



Program Ordinances (Examination Ordinances) *same as earlier.*

University Vision

Our aim is to be an eminent university that shapes the future by nurturing knowledge and empowering minds.

University Mission

To provide quality higher education through a multidisciplinary approach, promoting research and innovation in all spheres of its activities, and to serve society.

School of Management and Liberal Arts

Vision

To be a distinguished centre of academic excellence that fosters transformative learning in management and liberal arts and contribute meaningfully to society through multidisciplinary education, research, and innovation.

Mission

The School of Management and Liberal Arts is committed to:

- M1:** Providing quality education that blends domain expertise with multidisciplinary perspectives, enabling holistic student development across undergraduate, postgraduate, and doctoral levels
- M2:** Advancing rigorous scholarship and original research through inquiry-based learning and application of knowledge that meets global and societal needs
- M3:** Equipping students with professional competencies, ethical sensibilities, and technological knowledge to navigate dynamic work environments and civic contexts
- M4:** Encouraging cultural awareness, critical thinking, and leadership across diverse socio-economic and global settings

Master of Business Administration (MBA)

(Two-Year, Semester Based, Full Time Program)

Program Educational Objectives (PEOs)

The MBA program prepares graduates to:

- PEO1** **Apply** strategic thinking and integrated functional expertise to **solve** complex managerial challenges across industries.
- PEO2** **Demonstrate** analytical reasoning, research aptitude, and data-driven decision-making for organizational effectiveness and continuous improvement.
- PEO3** **Exhibit** professional communication, interpersonal effectiveness, and collaboration skills for success in multicultural business environments.
- PEO4** **Practice** ethical responsibility and socially conscious leadership by **promoting** sustainability, corporate governance, and inclusive impact.
- PEO5** **Drive** innovation and venture creation by **applying** entrepreneurial and intrapreneurial mindsets to emerging business contexts.

Program Outcomes (POs)

Upon completion of the MBA program, graduates will be able to:

- PO1** **Apply** critical and analytical thinking to **evaluate** and **resolve** complex business problems.
- PO2** **Demonstrate** domain expertise across core functional areas such as finance, marketing, HR, operations, and analytics.
- PO3** **Integrate** cross-functional knowledge to **develop** strategic and sustainable business solutions.
- PO4** **Exhibit** effective leadership, **collaborate** in teams, and **build** organizational capabilities.
- PO5** **Use** qualitative and quantitative tools to **make** data-informed decisions and **analyze** performance.
- PO6** **Practice** ethical reasoning and **apply** responsible business management grounded in legal frameworks.
- PO7** **Leverage** digital technologies, business intelligence, and AI tools to **optimize** business innovation.
- PO8** **Communicate** clearly and **present** persuasively in written and oral formats.
- PO9** **Apply** creative and entrepreneurial thinking to **design** innovative solutions and venture models.
- PO10** **Demonstrate** global awareness and the ability to **operate** effectively in cross-cultural business environments.

Master of Business Administration (MBA)
(Two-Year, Semester Based, Full Time Program)

ACADEMIC SESSION 2025-26

Program Structure - Distribution of Credits

Category	Sem I	Sem II	Sem III	Sem IV	TOTAL	Course
Core Courses	18	4	3	8	33	11
Functional Area Courses	0	12	3	0	15	5
Specialization Courses	0	0	12	18	30	10
Skill Enhancement Courses	3	3	2	1	9	7
AEC	3	0	0	0	3	1
MDC	3	4	2	0	9	3
VAC	0	3	3	2	8	4
Internship & Project-Based Courses	0	0	6	4	10	2
TOTAL	27	26	31	33	117	

Master of Business Administration (MBA)
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ACADEMIC SESSION 2025-26

