.

	5.3.2 Cafeteria Compensation 5.3.3 Non-Monetary Rewards and Recognition 5.4 Payroll Management 5.4.1 Overview of Payroll System 5.4.2 Payroll Process (Gross to Net Salary) 5.4.3 Deductions: PF, ESI, Tax (Basic Overview) 5.5 Benefits and Reward Administration 5.5.1 Benefits of Administration 5.5.2 Reward Disbursement Mechanism 5.5.3 Compliance and Documentation	
Unit 6	International Compensation 6.1 Introduction 6.1.1 Expatriate Compensation (PCNs, HCNs, TCNs) 6.2 Emerging Work Models 6.2.1 Gig Economy Compensation 6.2.2 Freelancer Payment Models 6.2.3 Remote and Hybrid Workforce Pay 6.3 Technology in HR 6.3.1 AI in Performance Management 6.3.2 HR Analytics in Compensation 6.3.3 Digital Payroll Systems 6.4 Strategic and Ethical Issues 6.4.1 Pay Equity and Gender Pay Gap 6.4.2 Diversity, Equity and Inclusion in Compensation 6.4.3 Ethical Compensation Practices 6.5 Future Trends 6.5.1 On demand Pay 6.5.2 Digital Reward Platforms 6.5.3 Future of Work and Compensation	8Hrs.

Sr. No.	Text books
1.	A. S. Kohli, Performance Management, Vikas Publishing House Pvt. Ltd., 2nd Edition.
2.	Joseph J. Martocchio, Strategic Compensation: A Human Resource Management Approach, Pearson Education, 3rd Edition.
3.	Dipak Kumar Bhattacharyya, Compensation Management, Oxford University Press, 2nd Edition.
4.	R. C. Sharma and Sulabh Sharma, Compensation and Reward Management: Wage and Salary Administration and Benefits, Routledge India, 1st Edition.
	Reference Books
1.	Michael Armstrong-Armstrong's Handbook of Performance Management Kogan Page
2.	Dipak Kumar Bhattacharyya, Performance Management Systems and Strategies Pearson Education India
3.	K. Aswathappa, Human Resource Management McGraw Hill

Sr. No.	Web Resources
1.	NPTEL Course – Performance and Reward Management: https://onlinecourses.nptel.ac.in/noc25_mg145
2.	Strategic Performance Management NPTEL https://www.digimat.in/nptel/courses/video/110105069
3.	Performance Appraisal and PMS NPTEL Youtube https://youtu.be/bu_yh3h0n3U

Course Title: Industrial Relations and Labor Laws		
Course Code: PB253013		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisites: Students should possess a basic understanding of Human Resource Management and Organizational Behavior concepts, along with familiarity with the business and employment environment, managerial communication, and workplace ethics.		
Course Description: The course Industrial Relations and Labor Laws (IRLL) provides a comprehensive understanding of the relationship between employers, employees, trade unions, and the state. It examines the scope and significance of industrial relations in the Indian context along with the legal framework governing employment and workplace relations. The course covers key labor legislations related to industrial disputes, wages, working conditions, social security, and employee welfare, with emphasis on collective bargaining, grievance handling, dispute resolution, and the role of government institutions in maintaining industrial harmony.		
Course Objectives: 1. To understand the concept and importance of industrial relations in organizations. 2. To familiarize students with labor laws applicable in India. 3. To develop knowledge regarding trade unions, collective bargaining, and dispute resolution mechanisms. 4. To understand employee welfare, social security, and labor reforms. 5. To analyze the role of employers, employees, and government in maintaining industrial harmony		

Course Outcomes		
COs	After completion of the course students will be able to:	Bloom's Level
CO1	Recall concepts, principles, and legal provisions related to industrial relations and labor laws.	Remember (level 1)
CO2	Explain the roles of trade unions, employers, and government in maintaining industrial relations.	Understand (level 2)
CO3	Apply mechanisms of collective bargaining, grievance handling, and labor law provisions to workplace situations.	Apply (level 3)
CO4	Analyze industrial disputes, labor issues, and legal cases for appropriate managerial action.	Analyse (level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	2	-	2	-	2	2	1
CO2	2	2	1	2	-	2	3	2
CO3	3	3	2	3	2	2	3	2
CO4	2	3	2	3	3	2	3	2

Assessment	
CA-1 (a) - (10M)	Subjective Test/Assignment/MCQ Test /Case Study
MSE (b) - (20M)	Subjective Test
CA-2 (c) - (10M)	Subjective Test/Assignment/MCQ Test etc/Case Study

Course Contents		
Unit 1	Introduction of Industrial Relations 1.1 Concept and Determinants of Industrial Relations 1.2 Industrial Relations in India 1.3 Managing IR Changes, IR and Productivity, Technology and IR 1.4 IR Strategies 1.5 Effective Communication Systems and IR Management 1.6 Indian Culture and IR. 1.7 HR Industrial Relations 1.8 Trade Union 1.8.1 Trade Union Legislation 1.8.2 Multiplicity of Trade Unions 1.8.3 Conflict Resolutions 1.8.4 Welfare and Productivity 1.8.5 Social Responsibility of Trade Unions 1.8.6 IR Management and Management of Trade Unions.	8 Hrs.
Unit 2	Industrial Disputes 2.1 Industrial Disputes and Resolution Mechanisms 2.1.1 Employee Counseling 2.1.2 Types, Methods and Problems 2.1.3 Consultative Bodies 2.1.3.1 Bipartite 2.1.3.2 Tripartite 2.1.4 Discipline and Grievance Redressal Machinery 2.1.5 Purposes and Procedures of Disciplinary Action 2.1.6 Grievance Redressal Procedures 2.1.6.1 Conciliation 2.1.6.2 Arbitration 2.1.6.3 Adjudication 2.1.7 Workers Development and Participation 2.1.7.1 Collective Bargaining: 2.1.7.2 The Bargaining Process 2.1.7.3 Strengths and Skills	8 Hrs.

Unit 3	Introduction to Labor Laws: 3.1 Overview of labor laws 3.2 Historical perspective 3.2.1 Early Industrial Labor Reforms 3.2.2 Trade Union Movement 3.2.3 Introduction of Factory Laws 3.2.4 Post-Independence Labor Legislation 3.2.5 Modern Labor Law Reforms 3.3 Constitutional framework 3.3.1 Fundamental Rights of Workers 3.3.2 Directive Principles of State Policy 3.3.3 Right to Equality and Fair Wages 3.3.4 Freedom of Association 3.3.5 Social Justice Provisions 3.4 Key principles and concepts.	8 Hrs.
Unit 4	Working Conditions 4.1 Industrial Relations code 2020 4.1.1 Trade Union Act, 1926 4.1.2 Industrial Employment Standing orders Act, 1946 4.1.3 Industrial Disputes Act, 1947 4.2 Occupational Safety, Health and Working Conditions Code, 2020 4.2.1 Factories Act 1948 4.2.2 Contract Labour (Regulation and Abolition) Act, 1970 4.2.3 Mines Act, 1952 4.2.4 Building and Other Construction Workers Act, 1996	8 Hrs.
Unit 5	Social Security and Welfare 5.1 Code on wages Act 2019 5.1.1 Payment of Wages Act, 1936 5.1.2 Payment of Bonus Act, 1965 5.1.3 Minimum wages Act, 1948 5.1.4 Equal remuneration Act, 1976 5.2 Social Security Laws 5.2.1 Employees' Provident Act, 1952 5.2.2 Employees' State Insurance Act, 1948 5.2.3 Maternity Benefit Act, 1961 (amendment 2017) Payment of Gratuity Act 1972	8 Hrs.
Unit 6	Contemporary Issues 6.1 Contemporary Laws and Issues 6.1.1 Child and Adolescent Labour (Prohibition and regulation) Act, 1986 6.1.2 Sexual harassment of Women at workplace (POSH) Act, 2013 6.1.3 Remote Work, Flexible Work, and Digital Employment 6.1.4 Impact of Globalization on Industrial Relations 6.1.5 Gig Economy and Contract Labour 6.1.6 Future Challenges in Labour Management Relations 6.2 Recent Cases in Industrial Relations	8 Hrs.

Sr. No.	Textbooks
1.	S. C. Srivastava, Industrial Relations and Labour Laws, Vikas Publishing, 1st Edition.
2.	B. D. Singh, Industrial Relations and Labour Laws, Excel Book India, 4th Edition.
3.	P. Subba Rao, Industrial Relations, Trade Unions and Labour Legislation, Himalaya Publishing House, 9th Edition.
Sr. No.	Reference books
1.	C.B. Mamoria; Satish Mamoria, Industrial Relations, 15th Edition, Tata McGraw Hill Publishing Company Ltd.
2.	C.B. Gupta, Personnel and Human Resource Management, 25th Edition, Himalaya Publishing House.
3.	S.S. Khanka, Human Resource Management, 12th Edition, Sultan Chand andamp; Sons.
4.	O.P. Malhotra, The Law of Industrial Disputes, 8th Edition, Universal Law Publishing Co.

Sr. No.	Web Resources
1.	Ministry of Labour and Employment, Government of India – https://labour.gov.in/
2.	ePGPathshala – Human Resource Management and Industrial Relations – https://epgp.inflibnet.ac.in/
3.	SWAYAM – Labour Laws and Industrial Relations Courses https://swayam.gov.in/

Course Title: Human Resource Planning and Development		
Course Code: PB253014		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs / week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Basic knowledge of Management Principles and Human Resource Management, including an understanding of organizational structures, HR functions, and employee management practices.		
Course Description: This course provides an understanding of Human Resource Planning (HRP) and Human Resource Development (HRD), focusing on workforce planning, forecasting, employee development, retention strategies, competency mapping, career growth, organizational culture, wellness initiatives, and emerging HR trends such as digital transformation, artificial intelligence, and technology-enabled learning.		
Course Objectives: 1. To provide conceptual understanding of Human Resource Planning and its strategic importance in organizations. 2. To familiarize students with HR demand and supply forecasting techniques and manpower planning practices. 3. To examine HRD frameworks, mechanisms, and interventions for employee and organizational development. 4. To analyze employee development practices, competency mapping, career planning, and emerging HRD trends.		

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the concepts, principles, and processes of Human Resource Planning and Human Resource Development.	Remember (Level 1)
CO2	Explain HR planning, forecasting, employee development, competency management, and emerging HRD practices.	Understand (Level 2)
CO3	Apply HR planning techniques, forecasting methods, and HRD practices for workforce and employee development.	Apply (Level 3)
CO4	Analyze HR planning and development practices, organizational climate, competency management, and emerging HR trends for organizational effectiveness.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	-	1	1	3	1	1
CO2	3	2	-	1	2	3	2	2
CO3	3	3	2	1	3	3	2	3
CO4	2	3	2	2	2	3	3	2

Assessment	
CA-1(a)-(10M)	Assignment/Power Point Presentation/Case Study
MSE (b)-(20M)	Subjective Test
CA-2 (c)-(10M)	HR Forecasting Exercise/Situational Analysis

Course Contents		
Unit 1	Introduction to Human Resource Planning (HRP) 1.1 Concept of Human Resource Planning 1.2 Objectives of HRP 1.3 Importance and Need for HRP 1.4 Human Resource Planning 1.4.1 Micro Human Resource Planning 1.4.2 Macro Human Resource Planning 1.5 Factors Affecting HR Planning 1.6 Steps in Human Resource Planning 1.7 HR Planning Process	8 Hrs.
Unit 2	Strategic Human Resource Planning 2.1 Strategic Alignment in HR Planning 2.1.1 Relationship between HRP and Business Strategy 2.1.2 Strategic Workforce Planning 2.1.3 Environmental Scanning in HRP 2.1.4 HR Policies and Strategic Planning 2.2 Strategic Issues and Challenges in HR Planning 2.2.1 Barriers to Effective HR Planning 2.2.2 Role of HR Managers in Strategic HRP 2.2.3 Contemporary Issues in HR Planning 2.2.4 Strategic Challenges in Workforce Planning	8 Hrs.
Unit 3	Forecasting Human Resource Demand and Supply 3.1 Meaning and Importance of HR Forecasting 3.2 HR Demand Forecasting Techniques 3.2.1 Managerial Judgement Technique 3.2.2 Delphi Method 3.2.3 Work study Technique 3.2.4 Ratio Analysis 3.2.5 Trend Analysis 3.2.6 Statistical and Mathematical Model 3.3 HR Supply Forecasting 3.3.1 Human Resource Flow Model 3.3.2 Human Resource Inventory 3.3.3 Replacement Chart 3.3.4 Wastage Analysis 3.4 Job Analysis and Job Design 3.5 HR Gap Analysis 3.5.1 Manpower Budgeting 3.5.2 Employee Redeployment Strategies 3.5.3 Employee Retention Strategies 3.5.4 Exit Strategies	8 Hrs.

Unit 4	Human Resource Development (HRD) and Organizational Development 4.1 Concept of HRD 4.2 Objectives and Scope of HRD 4.3 HRD Framework 4.3.1 HRD Mechanisms 4.3.2 HRD Process Model 4.3.3 HRD Interventions 4.4 Role of HRD Manager 4.5 HRD Practices in Organizations 4.6 Organizational Climate and Culture 4.6.1 Factors Influencing 4.6.2 Impact on Employee Development 4.6.3 Impact on Organizational Performance 4.7 Organizational Development (OD) 4.7.1 Concept and Importance 4.7.2 OD Interventions	8 Hrs.
Unit 5	Employee Development and Competency Management 5.1 Employee Development and Wellness 5.1.1 Employee Counseling 5.1.2 Counseling Programs in Organizations 5.1.3 Employee Assistance Program (EAP) 5.1.4 Stress Management 5.1.5 Employee Wellness and Health Promotion 5.2 Competency Management 5.2.1 Competency Framework 5.2.2 Competency Mapping: Meaning and Importance 5.2.3 Steps in Competency Mapping 5.3 Career Planning and Development 5.3.1 Career Planning 5.3.2 Career Management 5.3.3 Career Development 5.3.4 Role of Individual in Career Planning 5.3.5 Role of Organization in Career Planning	8 Hrs.
Unit 6	Emerging Trends and Future of HRD 6.1 Technology and Digital Transformation in HRD 6.1.1 Digital Transformation in HRD 6.1.2 E-learning and Technology-enabled Learning 6.1.3 Artificial Intelligence in Employee Development 6.1.4 Learning Management Systems (LMS) 6.1.5 Data Analytics in HRD 6.2 Continuous Learning and Workforce Development 6.2.1 Continuous Learning 6.2.2 Learning Organizations 6.2.3 Talent Development 6.2.4 Global Workforce Development 6.2.5 Upskilling and Reskilling 6.3 Future of HRD 6.3.1 Future Challenges in HRD 6.3.2 Opportunities in HRD 6.3.3 Future-ready Workforce Development Strategies 6.3.4 Gig Economy and Flexible Workforce	8 Hrs.

Sr. No.	Textbooks
1.	Bhattacharyya, D. K. Human Resource Planning. New Delhi: Excel Books.
2.	Gary Dessler, Human Resource Management, Pearson.
3.	C. B. Mamoria and S. V. Gankar, Personnel Management and Human Resources. Himalaya Publishing House.
4.	P. Subba Rao, Human Resource Management, Himalaya Publishing House.
Sr. No.	Reference Books
1.	T. V. Rao, Human Resource Development, Oxford University Press.
2.	Jeffrey A. Mello, Strategic Human Resource Management, Cengage Learning.
3.	Jon M. Werner and Randy L. DeSimone, Human Resource Development: Theory and Practice, Cengage Learning.

Sr. No.	Web Resources
1.	Deploying AI in HR Practices, NPTEL, https://youtu.be/SoRhqer6EJI
2.	Introduction to AI tools, NPTEL, https://youtu.be/hVwh9MAku_E
3.	Disruptive Innovation in HRM: Future of HRM, NPTEL, https://youtu.be/7br4SWgsFZI

Course Title: Training and Development		
Course Code: PB253015		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Basic understanding of Human Resource Management and Organizational Behaviour, along with fundamental knowledge of employee performance, learning concepts, and communication skills.		
Course Description: This course provides an understanding of the concepts, principles, and practices of Training and Development in organizations. It focuses on identifying training needs, designing and delivering effective training programs, and evaluating their effectiveness. The course also covers management and career development, along with modern approaches such as digital learning and global training practices. It aims to enhance employee performance and support overall organizational effectiveness.		
Course Objectives: 1. To develop an understanding of the concepts, importance, and role of Training and Development in organizations. 2. To enable students to identify training needs and design effective training programs. 3. To familiarize students with various training methods and techniques used in organizations. 4. To understand the process of evaluating training effectiveness and measuring training outcomes. 5. To provide knowledge of management development, career development, and contemporary trends in global training and development.		

Course Outcomes:		
COs	After completion of the course: Students should be able to	Bloom's Level
CO1	Recall the key concepts, principles, and processes of Training and Development, including training needs assessment, learning theories, training methods, evaluation techniques, management development, and global training practices.	Remember (Level 1)
CO2	Explain the concepts and processes of training design, delivery, evaluation, management development, and contemporary training practices in organizations.	Understand (Level 2)
CO3	Apply appropriate tools and techniques to design, implement, and evaluate Training and Development programs in organizational settings.	Apply (Level3)
CO4	Analyze training effectiveness, management development initiatives, and global training practices to improve employee performance and organizational outcomes.	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	2	-	3	1	-
CO2	2	2	1	3	1	3	2	1
CO3	3	3	2	2	2	3	3	2
CO4	3	3	2	3	2	3	3	2

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test etc.
MSE (b)-(20M)	Subjective Test
CA-2 (c)-(10M)	Subjective Test/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Introduction to Training and Development 1.1 Concept and Meaning of Training and Development 1.1.1 Definition of Training 1.1.2 Definition of Development 1.1.3 Characteristics of Training and Development 1.1.4 Scope of Training and Development 1.2 Difference between Training, Development and Education 1.2.1 Meaning of Education 1.2.2 Distinction between Training and Development 1.2.3 Comparison between Training and Education 1.3 Need and Importance of Training in Organizations 1.3.1 Changing business environment 1.3.2 Technological advancements 1.3.3 Skill enhancement requirements 1.3.4 Employee productivity and efficiency 1.3.5 Organizational growth and sustainability 1.4 Objectives and Benefits of Training 1.4.1 Individual level objectives 1.4.2 Organizational level objectives 1.4.3 Benefits to employees 1.4.4 Benefits to employers 1.5 Role of Training in Human Resource Development (HRD) 1.5.1 Training as a subsystem of HRD 1.5.2 Integration with other HR functions 1.5.3 Contribution to employee development 1.6 Training Policy and Training Culture 1.6.1 Training policy: meaning and components 1.6.2 Development of training policy 1.6.3 Concept of training culture 1.7 Link between Training, Performance Management and Organizational Strategy 1.7.1 Alignment with business strategy 1.7.2 Training and performance improvement 1.7.3 Strategic role of training	8 Hrs.

Unit 2	Training Need Assessment and Competency Mapping 2.1 Concept of Training Need Assessment (TNA) 2.1.1 Meaning and significance 2.1.2 Objectives of TNA 2.2 Levels of Training Need Analysis 2.2.1 Organizational analysis 2.2.2 Task analysis 2.2.3 Individual analysis 2.3 Methods of Training Need Identification 2.3.1 Observation method 2.3.2 Interviews 2.3.3 Questionnaires 2.3.4 Performance appraisal 2.3.5 Critical incident technique 2.4 Competency Mapping 2.4.1 Meaning and concept 2.4.2 Process of competency mapping 2.4.3 Applications in training 2.5 Gap Analysis 2.5.1 Identification of skill gap 2.5.2 Performance gap analysis	8 Hrs.
Unit 3	Training Design and Methods 3.1 Training Design 3.1.1 Setting training objectives 3.1.2 Designing training curriculum 3.1.3 Selecting training methods 3.2 On-the-Job Training Methods 3.2.1 Job rotation 3.2.2 Coaching 3.2.3 Mentoring 3.2.4 Apprenticeship 3.3 Off-the-Job Training Methods 3.3.1 Lectures and seminars 3.3.2 Case studies 3.3.3 Role playing 3.3.4 Simulation 3.3.5 Sensitivity training 3.4 E-Learning and Modern Training Methods 3.4.1 Online learning 3.4.2 Virtual classrooms 3.4.3 Mobile learning	8 Hrs.
Unit 4	Training Evaluation, Cost and Return on Investment 4.1 Training Evaluation and Effectiveness 4.1.1 Meaning of Training Evaluation 4.1.2 Need for Training Evaluation 4.1.3 Importance of Training Effectiveness 4.2 Kirkpatrick Model of Evaluation 4.3 Training Cost and Budgeting 4.3.1 Meaning of Training Cost 4.3.2 Types of Training Costs (Direct and Indirect) 4.3.3 Factors Affecting Training Budget 4.4 Return on Investment (ROI) in Training	8 Hrs.

	4.4.1 Meaning of ROI in Training 4.4.2 Importance of ROI 4.4.3 Methods of Calculating ROI 4.4.4 Benefits of ROI Analysis 4.5 Training Audit 4.5.1 Meaning of Training Audit 4.5.2 Objectives of Training Audit 4.5.3 Process of Training Audit 4.5.4 Benefits of Training Audit	
Unit 5	Importance and Methods of Management Development 5.1 Concept and Importance of Management Development 5.1.1 Meaning of Management Development 5.1.2 Objectives of Management Development 5.1.3 Importance in Organizations 5.2 Methods of Management Development 5.2.1 On-the-Job Methods 5.2.2 Off-the-Job Methods 5.2.3 Coaching and Mentoring 5.2.4 Job Rotation and Special Assignments 5.3 Leadership Development Programs 5.3.1 Meaning of Leadership Development 5.3.2 Types of Leadership Programs 5.3.3 Importance in Organizational Growth 5.4 Competency Development and Skill Enhancement 5.4.1 Meaning of Competency Development 5.4.2 Skill Enhancement Techniques 5.4.3 Role in Employee Performance Improvement 5.5 Career Development and Succession Planning 5.5.1 Meaning of Career Development 5.5.2 Career Planning Process 5.5.3 Succession Planning: Concept and Importance 5.5.4 Benefits to Organization and Employees	8 Hrs.
Unit 6	Recent Trends and Challenges in Training and Development 6.1 Recent Trends in Training 6.1.1 Digital learning 6.1.2 Artificial Intelligence in training 6.1.3 Gamification 6.2 Career Development and Succession Planning 6.2.1 Career planning 6.2.2 Career development programs 6.2.3 Succession planning 6.3 Knowledge Management 6.3.1 Concept and importance 6.3.2 Knowledge sharing practices 6.4 Challenges in Training and Development 6.4.1 Technological challenges 6.4.2 Organizational challenges 6.4.3 Employee-related challenges	8 Hrs.

Sr. No.	Textbooks
1.	Raymond A. Noe-Employee Training and Development(McGraw Hill edition)
2.	Rolf Lynton andUdaiPareek-Training for Development(Sage Publisher)
3.	P. L. Rao– Training and Development (Vikas Publishing / Excel Books)
4.	Blanchard and Thacker-Effective Training(Pearson edition)
Sr. No.	Reference Books
1.	Tapomoy Deb -Training and Development: Concepts and Applications- (Ane Books Pvt. Ltd., New Delhi)
2.	Irwin L. Goldstein and J. Kevin Ford- Training in Organizations (Cengage Learning)
3.	S. K. Bhatia- Training and Development- (Deep and Deep Publications, New Delhi)

Sr. No.	Web Resources
1.	Learning and Development NPTEL https://youtu.be/Byn0yr30w0c?si=rV68EHqExlBIB7lq
2.	Introduction to Training and Development https://tkiet.digimat.in/nptel/courses/video/109105192/L01 .
3.	Employees Training and Development NPTEL https://youtu.be/wzRIFdzm12g?si=Lt-CRw9U-6qZN3QJ

Course Title: Human Resource Audit and Analytics		
Course Code: PB253016		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 02hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students should possess a basic understanding of Human Resource Management concepts, organizational practices, and business operations. Familiarity with HR functions, managerial decision-making, and basic data handling using spreadsheets or computer applications will be beneficial for understanding HR audit and analytics practices.		
Course Description: This course introduces students to the concepts and practices of HR Audit and HR Analytics. It focuses on evaluating HR policies, systems, and practices for effectiveness and compliance while using data-driven analytical tools to support strategic HR decision-making. The course enables students to understand workforce metrics, employee performance analysis, HR dashboards, predictive analytics, and the role of analytics in improving organizational performance.		
Course Objectives: 1. To introduce the concepts, scope, and significance of HR Audit and HR Analytics. 2. To develop understanding of HR metrics, workforce analysis, and HR reporting systems. 3. To enable students to evaluate HR functions using audit frameworks and analytical tools. 4. To enhance analytical and decision-making skills through interpretation of HR data.		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall concepts, objectives, and importance of HR Audit and HR Analytics.	Remember (Level 1)
CO2	Explain HR metrics, workforce analytics, and HR audit techniques used in organizations.	Understand (Level 2)
CO3	Apply HR analytics tools and audit methods to evaluate HR functions and employee performance.	Apply (Level3)
CO4	Analyze HR data and audit reports for strategic decision-making and organizational improvement.	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	1	-	3	-	2	2	1
CO2	2	3	1	3	-	2	3	2
CO3	3	2	1	3	2	2	3	2
CO4	2	3	1	3	3	2	3	2

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test etc.
MSE(b)-(20M)	Subjective Test
CA-2(c)-(10M)	Subjective Test/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Human Resource Audit 1.1 Introduction 1.1. Meaning, Nature, Scope and Objectives of HR Audit 1.2. Need and Importance of HR Audit 1.3. Types of HR Audit 1.3.1. Compliance Audit 1.3.2. Best practices Audit 1.3.3. Strategic Audit 1.3.4. Functional Audit 1.3.5. MBO Audit 1.4. HR Audit Process 1.5. Role of HR Auditor	4 Hrs.
Unit 2	Policies and Compliance 2.1 Human Resource Policies and Compliance Audit 2.1.1. HR Policies and Procedures 2.1.2. Statutory Compliance in HR 2.1.3. Audit of Recruitment and Selection 2.1.4. Audit of Training and Development 2.1.5. Audit of Compensation and Benefits 2.1.6. Employee Welfare and Safety Audit	4 Hrs.
Unit 3	HR Analytics 3.1 Introduction to HR Analytics 3.1.1. Meaning and Scope of HR Analytics 3.1.2. Importance of HR Analytics in Organizations 3.1.3. Types of HR Analytics 3.1.3.1. Descriptive, 3.1.3.2. Diagnostic, 3.1.3.3. Predictive and 3.1.3.4. Prescriptive Analytics 3.1.4. HR Metrics and Key Performance Indicators (KPIs) 3.1.5. HR Dashboards and Scorecards	4 Hrs.
Unit 4	Workforce Analytics and Data Analysis 4.1. Employee Turnover Analysis 4.2. Absenteeism Analysis 4.3. Productivity and Performance Metrics 4.4. Employee Engagement Analysis 4.5. Recruitment and Selection Analytics 4.6. Training Effectiveness Analysis	4Hrs.
Unit 5	HR Data Management and Technology 5.1. Sources of HR Data 5.2. Data Collection Methods in HR 5.3. Data Visualization Techniques 5.4. Application of Excel in HR Analytics 5.5. Human Resource Information System (HRIS) 5.6. Data Privacy and Ethical Issues in HR Analytics	4 Hrs.

Unit 6	Strategic HR Analytics and Audit Reporting 6.1. Talent Analytics and Workforce Planning 6.2. Predictive Analytics in HR 6.3. Compensation and Benefits Analytics 6.4. HR Audit Report Preparation 6.5. Challenges in HR Audit and Analytics 6.6. Future Trends in HR Analytics.	4 Hrs
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Sr. No.	Textbooks
1.	T.V. Rao, HRD Audit: Evaluating the Human Resource Function for Business Improvement
2.	Jac Fitz-enz, The New HR Analytics
3.	Dipak Kumar Bhattacharyya, HR Analytics
Sr. No.	Reference Books
1.	Martin R. Edwards and Kirsten Edwards, Predictive HR Analytics
2.	Bernard Marr, Data-Driven HR
3.	Ronald R. Sims, Human Resource Management
4.	Wayne Cascio and John Boudreau, Investing in People

Sr. No.	Web Resources
1.	https://swayam.gov.in – HR Analytics and HRM Courses.
2.	https://nptel.ac.in – HR Analytics Lectures and Case Studies.
3.	https://www.shrm.org – HR Research Reports and Analytics Articles.

Course Title: Global Human Resource Management		
Course Code: PB253017		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 02hrs/week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students should have Basic understanding of Human Resource Management, Fundamentals of Organizational Behavior, Awareness of Business Environment /International Business.		
Course Description: This course provides a comprehensive understanding of managing human resources in a global business environment. It focuses on cross-cultural dynamics, international staffing, expatriate management, and global HR practices such as performance management and compensation. The course also explores contemporary issues and strategic challenges in International Human Resource Management, enabling students to apply HR concepts in multinational contexts.		
Course Objectives: 1. To introduce fundamental concepts, scope, and evolution of global Human Resource Management. 2. To develop understanding of cross-cultural issues and global HR practices. 3. To apply GHRM principles in staffing, training, and managing expatriates. 4. To analyze international HR systems including performance management and compensation practices and International labour standards and codes.		

Course Outcomes		
COs	After completion of the course students will be able to:	Bloom's Level
CO1	Recall and explain key concepts ,scope, and approaches to GHRM in international Business.	Remember (Level1)
CO2	Explain cross-cultural differences and their impact on managing global workforce.	Understand (Level2)
CO3	Apply Global HR practices in recruitment, training, and expatriate Management.	Apply (Level3)
CO4	Analyze global HR systems including performance management, compensation management and international labour standards and codes.	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	2	-	3	1	-
CO2	2	2	2	3	1	3	2	2
CO3	3	3	2	2	2	2	3	2
CO4	3	3	3	3	2	3	3	3

Assessment	
CA-1(a)	Subjective Test/Assignment/MCQ Test etc.
MSE (c)	Subjective Test
CA-2(c)	Subjective Test/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Foundation of GHRM 1.1 Concept, scope and evolution of GHRM 1.1.1 Domestic and International HRM 1.1.2 IHRM and GHRM 1.1.3 Globalization and its impact on HR 1.2 Cultural sensitivity and Cultural dimensions 1.2.1 Hofstede Theory 1.2.2 Trompenaars Theory 1.3 Approaches to IHRM 1.3.1 Ethnocentric Approach 1.3.2 Polycentric Approach 1.3.3 Regiocentric Approach 1.3.4 Geocentric Approach 1.4 Macro environmental influences on global HR	4 Hrs.
Unit 2	Global Staffing Expatriate Management 2.1 Global HR planning 2.2 Expatriate management 2.3 Selection and preparation 2.4 Pre-departure training 2.5 Cultural adjustment challenges 2.6 Repatriation process and issues	4 Hrs.
Unit 3	Managing Global Workforce Development 3.1 Training and development in global context 3.2 Cross-cultural training programs 3.3 Managing multicultural workforce 3.4 Leadership across cultures 3.5 Communication in global environment 3.6 Negotiation in global environment 3.7 Diversity and inclusion practices	4 Hrs.
Unit 4	Global Performance Compensation Management 4.1 International performance management systems 4.2 Performance appraisal challenges in global context 4.3 Objectives of international compensation 4.4 Components of global compensation 4.5 Expatriate compensation systems 4.6 International Compensation management system	4 Hrs.

Unit 5	International Employee Relations and Labour Standards 5.1 Concept and Objectives of International Employee Relation 5.2 Collective Bargaining, Trade Unions and Employee Participation in MNC,s 5.3 International Labour Organization (ILO): Structure, Functions and Role 5.4 International Labour Standards and Decent Work Agenda 5.5 International Labour Code 5.6 Labour Compliance and Ethical Employment Practices	4 Hrs.
Unit 6	Contemporary Issues in GHRM 6.1 IHRM in mergers and acquisitions 6.2 International alliances and SMEs 6.3 Global Technology in HRM 6.4 Ethical issues in global HRM 6.5 Sustainability and employee well-being 6.6 Future trends in global HRM	4 Hrs.

Sr. No	Textbooks
1.	International Human Resource Management, Authors: B. Sebastian Reiche, Anne-Wil Harzing, Helene Tenzer, Publisher: SAGE
2.	International Human Resource Management: Policies and Practices for Multinational Enterprises, Authors: Dennis Briscoe, Ibraiz Tarique, Randall Schuler , Publisher: Routledge
3.	International Human Resource Management, Authors: Peter J. Dowling, Marion Festing, Allen Engle
Reference Books	
1.	P.SubbaRao,International Human Resource Management, Himalaya PublishingHouse ,2008

Sr. No	Web sources
1	https://www.aicte-india.org/
2	https://www.ilo.org/
3	https://hbr.org/

Course Title: Management of Software Projects**Course Code: PB253011****Course Category: PEC**

Teaching Scheme	Examination Scheme	
Lectures: 04 hrs./ week	CA-1	10Marks
Tutorial: NIL	MSE	20Marks
Credits: 04	CA-2	10Marks
Semester: Second Year (Semester III)	ESE	60Marks

Course Prerequisite

Students should have Basic understanding of Principles of Management, Fundamental knowledge of Information Technology, Introductory awareness of Software Development concepts.

Course Description

This course aims to provide MBA students with a comprehensive understanding of managing software projects in modern organizations. It integrates project management principles with software development practices, focusing on planning, scheduling, risk management, quality assurance, procurement, leadership, and project control. The course emphasizes managerial decision-making, coordination of technical teams, and successful delivery of software projects within time, cost, and quality constraints.

Course Objectives

- Introduce fundamental concepts of project and software project management.
- Explain software development processes and life cycle models.
- Develop skills in project planning, scheduling, budgeting, and monitoring.
- Understand risk, quality, procurement, and change management in software projects.
- Enhance leadership, communication, and ethical decision-making in project environments.
- Enable effective project evaluation, implementation, and closure

Course Outcomes

COs	After completion of the course: Students will be able to	Bloom's Level
CO 1	Recall the fundamental concepts, principles, software development life cycle (SDLC) models, and project management processes used in software project management.	Remember (Level 1)
CO 2	Explain project planning, estimation techniques, scheduling, resource allocation, risk management, quality assurance, and software project Documentation	Understand (Level 2)
CO 3	Apply software project management tools and techniques to develop project plans, schedules, cost estimates, resource plans, and risk mitigation strategies for software projects.	Apply (Level 3)
CO 4	Analyze software project performance using metrics, project monitoring techniques, earned value analysis, and risk assessment to identify project issues and recommend corrective actions.	Analyze (Level4)

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	2	1	2	2	2	1	1
CO2	2	2	-	2	2	3	2	2
CO3	3	3	1	2	2	3	2	2
CO4	3	3	1	2	3	3	-	2

Assessment	
CA-1(a) (10M)	PPT/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	PPT/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Fundamentals of Project Management and Software Processes 1.1 Introduction to Projects 1.1.1 Meaning and Definition of a Project 1.1.2 Characteristics and Types of Projects 1.2 Project Management Concepts 1.2.1 Definition and Objectives of Project Management 1.2.2 Importance of Project Management in Software Industry 1.3 Project Manager and the Profession 1.3.1 Role and Responsibilities of Project Manager 1.3.2 Skills, Competencies and Challenges 1.3.3 Project Management as a Profession	8 Hrs.
Unit 2	Project and Software Life Cycles 2.1 Project Life Cycle 2.1.1 Project Life Cycle Phases 2.1.2 Software Development Life Cycle (SDLC) 2.1.3 Relationship between Project Life Cycle and SDLC 2.2 Software Development Process 2.2.1 Software Process and Process Discipline 2.2.2 Process Tailoring and Process Improvement 2.2.3 Software Production Process 2.3 Software Process Models 2.3.1 Waterfall Model 2.3.2 Prototyping Model 2.3.3 RAD and Incremental Models 2.4 Spiral and Component Assembly Models	8 Hrs.
Unit 3	Organizational, Technological and Planning Context 3.1 System View of Project Management 3.1.1 Projects as Systems 3.1.2 Interrelationship of Project Components 3.2 Organizational Context 3.2.1 Organizational Structures 3.2.2 Functional, Matrix and Projectized Organizations 3.2.3 Impact of Organization on Software Projects 3.3 Stakeholder Management 3.3.1 Identification of Stakeholders 3.3.2 Stakeholder Expectations and Influence 3.3.3 Stakeholder Engagement Strategies	8 Hrs.
Unit 4	Project Planning Approaches 4.1 Project Planning Approaches 4.1.1 Top-Down and Bottom-Up Planning 4.1.2 Project Activities and Work Breakdown Structure 4.1.3 Project Duration and Scheduling Concepts	8 Hrs.

	4.2 Project Scheduling Tools 4.2.1 Gantt Charts 4.2.2 PERT Charts 4.2.3 Critical Path Method (CPM) 4.3 Context of Information Technology Projects 4.3.1 Nature and Characteristics of IT Projects 4.4 Challenges in Software Project	
Unit 5	Project Execution, Monitoring, Review and Quality 5.1 Project Scheduling and Budgeting 5.1.1 Developing the Project Schedule 5.1.2 Developing and Finalizing the Project Budget 5.2 Project Monitoring and Control 5.2.1 Schedule Monitoring Tools 5.2.2 Project Metrics 5.2.3 Reporting Performance and Progress 5.3 Project Communication Management 5.3.1 Project Communications Plan 5.3.2 Information Distribution	8 Hrs.
Unit 6	Project Review and Recovery 6.1 Project Review and Recovery 6.1.1 Tracking Meetings and Project Reviews 6.1.2 Recovery Plans 6.1.3 Project Evaluation 6.2 Project Engineering and Requirements Management 6.2.1 Understanding Customer Problems 6.2.2 Product Requirements and Objectives 6.2.3 Information Gathering Tools and Techniques 6.3 Software Quality Management 6.3.1 Software Quality Concepts 6.3.2 Quality Measures and FURPS Model 6.3.3 Software Quality Assurance (SQA) 6.3.4 Software Reviews and Formal Technical Reviews	8 Hrs.

Sr. No.	Textbooks
1.	Roger S. Pressman, Software Engineering-A Practitioners approach, McGraw Hill
2.	Bob Hughes, Mike Cotterell, Rajib Mall, Software Project Management, McGraw Hill
3.	Pankaj Jalote, An Integrated Approach to Software Engineering, Wiley India
	Reference Books
1.	Hans van Vliet, Software Engineering: Principles and Practice, Wiley India
2.	Hughes, Software Project Management, McGraw Hill
3.	Gord Tallas, Software Project Management, Outskirts Press

	Web Resources
1.	https://onlinecourses.nptel.ac.in/noc20_cs68/preview
2.	https://onlinecourses.nptel.ac.in/noc24_mg01/preview
3.	https://www.tutorialspoint.com/software_engineering/software_project_management.htm

Course Title: Digital Manufacturing and Industry 5.0		
Course Code: PB253012		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs./ week	CA-1	10 Marks
Tutorial: NIL	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Basic understanding of operations management, production systems, supply chain management, and information technology.		
Course Description: This course provides comprehensive knowledge of digital manufacturing systems and the transition towards Industry 5.0, emphasizing smart technologies, human-centric manufacturing, sustainability and resilience in modern industrial enterprises.		
Course Objectives - To understand the concepts, evolution, and architecture of digital manufacturing and Industry 5.0. - To examine the role of advanced digital technologies in transforming manufacturing operations. - To analyze human-centric, sustainable, and resilient manufacturing systems. - To develop managerial perspectives for strategic implementation of Industry 5.0 practices.		

Course Outcomes		
COs	After completion of the course, students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, principles, technologies, and evolution of Digital Manufacturing, Industry 4.0, and Industry 5.0.	Remember (Level 1)
CO2	Explain the role of cyber-physical systems (CPS), Industrial Internet of Things (IIoT), cloud computing, digital twins, additive manufacturing, and human-centric manufacturing in Industry 5.0.	Understand (Level 2)
CO3	Apply digital manufacturing tools, smart factory technologies, automation systems, and data-driven decision-making techniques to improve manufacturing processes.	Apply (Level 3)
CO4	Analyze manufacturing systems using digital technologies, production data, simulation, and performance metrics to identify opportunities for efficiency, flexibility, sustainability, and quality improvement.	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	2	1	1	2	2	1	1
CO2	3	2	-	2	3	3	2	2
CO3	3	3	1	2	3	3	2	2
CO4	3	3	1	2	3	3	2	2

Assessment	
CA-1(a) (10M)	PPT/Assignment/MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	PPT/Assignment/MCQ Test etc.

Course Contents		
Unit 1	Introduction to Digital Manufacturing and Industry 5.0 1.1 Manufacturing Evolution: Industry 1.0 to Industry 5.0 1.2 Concept, Definition and Scope of Digital Manufacturing 1.2.1 Definition of Digital Manufacturing 1.2.2 Concept of Digital Manufacturing 1.2.3 Scope of Digital Manufacturing	8 Hrs.
Unit 2	Smart Manufacturing Systems 2.1 Digital Value Chains 2.2 Difference between Industry 4.0 and Industry 5.0 2.3 Role of Digital Manufacturing in Competitive Advantage	8 Hrs.
Unit 3	Digital Technologies in Manufacturing 3.1 Internet of Things (IoT) and Industrial IoT (IIoT) 3.1.1 Definition of IoT 3.1.2 Concept and scope of IoT 3.1.3 Definition and concept of Industrial IoT	8 Hrs.
Unit 4	Cyber-Physical Systems (CPS) 4.1 Cyber-Physical Systems (CPS) 4.2 Artificial Intelligence and Machine Learning in Manufacturing 4.3 Big Data Analytics and Cloud Computing 4.4 Digital Twins and Simulation Technologies	8 Hrs.
Unit 5	Human-Centric and Smart Manufacturing Systems 5.1 Human–Machine Collaboration and Cobots 5.2 Role of Augmented Reality (AR) and Virtual Reality (VR) 5.3 Workforce Transformation and Digital Skills 5.4 Change Management in Digital Manufacturing 5.5 Ethical, Social, and Safety Aspects of Industry 5.0	8 Hrs.
Unit 6	Human-Centric and Smart Manufacturing Systems 6.1 Human–Machine Collaboration and Cobots 6.2 Role of Augmented Reality (AR) and Virtual Reality (VR) 6.3 Workforce Transformation and Digital Skills 6.4 Change Management in Digital Manufacturing 6.5 Ethical, Social, and Safety Aspects of Industry 5.0	8 Hrs.

Sr. No.	Textbooks
1.	Deergha Sharma, Manisha Gupta, Raj K. Kovid, Industry 5.0: Emerging Paradigms for Business, Technology, and Society, CRC Press
2.	Mohan Kumar Pradhan, Mahendra U. Gaikwad, Manufacturing in the Digital Age, CRC Press
Sr. No.	Reference Books
1.	Rajesh Singh, Rakesh Kumar, Rupa Khanna, Industry 5.0: Sustainable Business Practices for a Bright Future
2.	Mohan K. Pradhan, Manufacturing in the Digital Age, CRC Press
3.	Mohan K. Pradhan, Manufacturing in the Digital Age, CRC Press

Sr. No.	Web Resources
1.	https://www.weforum.org/industry-5-0/
2.	https://www.mckinsey.com/capabilities/operations/our-insights
3.	https://www.ibm.com/industries/manufacturing

Course Title: Supply Chain Management and Digital Logistics**Course Code: PB253013****Course Category: PEC**

Teaching Scheme	Examination Scheme	
Lectures: 04 hrs./ week	CA-1	10 Marks
Tutorial: NIL	MSE	20 Marks
Credits:04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Course Prerequisite:

Basic understanding of management concepts, operations management, and business environment.

Course Description:

This course provides a comprehensive understanding of **Supply Chain Management (SCM)** and **Digital Logistics** in modern business organizations. It focuses on the integration of suppliers, manufacturers, distributors, and customers through efficient logistics systems and the application of digital technologies for supply chain optimization in Indian and global contexts.

Course Objectives

- To understand the concepts and importance of supply chain management
- To analyze supply chain structures, processes, and strategies
- To study logistics management and distribution systems
- To understand the role of digital technologies in logistics and supply chain operations
- To develop analytical and decision-making skills for efficient supply chain management

Course Outcomes

COs	After completion of the course, students will be able to	Bloom's Level
CO1	Define the fundamental concepts, terminology, components, and functions of supply chain management and digital logistics	Remember (Level 1)
CO2	Explain supply chain processes, logistics operations, inventory management, procurement, transportation, warehousing, and the role of digital technologies in supply chains.	Understand (Level 2)
CO3	Apply supply chain management principles and digital logistics tools to solve problems related to inventory, transportation, warehouse, and distribution operations.	Apply (Level 3)
CO4	Analyze supply chain performance using key performance indicators (KPIs), demand forecasting techniques, and digital data to identify operational inefficiencies and risks	Analyze (Level4)

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	1	2	2	1	1
CO2	3	2	-	2	3	3	2	2
CO3	3	3	1	2	3	3	2	2
CO4	3	3	1	2	3	3	2	2

Assessment	
CA-1(a) (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Introduction to Supply Chain Management 1.1 Meaning and evolution of supply chain management 1.2 Importance of SCM in competitive advantage 1.3 Components and participants of supply chain 1.4 Supply chain flows – product, information, and finance flows 1.5 Types of supply chains – efficient and responsive 1.6 SCM decisions – strategic, tactical, and operational 1.7 Challenges of supply chain management in India	8 Hrs.
Unit 2	Supply Chain Planning and Procurement 2.1 Supply chain strategy and planning 2.2 Demand forecasting and planning 2.3 Aggregate planning and capacity planning 2.4 Procurement and sourcing decisions 2.5 Supplier selection and supplier relationship management 2.6 Make or buy decisions 2.7 Global sourcing and outsourcing 2.8 Risk management in supply chain	8 Hrs.
Unit 3	Logistics Management 3.1 Logistics management – concept and objectives 3.2 Transportation management – modes and selection criteria 3.3 Warehousing – types, layout, and operations	8 Hrs.
Unit 4	Inventory management – EOQ, safety stock, and reorder levels 4.1 Distribution network design 4.2 Role of third-party logistics (3PL) and fourth-party logistics (4PL) 4.3 Reverse logistics and green logistics	8 Hrs.
Unit 5	Digital Analytics 5.1 Digital transformation in supply chain management 5.2 Role of information systems in SCM – ERP, SCM software 5.3 Use of IoT, RFID, and blockchain in logistics	8 Hrs.
Unit 6	E-logistics and e-supply chains 6.1 Supply chain analytics – descriptive, predictive, and prescriptive 6.2 Key performance indicators (KPIs) for supply chain performance 6.3 Data visualization and dashboards in supply chain management 6.4 Sustainability and ethical issues in supply chain and logistics 6.5 Risk, resilience, and disruption management in digital supply chains	8 Hrs.

Sr. No.	Textbooks
1.	Sunil Chopra and Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson Education
2.	Martin Christopher, Logistics and Supply Chain Management, Pearson Education
Sr. No.	Reference Books
1.	Supply Chain Management, David Simchi-Levi, Philip Kaminsky, McGraw-Hill

2.	Rachna Shah and Nicholas V. Little, Digital Supply Chain, McGraw-Hill
3.	K. K. Ahuja, Logistics Management, Himalaya Publications

Sr. No.	Web Resources
1.	https://www.cscmp.org
2.	https://www.ascm.org
3.	https://www.cscmp.org

Course Title: Product, Planning and Control Course Code: PB253014			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 04 hrs./ week		CA-1	10Marks
Tutorial: NIL		MSE	20Marks
Credits:04		CA-2	10Marks
Semester: Second Year (Semester III)		ESE	60Marks
Course Prerequisite: Basic understanding of Product/operations management, manufacturing systems, and business environment.			
Course Description: This course provides a comprehensive understanding of Product, Planning and Control (PPC) as a vital function of operations management. It focuses on planning, scheduling, routing, dispatching, and controlling Product activities to ensure optimum utilization of resources, cost efficiency, quality improvement, and timely delivery in manufacturing organizations, with reference to Indian and global industrial practices.			
Course Objectives: 1. To understand the concept, scope, and importance of Product planning and control 2. To study Product planning functions such as routing, loading, scheduling, and dispatching 3. To analyze inventory planning and material control techniques 4. To understand shop floor control and Product monitoring systems			

Course Outcomes		
COs	After completion of the course, students will be able to	Bloom's Level
CO1	Define the concepts and importance of Product planning and control	Remember (Level 1)
CO2	Explain Product planning functions and scheduling techniques	Understand (Level 2)
CO3	Apply inventory and material planning methods	Apply (Level 3)
CO4	Compare shop floor control, Product monitoring systems, Product performance and continuous improvement practices	Analyze (Level4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	1	1	2	2	1	1
CO2	3	2	-	2	3	3	2	2
CO3	3	3	1	2	3	3	2	2
CO4	3	3	1	2	3	3	2	2

Assessment	
CA-1(a) (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Introduction to Product Planning and Control 1.1 Meaning and scope of Product planning and control 1.2 Objectives and importance of PPC 1.3 Functions of Product planning and control 1.4 Role of PPC in manufacturing organizations 1.5 PPC organization and structure 1.6 Factors affecting Product planning 1.7 PPC challenges in Indian manufacturing sector	8 Hrs.
Unit 2	Product Planning Functions 2.1 Product planning process 2.2 Routing – concept and procedures 2.3 Loading – principles and types	8 Hrs.
Unit 3	Scheduling – objectives and techniques 3.1.1 Master Product schedule (MPS) 3.1.2 Aggregate Product planning 3.1.3 Line balancing and capacity planning	8 Hrs.
Unit 4	Inventory Planning and Control 4.1 Inventory management – meaning and objectives 4.1.1 Types of inventories 4.1.2 Inventory costs and control systems 4.1.3 Economic Order Quantity (EOQ) model 4.1.4 Reorder level, safety stock, and lead time 4.1.5 Material Requirements Planning (MRP) 4.1.6 Just-In-Time (JIT) inventory system	8 Hrs.
Unit 5	Product Control, Monitoring, and Performance (Integration of Control Techniques and Performance Measurement) 5.1 Product control – meaning and functions 5.2 Dispatching – procedures and methods 5.3 Shop floor control systems 5.4 Product follow-up and expediting	8 Hrs.
Unit 6	Quality control and inspection in Product 6.1 Use of information systems in PPC 6.2 Key performance indicators (KPIs) in Product 6.3 Productivity measurement and improvement techniques 6.4 Lean manufacturing and continuous improvement (Kaizen)	8 Hrs.

Sr. No.	Textbooks
1.	K. Aswathappa and K. Shridhara Bhat, Product and Operations Management, Himalaya Publications
2.	William J. Stevenson, Operations Management, McGraw-Hill Education

Sr. No.	Reference Books
1.	S. K. Mukhopadhyay, Product Planning and Control, PHI Learning
2.	Heizer, Render and Munson, Operations Management, Pearson Education

Sr. No.	Web Resources
1.	https://www.apics.org
2.	https://www.mckinsey.com/capabilities/operations
3.	https://www.tutorialspoint.com/Product_and_operations_management

Course Title: Project Management		
Course Code: PB253015		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04 hrs/ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Basic understanding of management, organizational processes, and finance, with awareness of project management concepts such as project planning, scheduling, resource management, and the general idea of executing and completing projects		
Course Description: This course provides an introduction to the fundamental concepts and practices of project management. It covers project planning, scheduling, resource management, project appraisal, and the project life cycle. Students will learn how projects align with organizational strategy and develop practical skills using project management tools and real-world case studies.		
Course Objectives: 1. Understand the definition, characteristics, and importance of projects in organizations. 2. Differentiate between routine operations and projects and appreciate the evolution of project management. 3. Apply project selection and appraisal techniques including strategic and financial evaluation. 4. Design and implement project organization structures and planning tools such as WBS and RAM..		

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the fundamentals of project management, project life cycle, and the role of projects in organizations.	Remember (Level 1)
CO2	Explain project identification, selection, appraisal techniques, and project organization structures for effective project planning.	Understand (Level 2)
CO3	Apply project planning, scheduling, resource management techniques, and project management software tools to manage projects efficiently.	Apply (Level 3)
CO4	Analyze project performance using scheduling techniques, financial evaluation methods, and AI applications to support project decision-making and control.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	1	1	-	3	1	-	-
CO2	3	2	1	2	1	3	1	1
CO3	3	3	2	1	2	3	2	2
CO4	2	3	2	2	2	2	3	2

Assessment	
CA-1(a) (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Fundamentals of Project Management 1.1 Introduction to Project Management 1.1.1 Definition and meaning of a project 1.1.2 Distinction between projects and routine operations 1.1.3 Evolution and importance of project management 1.2 Characteristics and Role of Projects 1.2.1 Characteristics of projects 1.2.2 Projects in contemporary organizations 1.2.3 Role of project management in strategic implementation	8 Hrs.
Unit 2	Project Life Cycle, Selection and Appraisal 2.1 Project Life Cycle 2.1.1 Phases of the project life cycle 2.1.2 Key activities and stakeholder involvement 2.2 Project Identification and Selection 2.2.1 Brainstorming techniques and project idea generation 2.2.2 Project screening and selection criteria 2.2.3 Qualitative and quantitative selection models 2.3 Project Appraisal 2.3.1 Technical, Financial, Economic and Risk appraisal	8 Hrs..
Unit 3	Project Organization and Planning 3.1 Strategic and Financial Evaluation 3.1.1 SWOT analysis 3.1.2 Cash flow analysis 3.1.3 Payback period 3.1.4 Net Present Value (NPV) 3.2 Project Organization Structures 3.2.1 Role of the project manager 3.2.2 Cross-functional, Dedicated, Influence-based and Matrix organizations 3.2.3 Advantages, disadvantages and selection criteria 3.3 Project Planning Tools 3.3.1 Work Breakdown Structure (WBS) 3.3.2 Levels of WBS 3.3.3 Responsibility Assignment Matrix (RAM)	8 Hrs.
Unit 4	Project Scheduling and Resource Management (09 Hours) 4.1 Project Scheduling Tools 4.1.1 Gantt charts 4.1.2 Milestone charts 4.2 Network Techniques 4.2.1 PERT and CPM 4.2.2 Activity-on-Node (AON) and Activity-on-Arrow (AOA) 4.2.3 Three-time estimates and probability of project completion 4.3 Scheduling Analysis 4.3.1 Time-scaled networks 4.3.2 Early start, late start and critical path analysis	8 Hrs.

Unit 5	Resource Management and Computerized Project Management (09 Hours) 5.1 Resource Management 5.1.1 Resource allocation 5.1.2 Resource loading and leveling 5.1.3 Constrained resource scheduling 5.1.4 Multi-project scheduling and project crashing 5.2 Computerized Project Management 5.2.1 Project Management Information Systems (PMIS) 5.2.2 Criteria for choosing project management software 5.2.3 Application of software tools in planning, scheduling, monitoring and control	8 Hrs..
Unit 6	AI Applications in Project Management (09 Hours) 6.1 Introduction to Artificial Intelligence (AI) 6.1.1 Meaning and concepts of Artificial Intelligence 6.1.2 AI technologies relevant to project management 6.1.3 Benefits and challenges of AI in project management 6.2 AI Applications in Project Management 6.2.1 AI in project planning and scheduling 6.2.2 AI for resource allocation and optimization 6.2.3 AI in risk identification and predictive analytics 6.2.4 AI for project monitoring and performance tracking 6.3 AI-Enabled Project Management Tools 6.3.1 AI features in project management software	8 Hrs.

Sr. No.	Textbooks
1.	Prasanna Chandra – Projects: Planning, Analysis, Selection, Financing, Implementation and Review
2.	Clifford F. Gray and Erik W. Larson – Project Management: The Managerial Process
3.	Jack R. Meredith and Samuel J. Mantel Jr. – Project Management: A Managerial Approach
4.	Harold Kerzner – Project Management: A Systems Approach to Planning, Scheduling, and Controlling
	Reference Books
1.	Kathy Schwalbe – Information Technology Project Management
2.	Project Management Institute (PMI) – A Guide to the Project Management Body of Knowledge (PMBOK® Guide)
3.	Eric Verzuh – The Fast Forward MBA in Project Management
4.	Paul E. Harris – Project Planning and Control Using Microsoft Project

Sr. No.	Web Reference
1.	Project Management – NPTEL – https://nptel.ac.in
2.	Project Management Institute (PMI) – https://www.pmi.org
3.	Microsoft Project Learning – https://learn.microsoft.com/project

Course Title: Purchasing and Materials Management		Course Category: PEC	
Course Code: PB253016			
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs/ week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 02		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Students should have a basic understanding of management principles, operations management, and the business environment. They should be familiar with fundamental business functions such as planning, organizing, and decision-making. Basic knowledge of manufacturing and service operations, along with an awareness of organizational processes, will help students understand the concepts covered in this course effectively.			
Course Description: This course provides a comprehensive understanding of Purchasing and Materials Management (PMM) as a critical function in manufacturing and service organizations. It focuses on procurement planning, vendor management, inventory control, stores management, and materials handling to ensure cost efficiency, quality, continuity of supply, and effective coordination with production and logistics functions in Indian and global business environments.			
Course Objectives: 1. To understand the concepts, scope, and importance of purchasing and materials management 2. To study purchasing procedures and supplier selection methods 3. To analyze inventory planning and materials control techniques 4. To understand stores management and materials handling systems 5. To develop decision-making skills for effective procurement and materials management			

Course Outcomes		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the concepts, objectives, functions, and importance of purchasing and materials management.	Remember (Level 1)
CO2	Explain purchasing procedures, vendor development, inventory management techniques, and materials planning concepts used in organizations.	Understand (Level 2)
CO3	Apply purchasing processes, inventory control techniques (ABC, VED, FSN, HML, EOQ, MRP, JIT), and supplier evaluation methods to solve materials management problems.	Apply (Level 3)
CO4	Analyze purchasing decisions, inventory performance, cost reduction strategies, vendor performance, and AI-based applications to improve materials management efficiency.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	-	-	-	3	-	-
CO2	3	2	1	2	1	3	1	1
CO3	2	2	2	2	2	2	2	2
CO4	2	3	2	3	2	2	3	2

Assessment	
CA-1(a) (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Introduction to Purchasing and Materials Management (10 Hours) 1.1 Meaning, scope, and objectives of materials management 1.2 Importance of purchasing and materials management in organizations 1.3 Functions of purchasing and materials management 1.4 Role of materials management in cost reduction 1.5 Materials management organization and structure	4 Hrs.
Unit 2	Purchasing Management and Vendor Development (10 Hours) 2.1 Materials management policies and procedures 2.2 Challenges of materials management in Indian industries 2.3 Purchasing management – concept and objectives 2.4 Purchasing cycle and purchasing procedures 2.5 Make or buy decisions 2.6 Supplier selection and evaluation methods	4 Hrs.
Unit 3	Materials and Purchasing Management 3.1 Inventory management – meaning and objectives 3.2 Types of inventory and inventory costs 3.1 Vendor rating and vendor development 3.2 Negotiation techniques in purchasing 3.3 Ethical issues in purchasing management 3.4 E-procurement and digital purchasing systems 3.5 Inventory management – meaning and objectives 3.6 Types of inventory and inventory costs 3.7 Inventory control techniques – ABC, VED, FSN, and HML analysis	4 Hrs.
Unit 4	Inventory Control and Materials Planning 4.1 Economic Order Quantity (EOQ) model 4.2 Reorder level, safety stock, and lead time 4.3 Material Requirements Planning (MRP) 4.4 Just-In-Time (JIT) and lean inventory systems 4.5 Stores management – objectives and functions 4.6 Stores layout and location planning	4 Hrs.
Unit 5	Stores Management, Materials Handling 5.1 Materials handling – principles and equipment 5.2 Standardization, simplification, and codification 5.3 Disposal of scrap, surplus, and obsolete materials 5.4 Use of information systems in materials management 5.5 Materials management performance measurement 5.6 Cost reduction and value analysis 5.7 Sustainability and ethical issues in materials management	4 Hrs.
Unit 6	Applications in Purchasing and Materials Management 6.1 Introduction to Artificial Intelligence (AI) in Materials Management 6.2 AI applications in purchasing and procurement 6.3 AI-based demand forecasting and inventory optimization 6.4 Machine Learning for supplier selection and vendor performance evaluation 6.5 AI-enabled warehouse and materials handling systems	4 Hrs.

Sr. No.	Textbooks
1	Gopalakrishnan, P. and Sundaresan, M. – Materials Management: An Integrated Approach
2	Datta, A. K. – Materials Management: Procedures, Text and Cases
3	Dobler, D. W. and Burt, D. N. – Purchasing and Supply Management
4	Monczka, R. M., Handfield, R. B., Giunipero, L. C. and Patterson, J. L. – Purchasing and Supply Chain Management

	Reference Books
1	Baily, P., Farmer, D., Crocker, B., Jessop, D. and Jones, D. – Procurement Principles and Management
2	Chopra, S. and Meindl, P. – Supply Chain Management: Strategy, Planning and Operation
3	Waters, D. – Inventory Control and Management
4	Lysons, K. and Farrington, B. – Procurement and Supply Chain Management

	Web Reference
1	NPTEL – Operations and Supply Chain Management – https://nptel.ac.in
2	SWAYAM – Supply Chain and Materials Management Courses – https://swayam.gov.in
3	NPTEL – Introduction to Operations Management – https://nptel.ac.in

Course Title: Lean Manufacturing and Quality Management Course Code: PB253017			Course Category: PEC
Teaching Scheme		Examination Scheme	
Lectures: 02 hrs/ week		CA-1	10 Marks
Tutorial: Nil		MSE	20 Marks
Credits: 02		CA-2	10 Marks
Semester: Second Year (Semester III)		ESE	60 Marks
Course Prerequisite: Students should possess a basic understanding of manufacturing management concepts, production processes, and quality management principles. They should be familiar with fundamental manufacturing operations, productivity improvement techniques, and quality control practices. This foundational knowledge will help them understand Lean Manufacturing concepts and apply quality improvement tools effectively.			
Course Description: This course helps to prepare the students to understand the tools and techniques involved in Lean Manufacturing and Quality Management. Also it highlights the importance of Lean manufacturing techniques in today's competitive business environment.			
Course Objectives: 1. To develop understanding of Lean manufacturing philosophy and Quality Management principles for improving organizational efficiency and competitiveness. 2. To familiarize students with Quality tools and techniques such as 5S, Kaizen, JIT, Kan ban, Poka Yoke, Total Productive Maintenance (TPM), etc. 3. To impart knowledge of Quality Management frameworks including Total Quality Management (TQM), Six Sigma, ISO standards, etc. 4. To develop analytical and decision-making skills using quality tools such as Statistical Process Control, Pareto analysis, cause-and-effect diagrams, control charts, etc.			

Course Outcome		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the fundamental concepts, principles, tools, and systems of Lean Manufacturing to identify waste and improve manufacturing and service processes.	Remember (Level 1)
CO2	Explain the concepts of product quality, service quality, and process quality, and evaluate the role of quality management practices in enhancing organizational performance.	Understand (Level 2)
CO3	Apply quality improvement techniques such as Deming's and Juran's approaches, Seven Quality Tools, 5S, Kaizen, Just-in-Time (JIT), Kanban, Toyota Production System (TPS), Poka-Yoke, Six Sigma, and Supply Chain Management to improve operational efficiency.	Apply (Level 3)
CO4	Analyze the applications of Artificial Intelligence (AI), Industry 4.0 technologies, and smart manufacturing solutions in Lean Manufacturing and Quality Management to enhance productivity, quality, and decision-making.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	2	–	–	1	3	1	–
CO2	3	3	1	2	1	2	3	1
CO3	3	3	2	2	2	2	2	2
CO4	2	3	1	2	2	2	2	2

Assessment	
CA-1(a) (10M)	Subjective Test / Assignment/ MCQ Test etc.
MSE(b) (20M)	Subjective Test
CA-2(c) (10M)	Subjective Test / Assignment/ MCQ Test etc.

Course Contents		
Unit 1	Lean Manufacturing 1.1 Lean manufacturing introduction 1.1.1 Definition and concept of Lean manufacturing 1.1.2 Evolution of Lean manufacturing 1.1.3 Need for Lean manufacturing 1.1.4 Elements of Lean manufacturing 1.2 Introduction to seven wastes of Lean manufacturing 1.3 Various tools of LM 1.4 Lean Systems – Features of manufacturing and of services	4 Hrs.
Unit 2	Quality Concepts 2.1 Defining quality 2.2 Evolution of Quality Principles 2.3 Product Quality 2.3.1 Evolution of product quality principles 2.3.2 Quality Control in production and its limitations 2.3.3 Cost of Quality 2.4 Service Quality 2.4.1 Definition and meaning of service quality 2.4.2 Measuring service quality 2.4.3 Tools to measure Service quality	4 Hrs.
Unit 3	Process Quality 3.1 Process Quality 3.1.1 Definition and meaning of process quality 3.1.2 Role of inspections in ensuring quality and its limitations 3.1.3 Process documentation 3.1.4 Flowcharting a process 3.1.5 Price of Non Conformance 3.2 Deming's Approach to Quality 3.3 Juran's Approach to Quality 3.4 The seven tools of quality	4 Hrs.
Unit 4	Quality Improvement 4.1 Master Production Scheduling 4.2 Materials Requirement Planning 4.3 Optimized Production 4.4 Operational Techniques of Quality Improvement 4.4.1 5-S 4.4.2 Kaizen 4.4.3 Just-in-Time System 4.4.4 Kanban 4.4.5 Toyota Production System 4.4.6 Poka Yoke 4.4.7 Six Sigma 4.5 Supply Chain Management	4 Hrs.

Unit 5	Quality Standards 5.1 Need and importance of Quality Accreditations 5.2 Global Competitiveness Index 5.3 Overview of ISO and its structure 5.3.1 ISO 9001: Quality Management Systems – requirements and clauses 5.3.2 ISO 14001: Environmental Management Systems 5.3.3 ISO 45001: Occupational Health and Safety Management Systems 5.3.4 ISO 22000: Food Safety Management Systems (overview)	4 Hrs.
Unit 6	AI Applications 6.1 Introduction to Artificial Intelligence (AI) 6.1.1 Definition and concepts of Artificial Intelligence 6.1.2 Evolution of AI in manufacturing 6.1.3 Need for AI in Lean Manufacturing and Quality Management 6.2 AI Applications in Manufacturing 6.2.1 Predictive Maintenance 6.2.2 AI-based Production Planning and Scheduling 6.2.3 AI in Inventory Management 6.2.4 AI-enabled Smart Manufacturing 6.3 AI Applications in Quality Management 6.3.1 AI for Quality Inspection 6.3.2 Defect Detection using Machine Vision 6.4 Industry 4.0 and Smart Factory	4 Hrs.

Sr. No.	Textbooks
1	Michael L. George – Lean Six Sigma: Combining Six Sigma Quality with Lean Speed
2	Dale H. Besterfield – Quality Control
3	David Hoyle – ISO 9000 Quality Systems Handbook
4	S. Rajendra Prasad – Total Quality Management
Reference Books	
1	James P. Womack and Daniel T. Jones – Lean Thinking
2	Joseph M. Juran – Juran's Quality Handbook
3	W. Edwards Deming – Out of the Crisis
4	Thomas H. Davenport and Rajeev Ronanki – Artificial Intelligence for the Real World

Web Reference	
1	Lean Manufacturing – NPTEL – https://nptel.ac.in/courses/112107304
2	Total Quality Management – NPTEL – https://nptel.ac.in/courses/110105039
3	Supply Chain Management – NPTEL – https://nptel.ac.in/courses/110106045

Course Title : Business Analytics for Decision Making**Course Code: PB253011****Course Category: PEC**

Teaching Scheme	Examination Scheme	
Lectures: 04 hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Prerequisite: Students are expected to have basic knowledge of Statistics, Business Mathematics, MS Excel, Information Technology, and Fundamentals of Management.

Course Description: Business Analytics focuses on the application of data-driven techniques to support managerial decision-making across business functions. The course provides an understanding of data collection, preparation, visualization, analytical methods, and business intelligence tools for solving organizational problems. Students will learn to apply analytical techniques in marketing, finance, human resources, operations, and supply chain management while exploring emerging technologies such as Artificial Intelligence, Machine Learning, Big Data, and Cloud Analytics for business decision-making.

Course Objectives

1. To examine the concepts, evolution, types, and strategic importance of Business Analytics in organizations.
2. To analyse business data through data collection, preparation, visualization, and exploratory data analysis techniques.
3. To evaluate analytical methods for solving business problems and supporting managerial decision-making.
4. To assess the application of Business Analytics across marketing, finance, human resources, operations, and supply chain functions.
5. To examine emerging technologies, ethical issues, and future trends in Business Analytics.

Course Outcomes:

COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, processes, and applications of Business Analytics.	Remember (Level 1)
CO2	Explain data management, visualization techniques, and analytical methods for business decision-making.	Understand (Level 2)
CO3	Apply analytical techniques and business intelligence tools to solve business problems across functional areas.	Apply (Level 3)
CO4	Examine business data using analytical models while assessing ethical, technological, and emerging trends in Business Analytics.	Analyze (Level 4)

CO PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	–	–	–	3	1	–
CO2	2	3	–	2	1	3	2	–
CO3	2	3	1	2	2	2	3	1
CO4	2	3	2	3	2	2	3	2

Assessment

CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/Case Study etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test/ PPT/Case Study/Data Analysis using Excel/Power BI/Tableau etc.

Course Contents		
Unit 1	Foundations of Business Analytics 1.1 Introduction to Business Analytics 1.2 Evolution and Importance of Analytics 1.3 Types of Analytics 1.3.1 Descriptive 1.3.2 Diagnostic 1.3.3 Predictive 1.3.4 Prescriptive 1.4 Business Analytics Process 1.5 Data-Driven Decision 1.6 Making Business Problems Suitable for Analytics 1.7 Role of Analytics in Organizations 1.7.1 For Strategic, Tactical, and Operational Decision Making 1.7.2 Application of Analytics Across Business Functions 1.7.3 Analytics for Performance Measurement 1.8 Ethics and Privacy in Business Analytics	8 Hrs
Unit 2	Data Collection, Preparation and Visualization 2.1 Sources of Business Data 2.2 Structured and Unstructured Data 2.3 Data Quality and Data Cleaning 2.3.1 Dimensions of Data Quality 2.3.2 Common Data Quality Issues 2.3.3 Data Cleaning Techniques 2.4 Data Integration and Data Preparation 2.5 Exploratory Data Analysis (EDA) 2.6 Data Visualization 2.6.1 Principles and Importance of Data 2.6.2 Data Visualization Techniques 2.6.3 Business Dashboards and Visualization Tools 2.7 Principles Dashboards and Scorecards 2.8 Introduction to Power BI and Tableau	8 Hrs
Unit 3	Talent Acquisition and Employee Performance Analytics 3.1 Descriptive Statistics for Decision Making 3.2 Probability Concepts 3.3 Correlation and Regression Analysis 3.4 Forecasting Techniques 3.5 Decision Trees 3.5.1 Introduction to Decision Trees 3.5.2 Decision Tree Construction and Analysis 3.5.3 Applications of Decision Trees in Business 3.6 What-if Analysis 3.7 Sensitivity Analysis 3.8 Risk Analysis 3.8.1 Types of Business Risks 3.8.2 Risk Assessment Techniques 3.8.3 Risk Mitigation and Decision Making	8 Hrs

Unit 4	Business Analytics Applications – I 4.1 Marketing Analytics 4.1.1 Customer Segmentation 4.1.2 Marketing Performance Metrics 4.1.3 Customer Lifetime Value (CLV) 4.1.4 Customer Retention Analytics 4.2 Financial Analytics 4.2.1 Financial Statement Analysis 4.2.2 Investment and Risk Analytics 4.2.3 Financial Performance Measurement	8 Hrs
Unit 5	Business Analytics Applications – II 5.1 HR Analytics 5.1.1 Workforce Planning and Talent Analytics 5.1.2 Employee Performance and Attrition Analysis 5.1.3 Recruitment, and Learning 5.1.4 HR Performance Metrics 5.2 Operations Analytics 5.2.1 Demand Forecasting and Capacity Planning 5.2.2 Inventory and Supply Chain Performance Analysis 5.2.3 Process Optimization and Quality Analytics 5.3 Supply Chain Analytics	8 Hrs
Unit 6	Emerging Trends in Business Analytics 6.1 Business Analytics Case Studies 6.2 Artificial Intelligence in Business 6.3 Machine Learning Concepts for Managers 6.4 Business Intelligence Systems 6.5 Big Data Analytics 6.5.1 Fundamentals of Big Data 6.5.2 Big Data Ecosystem 6.5.3 Big Data Technologies 6.5.4 Business Applications 6.5.5 Big Data Analytics for Business Decision Making 6.6 Cloud-Based Analytics 6.7 Generative AI in Decision Making 6.8 Data Governance and Ethical Issues 6.9 Future Trends in Business Analytics	8 Hrs

Sr. No.	Textbooks
1.	Evans, James R., Business Analytics, 3rd Edition, Pearson, 2020.
2.	Albright, S. Christian, Winston, Wayne L., Business Analytics: Data Analysis and Decision Making, 7th Edition, Cengage Learning, 2023.
3.	Albright, S. Christian, Winston, Wayne L., Business Analytics: Data Analysis and Decision Making, 7th Edition, Cengage Learning, 2023.

Sr. No.	Reference Books
1.	Provost, Foster, Fawcett, Tom, Data Science for Business, O'Reilly Media, 2013.
2.	Sharda, Ramesh, Delen, Dursun, Turban, Efraim, Business Intelligence, Analytics, and Data Science: A Managerial Perspective, Pearson, 2023.
3.	Marr, Bernard, Data Strategy: How to Profit from a World of Big Data, Analytics and Artificial Intelligence, Kogan Page, 2022.
4.	Davenport, Thomas H., Harris, Jeanne G., Competing on Analytics, Harvard Business Review Press, 2017.

Sr. No.	Web Resources
1.	Microsoft Learn (Power BI) – https://learn.microsoft.com/power-bi
2.	Tableau Learning – https://www.tableau.com/learn
3.	Google Looker Studio – https://lookerstudio.google.com
4.	Google Looker Studio – https://lookerstudio.google.com
5.	IBM SkillsBuild – https://skillsbuild.org

Course Title: Business Intelligence and Data Visualization**Course Code: PB253012****Course Category: PEC**

Teaching Scheme	Examination Scheme	
Lectures: 04hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Prerequisite: Students are expected to have basic knowledge of Management Information Systems, Database Management, Statistics, MS Excel, and Business Analytics.

Course Description: Business Intelligence and Data Visualization (BIDV) focuses on transforming organizational data into meaningful insights for effective managerial decision-making. The course provides an understanding of Business Intelligence architecture, data warehousing, data preparation, visualization principles, dashboards, key performance indicators, and modern Business Intelligence tools. Students will learn to create interactive dashboards, interpret business insights, and apply Business Intelligence across various business functions while exploring emerging technologies such as Artificial Intelligence, Big Data, Cloud Computing, Mobile Business Intelligence, and Generative AI.

Course Objectives

1. To examine the concepts, architecture, components, and strategic importance of Business Intelligence and Data Visualization.
2. To analyse business data through data preparation, visualization, and dashboard development techniques.
3. To evaluate Business Intelligence tools, KPIs, and reporting techniques for organizational decision-making.
4. To assess the application of Business Intelligence and Data Visualization across various business functions.
5. To examine advanced Business Intelligence technologies, ethical issues, data governance, and future trends.

Course Outcomes:

COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, architecture, and applications of Business Intelligence and Data Visualization.	Remember (Level 1)
CO2	Explain data preparation, visualization techniques, dashboards, and Business Intelligence tools for managerial decision-making.	Understand (Level 2)
CO3	Employ Business Intelligence tools and data visualization techniques for business performance analysis across functional areas.	Apply (Level 3)
CO4	Analyze business data using Business Intelligence techniques while assessing governance, security, ethical issues, and emerging trends in Business Intelligence and Data Visualization.	Analyze (Level 4)

CO PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	–	–	–	3	1	–
CO2	2	3	–	2	1	3	2	–
CO3	2	3	1	2	2	2	3	1
CO4	2	3	2	3	2	2	3	2

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/ Case Study etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test/Dashboard Development/PPT/Case Study etc.

Course Contents		
Unit 1	Fundamentals of Business Intelligence 1.1 Introduction to Business Intelligence 1.2 Evolution and Components of BI 1.2.1 Core Components of Business Intelligence 1.2.2 Business Intelligence Architecture 1.2.3 Business Intelligence Lifecycle 1.2.4 Role of Business Intelligence in Modern Organizations 1.3 Business Intelligence Architecture 1.4 Data Warehousing and Data Marts 1.5 Business Intelligence Applications 1.6 BI in Strategic Decision Making 1.7 Benefits and Challenges of BI 1.7.1 Critical Success Factors for BI 1.7.2 Data Privacy, Security, and Ethical Issues 1.7.3 Future Scope and Emerging Challenges in BI	8 Hrs
Unit 2	Data Preparation and Visualization 2.1 Emerging Trends in Business Intelligence 2.1.1 Cloud-Based Business Intelligence 2.1.2 Self-Service Business Intelligence 2.1.3 Mobile and Real-Time Business Intelligence 2.1.4 Generative AI and Augmented Analytics 2.2 Data Sources and Data Collection 2.3 Data Cleaning and Transformation 2.4 Data Integration and Preparation 2.5 Principles of Data Visualization 2.5.1 Visual Encoding and Graphical Elements 2.5.2 Selection of Appropriate Charts and Graphs 2.5.3 Design Principles for Effective Visualizations 2.5.4 Best Practices and Common Visualization Errors 2.6 Data Visualization Techniques 2.7 Storytelling with Data 2.8 Visual Perception and Best Practices 2.9 Ethical Issues in Data Visualization	8 Hrs
Unit 3	Business Dashboards and BI Tools 3.1 Business Dashboards 3.2 Key Performance Indicators (KPIs) 3.2.1 Concept and Characteristics of KPIs 3.2.2 Types of Key Performance Indicators 3.2.3 Designing and Selecting Effective KPIs 3.2.4 KPI Monitoring and Performance Measurement 3.2.5 KPI Dashboards and Reporting 3.3 Dashboard Design Principles 3.4 Interactive Reports and Visual Analytics 3.5 Microsoft Power BI 3.6 Tableau Fundamentals 3.6.1 Connecting and Preparing Data in Tableau	8 Hrs

	3.6.2 Creating Charts, Graphs, and Interactive Dashboards 3.6.3 Data Analysis Using Filters, Calculations, and Parameters 3.6.4 Publishing, Sharing, and Collaboration in Tableau 3.7 Google Looker Studio (Overview) 3.8 Comparative Analysis of BI Tools	
Unit 4	Learning, Engagement, and Retention Analytics 4.1 Marketing Intelligence 4.2 Financial Intelligence 4.3 Human Resource Intelligence 4.4 Operations and Supply Chain Intelligence 4.5 Customer Intelligence 4.6 Sales Performance Analytics 4.7 Executive Information Systems 4.8 Industry Case Studies	8 Hrs
Unit 5	Predictive Analytics and HR Visualization 5.1 Real-Time Business Intelligence 5.1.1 Concept and Importance 5.1.2 Data Collection and Processing 5.1.3 Dashboards and Performance Monitoring 5.1.4 Applications of Real-Time Business Intelligence 5.1.5 Challenges and Future Trends in Real-Time BI 5.2 Self-Service Business Intelligence 5.3 Artificial Intelligence in Business Intelligence 5.4 Predictive and Prescriptive Analytics 5.4.1 Models 5.4.2 Decision Making 5.4.3 Business Applications 5.4.4 Challenges and Ethical Considerations in Advanced Analytics	8 Hrs
Unit 6	AI, Ethics, and Emerging Trends in People Analytics 6.1 Big Data and Cloud-Based BI 6.2 Mobile Business Intelligence 6.3 Data Governance and Security 6.4 Future Trends in Business Intelligence 6.4.1 Cloud-Based and Mobile Business Intelligence 6.4.2 Augmented Analytics and Self-Service Business Intelligence 6.4.3 Internet of Things (IoT) and Big Data Integration 6.4.4 Ethical, Sustainable, and Future Directions of Business Intelligence	8 Hrs

Sr. No.	Textbooks
1.	Sharda, R., Delen, D., Turban, E., Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 5th Edition, Pearson, 2023.
2.	Knaflic, Cole Nussbaumer, Storytelling with Data: A Data Visualization Guide for Business Professionals, Wiley, 2015.
3.	Few, Stephen, Information Dashboard Design: Displaying Data for At-a-Glance Monitoring, 2nd Edition, Analytics Press, 2013.
Sr. No.	Reference Books
1.	Provost, Foster, Fawcett, Tom, Data Science for Business, O'Reilly Media, 2013.
2.	Knaflic, C. N., Storytelling with Data: A Data Visualization Guide for Business Professionals, Wiley, 2015.
3.	Few, S., Information Dashboard Design: Displaying Data for At-a-Glance Monitoring, 2nd Edition, Analytics Press, 2013.
4.	Marr, B., Data Strategy: How to Profit from a World of Big Data, Analytics and Artificial Intelligence, Kogan Page, 2022.

Sr. No.	Web Resources
1.	NPTEL – Data Analytics and Business Intelligence Courses – https://nptel.ac.in
2.	SWAYAM – Online Courses in Business Analytics and Data Science – https://swayam.gov.in
3.	Microsoft Learn (Power BI) – https://learn.microsoft.com/power-bi

Course Title : Customer and Marketing Analytics		
Course Code: PB253013		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Prerequisite: Students are expected to have basic knowledge of Marketing Management, Consumer Behaviour, Statistics, MS Excel, and Business Analytics.		
Course Description: Customer and Marketing Analytics focuses on the application of data analytics to understand customer behaviour, evaluate marketing performance, and support evidence-based marketing decisions. The course provides knowledge of customer analytics, marketing metrics, campaign evaluation, predictive marketing techniques, and digital marketing analytics. Students will learn to analyze customer data, measure marketing effectiveness, develop customer-centric strategies, and apply analytical tools to improve customer acquisition, retention, loyalty, and business performance while addressing ethical and emerging issues in marketing analytics.		
Course Objectives 1. To examine the concepts, data sources, customer data, and strategic importance of Customer and Marketing Analytics. 2. To analyse customer behaviour, customer segmentation, customer lifetime value, and marketing performance using analytical techniques. 3. To evaluate customer acquisition, retention, digital marketing, and marketing campaign analytics for effective decision-making. 4. To assess predictive marketing techniques and customer analytics for improving marketing effectiveness and customer relationship management. 5. To examine emerging technologies, artificial intelligence, ethics, data governance, and future trends in Customer and Marketing Analytics..		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Define the fundamental concepts, customer data, marketing metrics, and applications of Customer and Marketing Analytics.	Remember (Level 1)
CO2	Explain customer analytics, marketing performance measures, and customer relationship analytics for managerial decision-making.	Understand (Level 2)
CO3	Demonstrate analytical techniques to evaluate customer behaviour, marketing campaigns, and digital marketing performance.	Apply (Level 3)
CO4	Examine customer and marketing data using predictive analytics while assessing ethical, technological, and emerging issues in marketing analytics.	Analyze (Level 4)

CO PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	–	1	–	3	1	–
CO2	2	3	1	2	1	3	2	–
CO3	2	3	1	2	2	2	3	1
CO4	2	3	2	3	2	2	3	2

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/Case Study etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test/Marketing Analytics Dashboard/PPT/Case Study etc.

Course Contents		
Unit 1	Fundamentals of Customer and Marketing Analytics 1.1 Introduction to Customer and Marketing Analytics 1.2 Marketing Data Sources 1.3 Customer Data and Data Management 1.4 Customer Segmentation and Targeting 1.5 Marketing Metrics and KPIs 1.6 Customer Journey Analytics 1.7 Data-Driven Marketing Decisions 1.8 Emerging Trends in Marketing Analytics 1.8.1 Artificial Intelligence and Machine Learning 1.8.2 Predictive and Prescriptive Marketing Analytics 1.8.3 Omni-channel and Customer Experience Analytics 1.8.4 Social Media and Influencer Analytics 1.8.5 Privacy, Data Ethics, and Future Trends in Marketing Analytics	8 Hrs
Unit 2	Customer Analytics 2.1 Customer Profiling and Personas 2.1.1 Concept and Importance of Customer Profiling 2.1.2 Customer Demographics, Psychographics 2.1.3 Development of Customer Personas 2.1.4 Applications of Customer Personas in Marketing Strategy 2.1.5 Challenges and Best Practices in Customer Profiling 2.2 Customer Lifetime Value (CLV) 2.3 Customer Acquisition Analytics 2.3.1 Customer Retention and Churn Analysis 2.3.2 Customer Churn: Concepts and Types 2.3.3 Churn Prediction Techniques 2.3.4 Customer Retention Metrics and KPIs 2.4 Retention Analytics for Customer Relationship Management (CRM) 2.5 Customer Satisfaction and Loyalty Analytics 2.6 Customer Behavior Analysis 2.7 Customer Experience (CX) Analytics 2.8 Ethical Issues in Customer Analytics	8 Hrs
Unit 3	Marketing Performance Analytics 3.1 Marketing Campaign Analytics 3.1.1 Planning and Designing Marketing Campaigns 3.1.2 Campaign Performance Metrics and KPIs 3.1.3 Campaign Effectiveness Measurement 3.1.4 Return on Marketing Investment (ROMI) Analysis 3.1.5 Campaign Optimization and Performance Improvement 3.2 Sales Analytics 3.3 Product and Pricing Analytics 3.4 Digital Marketing Analytics 3.5 Social Media Analytics 3.6 Web Analytics 3.7 Website Traffic and User Behavior Analysis	8 Hrs

	3.7.1 Key Web Analytics Metrics and KPIs 3.7.2 Google Analytics and Web Analytics Tools 3.7.3 Marketing Decision Making 3.8 Return on Marketing Investment (ROMI) 3.9 Marketing Dashboards and Reports	
Unit 4	Predictive Marketing Analytics 4.1 Demand Forecasting 4.2 Market Basket Analysis 4.3 Recommendation Systems 4.4 Types of Recommendation Systems 4.4.1 Content-Based 4.4.2 Collaborative 4.4.3 Hybrid 4.5 Customer Purchase Prediction 4.5.1 Factors Influencing Customer Purchase Decisions 4.5.2 Purchase Prediction Models and Techniques 4.5.3 Applications of Purchase Prediction in Marketing 4.6 Market Response Modeling 4.6.1 Concept and Objectives 4.6.2 Models for Measuring Marketing Response 4.6.3 Applications in Decision Making	8 Hrs
Unit 5	Customer Personalization and Marketing Applications 5.1 Predictive Customer Segmentation 5.2 Personalization and Recommendation Analytics 5.3 Marketing Case Studies 5.4 Artificial Intelligence in Marketing 5.5 Big Data in Marketing 5.6 Omni-channel Marketing Analytics 5.7 Influencer and Social Listening Analytics 5.7.1 Real-Time Marketing Analytics 5.7.2 Data Collection and Monitoring 5.7.3 Customer Engagement Analytics 5.7.4 Applications of Real-Time Marketing Analytics	8 Hrs
Unit 6	Marketing Automation, Ethics, and Future Trends 6.1 Marketing Automation and CRM Analytics 6.1.1 Marketing Automation Tools and Techniques 6.1.2 Customer Relationship Management (CRM) Analytics 6.1.3 Personalization and Customer Lifecycle Management 6.2 Privacy, Ethics, and Data Governance 6.3 Future Trends in Customer and Marketing Analytics	8 Hrs

Sr. No.	Textbooks
1.	Kumar, V., Reinartz, W., Customer Relationship Management: Concept, Strategy, and Tools, 3rd Edition, Springer, 2018.
2.	Winston, Wayne L., Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wiley, 2014.
3.	Kotler, Philip, Keller, Kevin Lane, Chernev, Alexander, Marketing Management, 16th Edition, Pearson, 2022.
Sr. No.	Reference Books
1.	Chaffey, Dave, Digital Marketing: Strategy, Implementation and Practice, 8th Edition, Pearson, 2022.
2.	Solomon, Michael R., Consumer Behavior: Buying, Having, and Being, 13th Edition, Pearson, 2020.

Sr. No.	Web Resources
1.	NPTEL – Marketing Analytics / Digital Marketing / Business Analytics Courses – https://nptel.ac.in
2.	SWAYAM – Marketing Analytics and Digital Marketing Courses – https://swayam.gov.in
3.	Google Skillshop (Google Analytics Certification) – https://skillshop.withgoogle.com
4.	HubSpot Academy – CRM and Marketing Analytics Courses – https://academy.hubspot.com

Course Title : Financial Analytics and Fintech**Course Code: PB253014****Course Category: PEC**

Teaching Scheme	Examination Scheme	
Lectures: 04hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks

Prerequisite: Basic knowledge of financial management, statistics/econometrics, and financial markets along with familiarity with spreadsheets or analytical tools used in business and finance.

Course Description: This course introduces the evolution, typologies, and functional applications of FinTech, covering industry trends, regulations in India, and IT enabled financial innovations shaping the future of financial services. It explores major financial innovations such as digitization, cryptocurrencies, blockchain, and AI based visualization in banking, insurance, and funds. The course develops foundations in financial analytics, including fundamental and technical analysis, data driven visualization, and components of analytical workflows.

Course Objectives:

1. Develop conceptual understanding of FinTech evolution, typologies, industry trends, and regulatory aspects, with a focus on the Indian financial ecosystem.
2. Build analytical skills in financial analytics, including fundamental and technical analysis, financial time series, and data visualization for better financial decision-making.
3. Apply portfolio and derivative pricing models—such as Markowitz, CAPM, and Black–Scholes—to construct, evaluate, and optimize asset portfolios and manage financial risks.

Course Outcomes

COs	After completion of the course students will be able to	Bloom's Level
CO1	Identify key concepts, terminology, and historical milestones in FinTech and financial analytics.	Remember (Level 1)
CO2	Explain the functional aspects, ecosystem trends, and regulatory environment of FinTech in India, and describe how digital innovations transform financial services and institutions.	Understand (Level 2)
CO3	Employ core tools and techniques of financial analytics and time-series analysis using appropriate software or AI visualization tools.	Apply (Level 3)
CO4	Analyze portfolio construction and risk return trade-offs using Markowitz mean–variance framework and CAPM.	Analyze (Level 4)
CO5	Evaluate models and empirical evidence in high-frequency trading and derivative pricing including Black–Scholes and alternative price-change models.	Evaluate (Level 5)

CO PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	3	1	1
CO2	2	3	1	1	1	2	2	1
CO3	2	3	1	1	1	2	3	1
CO4	2	3	1	2	1	3	3	1
CO5	3	3	1	2	2	3	3	2

Assessment	
CA-1 (a) (10M)	Subjective Test / Assignment/ Presentations/Case Studies etc.
MSE (b) (20M)	Subjective Test
CA-2 (c) (10M)	Subjective Test / Assignment/ Presentations/Case Studies etc.

Course Contents		
Unit 1	Introduction 1.1 FinTech Evolution 1.2 FinTech Typology 1.3 Functional aspects of FinTech applications 1.4 Trends in FinTech Industry and Opportunities provided by different areas of the FinTech ecosystem 1.5 FinTech 1.5.1 IT-enabled financial innovations and the current trend 1.6 The Future of Financial Services 1.7 FinTech Regulation in India	8 Hrs
Unit 2	Financial Innovations 2.1 A brief History of Financial Innovation 2.2 Digitization of Financial Services 2.3 FinTech Funds 2.4 Visualization using AI 2.5 Cryptocurrencies 2.6 Block chain 2.7 FinTech in banks and Insurance companies	8 Hrs
Unit 3	Introduction to Financial Analytics 3.1 Definition 3.2 Relevance and scope of financial Analytics 3.3 Recent trends in financial analytics 3.4 Types of Financial Analytics 3.4.1 Fundamental Analysis 3.4.2 Technical Analysis 3.5 Component of Financial Analytics 3.6 Features of Financial Analytics 3.7 Financial Analytics and Data Analysis 3.8 Introduction to Visualization	8 Hrs
Unit 4	Financial Time Series 4.1 Asset Returns 4.2 Distributional Properties of Returns 4.3 Review of Statistical Distributions and properties of financial time Series 4.4 Econometrics	8 Hrs
Unit 5	Asset Portfolio Models 5.1 Basics of portfolio construction 5.2 Markowitz Theorem 5.3 Capital Asset Pricing Model 5.4 Diversification and Portfolio Optimization	8 Hrs

Unit 6	High-Frequency Data Analysis and Derivative Pricing 6.1 Non synchronous Trading 6.2 Bid–Ask Spread of trading Prices 6.3 Empirical Characteristics of Trading Data 6.4 Models for Price Changes 6.5 Duration Models 6.6 Issues regarding derivative markets 6.7 Brownian motion 6.8 Black - Sholes model 6.9 Modelling derivative prices	8 Hrs
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Sr. No.	Textbooks
1.	Sanjay Phadke, FinTech Future - The Digital DNA of Finance, Sage Publications, 2020
2.	Pranay Gupta and T. Mandy Tham, FinTech: The New DNA of Financial Services Gruyter 2019
Sr. No.	Reference Books
1.	Argimiro Arratia (2014), "Computational Finance An Introductory Course with R", Atlantis Press
2.	David Ruppert (2011), "Statistics and Data Analysis for Financial Engineering", Springer
3.	John Y. Campbell, Andrew W. Lo, A. Craig MacKinlay (1997), "The Econometrics of Financial Markets", Princeton University Press

Sr. No.	Web Resources
1.	http://www.nseindia.com/learn/financial-data-analytics-machine-learning
2.	https://www.ajnifm.ac.in/
3.	https://www.iibf.org.in/ELearning.asp

Course Title: Supply Chain and Operations Analytics		
Course Code: PB253015		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 04hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 04	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Course Prerequisite: Students should have basic knowledge of Supply Chain Management, operations management, statistics, and introductory data analytics.		
Course Description: This course provides an introduction to supply chain and operations analytics, focusing on how data and analytical methods improve planning, forecasting, inventory, logistics, and procurement decisions. It covers key concepts, tools such as Excel, R, Python, and Tableau, and emerging trends like AI, sustainability, blockchain, and Industry 4.0/5.0.		
Course Objectives		
1. To develop understanding of supply chain and operations analytics concepts and their role in decision-making.		
2. To build skills in collecting, cleaning, and analyzing supply chain data using analytical tools.		
3. To apply statistical, forecasting, optimization, and simulation techniques to real supply chain problems.		
4. To introduce students to modern software and emerging technologies used in supply chain analytics.		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, terminologies, and frameworks of supply and operations chain analytics.	Remember (Level 1)
CO2	Explain the role of analytics in supply chain and operations decision-making.	Understanding (Level 2)
CO3	Apply analytical tools and techniques to solve supply chain and operations problems.	Apply (Level 3)
CO4	Analyze supply chain data, patterns, and performance indicators to identify operational issues and trends.	Analyze (Level 4)
CO5	Evaluate analytical results and alternative solutions to support effective decision-making in supply chain contexts.	Evaluate (Level 5)

CO PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	3	1	1
CO2	2	3	1	1	1	2	2	1
CO3	2	3	1	1	1	2	3	1
CO4	2	3	1	2	1	3	3	1
CO5	3	3	1	2	2	3	3	2

Assessment	
CA-1 (a) (10M)	Subjective Test / Assignment/ Presentations/Case Studies etc.
MSE (b) (20M)	Subjective Test
CA-2 (c) (10M)	Subjective Test / Assignment/ Presentations/Case Studies etc.

Course Contents		
Unit 1	Fundamentals 1.1 Fundamentals: 1.2 Introduction to Supply Chain Management (SCM) and Operations Management 1.3 Role of analytics in SCM and operations 1.4 Types of analytics: 1.4.1 Descriptive 1.4.2 Predictive 1.4.3 Prescriptive 1.5 Key performance indicators (KPIs) in supply chains 1.6 Overview of Supply Chain Operations Reference (SCOR)	8 Hrs
Unit 2	Data Collection and Management in Supply Chains 2.1 Data sources in supply chain and operations 2.2 Data quality and preprocessing techniques 2.3 Introduction to data warehousing and big data in SCM 2.4 Ethical considerations and data privacy in supply chain analytics	8 Hrs
Unit 3	Analytical Tools and Techniques 3.1 Statistical analysis and forecasting methods, 3.2 Optimization models for supply chain and operations, 3.3 Simulation techniques in operations management	8 Hrs
Unit 4	Introduction to software tools 4.1 Excel 4.2 R 4.3 Python 4.4 Tableau	8 Hrs
Unit 5	Applications in Supply Chain and Operations 5.1 Demand forecasting and inventory management 5.2 Transportation and logistics analytics 5.3 Supplier selection and procurement analytics 5.4 Case studies: 5.4.1 Indian and global supply chain analytics applications	8 Hrs
Unit 6	Strategic and Emerging Trends in Supply Chain Analytics 6.1 Integration of AI and Machine Learning in SCM 6.2 Sustainability and green supply chain analytics 6.3 Risk management and resilience in supply chains 6.4 Future trends 6.4.1 Industry 4.0 and 5.0 6.4.2 IoT and IIoT 6.5 Blockchain in supply chain analytics	8 Hrs

Sr. No.	Textbooks
1.	Supply Chain Analytics: Strategies, Models and Solutions, Authors: Rabindranath Bhattacharya Anindita M. Bhattacharyya, Publisher: Wiley
2.	Production and Operations Analysis, Author: Steven Nahmias, Publisher: McGraw-Hill Education
3.	Operations and Supply Chain Management Essentials: Build Skills in Logistics, Process Improvement, and Supply Chain Analytics, Author: Ashley McDonough, Publisher: Vibrant Publishers
Sr. No.	Reference Books
1.	Operations Management: Sustainability and Supply Chain Management (13th Edition), Authors: Jay Heizer, Barry Render, Chuck Munson, Publisher: Pearson

2.	Financial Cost and Management Accounting, P. Periasamy
3.	The Analytics Edge, Authors: Dimitris Bertsimas, Allison O'Hair, William Pulleyblank, Publisher: MIT Press
4.	Supply Chain Analytics: A Comprehensive Guide to supply chain analytics, harnessing Python to drive efficiency: volume 1, Authors: Alice Schwartz and Hayden Van Der Post, Publisher: Supply Chain Analytica
5.	Supply Chain Analytics, Author: T A S Vijayaraghavan, Publisher: Wiley

Sr. No.	Web Resources
1.	https://www.youtube.com/watch?v=3d7C4pShyKI
2.	https://www.youtube.com/playlist?list=PLhGyjkKWps0qoi2mHrqn7StZzpp55GtKI
3.	https://www.youtube.com/playlist?list=PLNLDEHOJTZSh-MPZY5hosnChUHHI55sxl
4.	https://www.youtube.com/watch?v=AjL-yNCQ118

Course Title : People Analytics		
Course Code: PB253016		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 02hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Prerequisite: Students are expected to have basic knowledge of Human Resource Management, Statistics, MS Excel, and Business Analytics.		
Course Description: People Analytics focuses on the application of data analytics to human resource management for evidence-based decision-making. The course integrates HR concepts with analytical tools to measure workforce performance, predict employee outcomes, and support strategic talent management. Through HR datasets, dashboards, and real-world case studies, students learn to apply analytical techniques for recruitment, performance, retention, workforce planning, and organizational effectiveness.		
Course Objectives 1. To examine the concepts, evolution, scope, and strategic importance of People Analytics in modern organizations. 2. To analyse HR data, metrics, KPIs, and workforce trends for effective decision-making. 3. To evaluate analytical approaches for recruitment, performance management, employee engagement, learning, and retention. 4. To assess predictive analytics techniques, HR dashboards, visualization tools, and workforce planning applications. 5. To examine emerging technologies, ethical issues, AI applications, and data privacy in People Analytics.		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the fundamental concepts, HR metrics, and applications of People Analytics.	Remember (Level 1)
CO2	Explain the role of HR data, workforce analytics, and employee lifecycle analytics in organizational decision-making.	Understand (Level 2)
CO3	Employ analytical tools and dashboards to evaluate HR performance, recruitment, and employee retention.	Apply (Level 3)
CO4	Analyze workforce data using predictive analytics while assessing ethical, legal, and technological issues in People Analytics.	Analyze (Level 4)

CO PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	–	–	–	3	1	–
CO2	2	3	–	2	1	3	2	–
CO3	2	3	1	2	2	2	3	1
CO4	2	3	2	3	2	2	3	2

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/ Case Study etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test/Dashboard Development/PPT/Case Study etc.

Course Contents		
Unit 1	Foundations of People Analytics 1.1 Concept, Nature, and Scope of People Analytics 1.2 Evolution of People Analytics 1.2.1 HR Metrics, HR Analytics, and Workforce Analytics 1.2.2 Strategic Role of People Analytics 1.3 Importance of People Analytics in Organizations 1.4 Evidence-Based Human Resource Management 1.5 HR Data Sources 1.5.1 Human Resource Information System (HRIS) 1.5.2 Enterprise Resource Planning (ERP) 1.5.3 Employee Surveys and Digital Platforms 1.6 Challenges and Benefits of People Analytics	4 Hrs
Unit 2	HR Data, Metrics, and Workforce Analytics 2.1 HR Data Collection and Preparation 2.1.1 Structured and Unstructured HR Data 2.1.2 Data Cleaning and Validation 2.2 HR Metrics and Key Performance Indicators (KPIs) 2.3 Workforce Planning Analytics 2.4 Workforce Demand Forecasting 2.5 Workforce Supply Forecasting 2.6 Skills Gap Analysis 2.7 Diversity, Equity, and Inclusion (DEI) Analytics 2.8 Scorecards	4 Hrs
Unit 3	Talent Acquisition and Employee Performance Analytics 3.1 Recruitment Analytics 3.1.1 Recruitment Funnel 3.1.2 Time-to-Hire 3.1.3 Cost-per-Hire 3.2 Selection Analytics 3.3 Onboarding Analytics 3.4 Performance Management Analytics 3.4.1 Employee Productivity Metrics 3.4.2 Performance KPIs 3.5 Compensation and Benefits Analytics	4 Hrs
Unit 4	Learning, Engagement, and Retention Analytics 4.1 Learning and Development Analytics 4.1.1 Training Effectiveness 4.1.2 Learning ROI 4.2 Employee Engagement Analytics 4.2.1 Employee Satisfaction Surveys 4.2.2 Engagement Metrics 4.3 Attrition Analytics 4.4 Retention Analytics 4.5 Succession Planning Analytics 4.6 Employee Lifecycle Analytics	4 Hrs
Unit 5	Predictive Analytics and HR Visualization 5.1 Introduction to Predictive Analytics in HR 5.2 Employee Turnover Prediction 5.3 Absenteeism Analysis 5.4 HR Dashboards 5.4.1 Microsoft Excel Dashboards 5.4.2 Power BI/Tableau Dashboards 5.5 Data Visualization Techniques 5.6 Data Storytelling for HR Decision-Making	4 Hrs

Unit 6	AI, Ethics, and Emerging Trends in People Analytics 6.1 Artificial Intelligence in Human Resource Management 6.2 Machine Learning Applications in People Analytics 6.3 Generative AI for Recruitment and Talent Management 6.4 Organizational Network Analysis (ONA) 6.5 Ethical Issues in People Analytics 6.5.1 Data Privacy and Confidentiality 6.5.2 Bias and Fairness in AI-Based HR Decisions 6.6 Future Trends in People Analytics and Industry Case Studies	4 Hrs
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Sr. No.	Textbooks
1.	Edwards, Martin R., Edwards, Kirsten, Predictive HR Analytics: Mastering the HR Metric, Kogan Page, 2019.
2.	Fitz-enz, Jac, The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, AMACOM, 2010.
3.	Davenport, Thomas H., Harris, Jeanne G., Shapiro, Jeremy, Competing on Talent Analytics, Harvard Business Review Press, 2010.
Sr. No.	Reference Books
1.	Fitz-enz, Jac, The ROI of Human Capital: Measuring the Economic Value of Employee Performance, AMACOM, 2009.
2.	Marr, Bernard, Data-Driven HR: How to Use Analytics and Metrics to Drive Performance, Kogan Page, 2018.
3.	Provost, Foster, Fawcett, Tom, Data Science for Business, O'Reilly Media, 2013.
4.	Rasmussen, Thomas, Ulrich, Dave, Learning from Practice: How HR Analytics Avoids Being a Management Fad, Organizational Dynamics, 2015.

Sr. No.	Web Resources
1.	Society for Human Resource Management (SHRM) – https://www.shrm.org
2.	Microsoft Learn (Power BI) – https://learn.microsoft.com/power-bi
3.	Tableau Learning – https://www.tableau.com/learn
4.	International Labour Organization (ILO) – https://www.ilo.org
5.	World Economic Forum – Future of Jobs Reports – https://www.weforum.org

Course Title : Artificial Intelligence for Business Applications		
Course Code: PB253017		Course Category: PEC
Teaching Scheme	Examination Scheme	
Lectures: 02hrs./ week	CA-1	10 Marks
Tutorial: Nil	MSE	20 Marks
Credits: 02	CA-2	10 Marks
Semester: Second Year (Semester III)	ESE	60 Marks
Prerequisite: Basic understanding of management principles, business analytics, statistics, and digital technologies. No prior programming or Artificial Intelligence knowledge is required.		
Course Description: This course introduces Artificial Intelligence concepts and their applications in business decision-making. It covers AI technologies, machine learning fundamentals, data-driven business applications, generative AI, intelligent automation, ethical considerations, and emerging AI trends across marketing, finance, HR, operations, and supply chain management.		
Course Objectives 1. To familiarize students with the concepts, techniques and business applications of Artificial Intelligence. 2. To provide understanding of AI-driven decision-making, automation and analytical tools across business functions. 3. To develop awareness of AI applications, governance, ethics and responsible business practices. 4. To strengthen analytical thinking for evaluating AI-enabled business solutions and emerging technologies.		

Course Outcomes:		
COs	After completion of the course students will be able to	Bloom's Level
CO1	Recall the concepts, terminology, techniques and applications of Artificial Intelligence in business.	Remember (Level 1)
CO2	Explain AI technologies, machine learning concepts, intelligent automation and their role in business decision-making.	Understand (Level 2)
CO3	Demonstrate AI-based approaches, analytical tools and digital technologies for solving business problems.	Apply (Level 3)
CO4	Examine AI-enabled business strategies, ethical issues, governance frameworks and emerging trends for organizational decision-making.	Analyze (Level 4)

CO PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	1	1	1	2	2	1
CO2	3	2	1	2	1	2	3	1
CO3	3	3	2	2	2	3	3	2
CO4	2	3	3	3	2	2	3	3

Assessment	
CA-1(a)-(10M)	Subjective Test/Assignment/MCQ Test/PPT/ Case Study etc.
MSE (b)-(20M)	Subjective Test
CA-2(c)-(10M)	Assignment/MCQ Test/Dashboard Development/PPT/Case Study etc.

Course Contents		
Unit 1	Fundamentals of Artificial Intelligence 1.1 Introduction to Artificial Intelligence 1.1.1 Meaning and Evolution of AI 1.1.2 History and Generations of AI 1.1.3 AI vs Machine Learning vs Deep Learning 1.2 AI Technologies 1.2.1 Machine Learning 1.2.2 Deep Learning 1.2.3 Natural Language Processing (NLP) 1.3 AI in Business 1.3.1 Importance of AI in Organizations 1.3.2 AI-driven Business Transformation 1.3.3 AI Applications across Industries 1.4 Business Intelligence and AI 1.4.1 AI and Business Analytics 1.4.2 AI for Decision Support Systems	4 Hrs
Unit 2	AI for Business Functions 2.1 AI in Marketing 2.1.1 Customer Segmentation 2.1.2 Recommendation Systems 2.1.3 Personalization 2.2 AI in Finance 2.2.1 Fraud Detection 2.2.2 Credit Scoring 2.2.3 Algorithmic Trading 2.3 AI in Human Resource Management 2.3.1 AI Recruitment 2.3.2 Employee Analytics 2.3.3 Performance Management 2.4 AI in Operations and Supply Chain 2.4.1 Demand Forecasting 2.4.2 Inventory Optimization 2.4.3 Predictive Maintenance	4 Hrs
Unit 3	Machine Learning for Business Analytics 3.1 Fundamentals of Machine Learning 3.1.1 Types of Machine Learning 3.1.2 Supervised Learning 3.1.3 Unsupervised Learning 3.2 Business Data Analytics 3.2.1 Predictive Analytics 3.2.2 Prescriptive Analytics 3.2.3 Customer Analytics 3.3 AI Models 3.3.1 Classification 3.3.2 Regression 3.3.3 Clustering 3.4 AI-enabled Decision Making 3.4.1 Business Forecasting 3.4.2 Risk Analysis 3.4.3 Decision Intelligence	4 Hrs
Unit 4	Generative AI and Intelligent Automation 4.1 Generative AI 4.1.1 Concept and Evolution 4.1.2 Large Language Models	4 Hrs

	4.1.3 Prompt Engineering Fundamentals 4.2 Business Applications of Generative AI 4.2.1 Marketing Content Generation 4.2.2 Report Writing 4.2.3 Business Communication 4.3 Intelligent Automation 4.3.1 Robotic Process Automation (RPA) 4.3.2 AI Chatbots 4.3.3 Intelligent Virtual Assistants 4.4 AI Productivity Tools 4.4.1 Microsoft Copilot 4.4.2 ChatGPT, Gemini and other AI Tools. 4.4.3 AI-powered Business Productivity	
Unit 5	AI Governance, Ethics and Risk 5.1 Responsible AI 5.1.1 Explainable AI 5.1.2 Fairness and Bias 5.1.3 Transparency 5.2 AI Ethics 5.2.1 Privacy 5.2.2 Data Protection 5.2.3 Intellectual Property 5.3 AI Governance 5.3.1 AI Policies 5.3.2 Regulatory Frameworks 5.3.3 AI Risk Management 5.4 AI Security 5.4.1 Cybersecurity 5.4.2 AI Threats 5.4.3 Responsible AI Adoption	4 Hrs
Unit 6	Emerging Trends in AI for Business 6.1 Future of AI 6.1.1 Agentic AI 6.1.2 Autonomous AI Systems 6.1.3 Human-AI Collaboration 6.2 Industry 5.0 6.2.1 AI and Industry 5.0 6.2.2 Smart Enterprises 6.2.3 Intelligent Decision Systems 6.3 AI and Sustainable Business 6.3.1 AI for ESG 6.3.2 Green AI 6.3.3 Smart Cities and Digital Governance 6.4 Emerging Business Trends 6.4.1 AI in Entrepreneurship 6.4.2 AI in Business Innovation 6.4.3 Future Skills for Managers	4 Hrs

Sr. No.	Textbooks
1.	Doug Rose, Artificial Intelligence for Business, 2nd Edition, Pearson Education, 2022.
2.	Ramesh Sharda, Dursun Delen Efraim Turban, Business Intelligence, Analytics, Data Science, and AI: A Managerial Approach, Pearson Education.

Sr. No.	Reference Books
1.	Pratyush Banerjee, Supriti Mishra Shivashankar Chari, Machine Learning for Business Applications, McGraw Hill Education (India), 2025
2.	Stuart Russell Peter Norvig, Artificial Intelligence: A Modern Approach, 4th Indian Edition, Pearson Education India.

Sr. No.	Web Resources
1.	Artificial Intelligence, NPTEL, https://nptel.ac.in/courses
2.	Artificial Intelligence and Business Analytics, SWAYAM, https://swayam.gov.in
3.	IBM Skills Build – Artificial Intelligence, https://skillsbuild.org

Course Title: In-Plant Training		
Course Code: PB253601		Course Category: EL
Teaching Scheme	Examination Scheme	
Lectures: Nil	CA 1	20
Tutorial: Nil	CA 2	20
Practical: 8 hrs/week	MSE	NIL
Credits:04	ESE	60
Semester: Second Year (Semester III)		
Course prerequisite: Completion of MBA Semester I, II, and III and basic understanding of all functional areas of management.		
Course Description: The Internship Project in Semester IV is a comprehensive industry-oriented project that provides students with in-depth exposure to organizational functioning. The course enables students to apply management concepts, tools, and techniques to analyze and solve real-world business problems through structured and supervised project work.		
Course Objectives: 1. To provide in-depth exposure to industry and organizational practices. 2. To integrate knowledge from all functional areas of management. 3. To develop analytical, research, and decision-making skills. 4. To enhance professional competence, ethics, and managerial skills.		

Course Outcomes:		
COs	After completion of the course : Student should be able to	Bloom's Level
CO1	Understand organizational structure, culture, and business operations in depth.	Understand (Level 2)
CO2	Apply management concepts to real business problems using data-based analysis.	Apply (Level3)
CO3	Analyze functional integration across departments	Analyze (Level 4)
CO4	Evaluate the comprehensive project report and demonstrate professional presentation skills.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	3	2	2
CO2	3	3	2	2	2	3	3	2
CO3	3	3	2	3	3	3	2	3
CO4	3	2	3	3	3	2	2	3

Assessment	
CA-1	Review 1
MSE	Nil
CA-2	Review 2
ESE	Viva Voce

Course Contents		
Chapter1	Organization and Industry Analysis Profile of the organization 1.2 Nature of business and industry overview 1.3 Vision, mission, values, and objectives 1.4 Organizational structure and governance 1.5 Products / services and value proposition 1.6 Market position, competitors, and industry trends	16 Hrs.
Chapter 2	Department-wise Functional Understanding - 1 2.1 Human Resource Management 2.1.1 Recruitment and selection Procedure 2.1.2 Training and development (Need identification) 2.1.3 Performance appraisal (Types) 2.1.4 Compensation and benefits 2.1.5 Employee motivation and engagement (Tools) 2.1.6 Basic labour compliance (How) 2.2 Marketing Management 2.2.1 Market segmentation and targeting (Product Specific) 2.2.2 Marketing mix (Current) 2.2.3 Sales and distribution (Channels and Why?) 2.2.4 Branding and promotion (Tools and current status) 2.2.5 Customer relationship management (Tools)	16 Hrs.
Chapter 3	Department-wise Functional Understanding - 2 3.1 Financial Management 3.1.1 Financial statements 3.1.2 Budgeting and financial planning 3.1.3 Cost control (Methods) 3.1.4 Working capital management 3.1.5 Cash flow management 3.2 Operations and Supply Chain Management 3.2.1 Operations / service process 3.2.2 Quality management (Tools) 3.2.3 Inventory management (Techniques)	16 Hrs.
Chapter 4	Internship Role and Work Exposure 4.1 Internship duration (Minimum 45 days) 4.2 Role assigned and responsibilities 4.3 Tools, systems, and processes use 4.4 Practical learning from daily work activities	16 Hrs.
Chapter 5	Project Identification 5.1 Identification of project topic 5.2 Objectives and scope of the project 5.3 Presentation of findings 5.4 Discussion of results 5.5 Managerial implications of findings	16 Hrs.
Chapter 6	Conclusions, Recommendations and Learning Reflection 6.1 Summary of project outcomes 6.2 Conclusions drawn from the study 6.3 Recommendations and suggestions to the organization 6.4 Limitations of the project 6.5 Scope for future work 6.6 Personal learning reflection and skill development	16 Hrs.

Sr. No.	Textbooks
1.	Kothari, C. R., and Garg, G. (2024) Research Methodology: Methods and Techniques (5th ed.). New Age International Publisher
2.	Gupta, S. P. (2023) Statistical Methods - Sultan Chand and Sons
	Reference Books
1.	Creswell, J. W., & Creswell, J. D. (2023). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (7th ed.). Sage Publications.
2.	Bryman, A., & Bell, E. (2024) Business Research Methods (6th ed.) Oxford University Press.

Course Title: Seminar Course Code: PB254401		Course Category: VSE
Teaching Scheme	Examination Scheme	
Practical : 6 hrs/week	CA 1	20 Marks
Tutorial: Nil	MSE	Nil
Credits:03	CA 2	20 Marks
Semester: Second Year (Semester IV)	ESE	60 Marks
Course prerequisite: Students should have basic knowledge of research methodology, report writing and presentation skills, along with preliminary understanding of their internship/project area.		
Course Description: The Seminar provides a structured platform for students to review, organize and communicate the learning and findings emerging from their internship/project work. It develops skills in academic review, interpretation of project outcomes, professional presentation and scholarly discussion.		
Course Objectives: 1. To familiarize students with academic review and documentation of internship/project work. 2. To strengthen skills in organizing, interpreting and communicating project-related information. 3. To develop professional presentation and discussion skills. 4. To encourage critical reflection on internship/project experiences and outcomes.		

Course Outcomes:		
COs	After completion of the course student will be able to	Bloom's Level
CO1	Recall relevant concepts, information and findings from their internship/project work.	Remember (Level 1)
CO2	Explain the background, objectives, methodology and major findings of their internship/project.	Understand (Level 2)
CO3	Demonstrate effective academic and professional presentation of internship/project outcomes.	Apply (Level3)
CO4	Examine project findings, experiences, challenges and implications through academic discussion and viva voce.	Analyze (Level 4)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PS01	PS02	PS03
CO1	2	1	1	2	1	2	1	1
CO2	2	2	1	3	2	2	1	2
CO3	2	2	2	3	3	2	2	3
CO4	2	3	2	3	3	2	2	3

Assessment	
CA-1	Review
CA-2	Presentation
MSE	Nil
ESE	Seminar Report /Viva Voce

Course Description	
Chapter 1	Review 1: Introduction and Progress of Internship/Project This chapter provides students with an initial academic platform to introduce their proposed internship/project work. Students will present the background of the organization or study, identify the broad area of work, explain the problem or topic selected, and state the preliminary objectives and scope. They will also discuss the information gathered so far, relevant secondary sources or basic literature reviewed, and the approach proposed for carrying out the work. The review will focus on the student's understanding of the selected topic, clarity of objectives, initial progress, and readiness for further work. Faculty members will provide suggestions and feedback to help students refine and proceed with their internship/project in a systematic manner. Key areas: Introduction and background; problem/topic identification; objectives and scope; preliminary literature/secondary information; proposed methodology/approach; initial progress; faculty feedback.
Chapter 2	PPT Presentation on Internship/Project This chapter focuses on developing basic academic and professional presentation skills through a PowerPoint presentation based on the student's internship/project. Students will prepare and deliver a structured PPT covering the background, organization or study area, objectives, proposed methodology, work completed or preliminary observations, and expected outcomes. The presentation will help students communicate their ideas clearly, respond to basic questions, and incorporate suggestions received from faculty members. The emphasis will be on clarity, organization, confidence and effective communication, rather than on presenting a fully completed project. Key areas: PPT preparation; organization of content; presentation of objectives and proposed work; preliminary observations/findings; expected outcomes; presentation skills; question-answer session; feedback and improvement.
Chapter 3	Seminar Report This chapter focuses on the preparation and submission of a structured seminar report based on the student's internship/project area. The report will document the background of the organization or study, selected topic, objectives, preliminary work undertaken, observations, learning gained and future scope. Students will organize the available information in an appropriate academic format and incorporate feedback received during the Review 1 and PPT Presentation stages. Key areas: • Structure and Preparation of Seminar Report • Documentation of Internship/Project Background and Objectives • Presentation of Preliminary Work, Observations and Learning • Conclusions, Future Scope and Final Submission

Sr. No.	Textbooks
1.	Kothari, C. R., and Garg, G. (2024) Research Methodology: Methods and Techniques (5th ed.). New Age International Publisher
2.	Gupta, S. P. (2023) Statistical Methods - Sultan Chand and Sons
Reference Books	
1.	Creswell, J. W., and Creswell, J. D. (2023). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (7th ed.). Sage Publications.
2.	Bryman, A., and Bell, E. (2024) Business Research Methods (6th ed.) Oxford University Press.

Course Title: Internship		
Course Code: PB254601		Course Category: EL
Teaching Scheme	Examination Scheme	
Lectures: Nil	CA-1	50 Marks
Tutorial: Nil	CA-2	50 Marks
Practical: 42 hrs/week	MSE	Nil
Credits: 21	ESE	100 Marks
Semester: Second Year (Semester IV)		
Course prerequisite: Understanding of Research Methodology and Basic Statistics, with the strong domain knowledge of specialization.		
Course Description: This course enables students to undertake an in-depth research project on a relevant management topic. Students identify a problem, review literature, collect and analyze data, and present findings systematically. The course emphasizes research ethics, academic writing, and practical application of concepts. It culminates in the submission and viva-voce of a dissertation report.		
Course Objectives: 1. To develop students' ability to conduct independent research. 2. To apply management concepts to real business problems. 3. To enhance analytical, writing, and presentation skills. 4. To promote ethical and systematic research practices.		

Course Outcomes:		
COs	After completion of the course student will be able to	Bloom's Level
CO1	Recall the fundamental concepts of research, types of studies, and the standard structure of a dissertation	Remember (Level 1)
CO2	Explain the purpose and process of literature review, research gaps, and the role of a conceptual framework in a study.	Understand (Level 2)
CO3	Determine appropriate sampling designs, data-collection methods, and questionnaire design techniques to a chosen research problem.	Apply (Level 3)
CO4	Analyze collected data using descriptive and basic inferential statistical techniques to address research objectives and hypotheses.	Analyze (Level 4)
CO5	Evaluate the overall quality of the dissertation by assessing the discussion of findings, limitations, ethical compliance, and adherence to academic writing and referencing standards.	Evaluate (Level 5)

CO-PO Mapping								
COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	1	-	1	-	2	1	1
CO2	2	2	-	1	-	3	2	1
CO3	2	3	-	1	-	2	3	1
CO4	2	3	-	1	-	3	3	1
CO5	2	2	1	3	1	2	2	3

Assessment	
CA-1	Review 1
MSE	NIL
CA-2	Review 2
ESE	Project Report/Viva Voce

Course Contents		
Unit 1	Research Design and Proposal Development 1.1 Introduction to Dissertation 1.2 Selection of Research Topic 1.3 Problem Identification 1.4 Research Objectives and Hypothesis 1.5 Scope and Significance of Study 1.6 Research Design	72 Hrs.
Unit 2	Research Proposal and Literature Review 2.1 Preparation of Research Proposal: 2.2 Sources of Literature 2.3 Review Techniques 2.4 Research Gap Identification 2.5 Conceptual Framework	96 Hrs.
Unit 3	Methodology – Sampling, Data Collection and Instruments 3.1 Sampling Design 3.2 Data Collection Methods 3.3 Questionnaire Design 3.4 Pilot Study	108 Hrs.
Unit 4	Data Processing and Analysis 4.1 Data Coding and Tabulation 4.2 Descriptive Statistics 4.3 Inferential Analysis (if applicable) 4.4 Use of Software (Excel/SPSS) 4.5 Interpretation of Results	120 Hrs.
Unit 5	Discussion, Conclusions and Recommendations 5.1 Discussion of Findings 5.2 Limitations of Study 5.3 Conclusions and Recommendations 5.4 Managerial/Practical Implications	60 Hrs.
Unit 6	Report Writing, Ethics and Viva 6.1 Dissertation Structure 6.2 Referencing Styles (APA/MLA) 6.3 Plagiarism and Research Ethics 6.4 Final Submission 6.5 Viva-Voce / Presentation	48 Hrs.

Sr. No.	Textbooks
1.	C. R. Kothari, Research Methodology: Methods and Techniques, New Age International
2.	Donald R. Cooper and Pamela Schindler, Business Research Methods, McGraw-Hill
Reference Books	
1.	https://www.youtube.com/watch?v=oUiKwFNzKDM
2.	https://www.youtube.com/watch?v=TEqYnV6KWfY
3.	https://www.youtube.com/watch?v=j9A3ceOBihM