PROGRAM CURRICULUM
Semester-I

Sr. No.	Course Code	Course Name	Contact Hours			Credits	Category
			L	T	P		
1	MBA 501	Business Mathematics	3	0	0	3	MDC
2	MBA 502	Macroeconomic Environment	3	0	0	3	Core
3	MBA 503	Managerial Accounting	3	0	0	3	Core
4	MBA 504	Organizational Behaviour	3	0	0	3	Core
5	MBA 505	Managerial Economics	3	0	0	3	Core
6	MBA 506	Legal Aspects of Business	3	0	0	3	Core
7	MBA 507	Management Concepts & Principles	3	0	0	3	Core
8	MBA 508	English Language	3	0	0	3	AEC
9	MBA 509P	MS-Office - I	0	0	4	2	SEC
10	MBA 510P	Business News & Industry Analysis	0	0	2	1	SEC
		Total Credits	24	0	6	27	
		Total Contact Hours	30				

Semester-II

Sr. No.	Course Code	Course Name	Contact Hours			Credits	Category
			L	T	P		
1	MBA 511	Quantitative Techniques & Operations Research	4	0	0	4	Core
2	MBA 512	Production & Operations Management	3	0	0	3	Functional Area
3	MBA 513	Marketing Management	3	0	0	3	Functional Area
4	MBA 514	Financial Management	3	0	0	3	Functional Area
5	MBA 515	Human Resource Management	3	0	0	3	Functional Area
6	MBA 516	Business Research Methods	4	0	0	4	MDC

7	MBA 517	Business Analytics -I	2	0	2	3	VAC
8	MBA 518P	Soft Skills - I	0	0	2	1	SEC
9	MBA 519P	MS-Office - II	0	0	4	2	SEC
		Total Credits	22	0	8	26	
		Total Contact Hours	30				

Semester-III

Sr. No.	Course Code	Course Name	Contact Hours			Credits	Category
			L	T	P		
1	MBA 601	Project Management	3	0	0	3	Core
2	MBA 602	International Business	3	0	0	3	Functional Area
3	MBA 603	Management Information System	2	0	0	2	MDC
4	MBA 604 P	Soft Skills - II	0	0	2	1	SEC
5	MBA 605 P	Business Analytics -II	0	0	4	2	VAC
6	MBA 606 P	Creative Problem-Solving & Design Thinking	0	0	2	1	SEC
7	MBA 607 P	Business Intelligence using Power BI	0	0	2	1	VAC
8	MBA 608	Student Internship Program (SIP) & Viva-Voce	0	0	0	6	Internship
9		Specialization - I Core - I *	3	0	0	3	Specialization
10		Specialization - I Elective - I*	3	0	0	3	Specialization
11		Specialization - II Core - I *	3	0	0	3	Specialization
12		Specialization - II Elective - I*	3	0	0	3	Specialization
		Total Credits	20	0	10	31	
		Total Contact Hours	30				

Semester-IV

Sr. No	Course Code	Course Name	Contact Hours			Credits	Category
			L	T	P		
1	MBA 609	Strategic Management	3	0	0	3	Core
2	MBA 610	Business Ethics & Corporate Social Responsibility	3	0	0	3	Core
3	MBA 611	Spirit of Entrepreneurship	2	0	0	2	Core
4	MBA 612 P	Soft Skills - III	0	0	2	1	SEC
5	MBA 613	AI Applications in Business	2	0	0	2	VAC
6		Specialization - I Core - II *	3	0	0	3	Specialization
7		Specialization - I Elective - II*	3	0	0	3	Specialization
8		Specialization - II Core - II *	3	0	0	3	Specialization
9		Specialization - II Elective - II*	3	0	0	3	Specialization
10		Specialization - I Core - III *	3	0	0	3	Specialization
11		Specialization - II Core - III *	3	0	0	3	Specialization
12	MBA 614	Deep Immersion Project Report & Viva-Voce	0	0	0	4	Project Report
		Total Credits	28	0	2	33	
		Total Contact Hours	30				

*Students can choose any two specializations out of 10 offered in the MBA Program

SPECIALISATION AREAS
MBA PROGRAM OFFERS A DUAL SPECIALISATION:
(STUDENTS CAN CHOOSE TWO SPECIALISATION AREAS FROM THE LIST BELOW)

SPECIALISATIONS OFFERED
1. MARKETING MANAGEMENT (MRM)
2. HUMAN RESOURCE MANAGEMENT (HRM)
3. RETAIL MANAGEMENT (RTM)
4. FINANCIAL MANAGEMENT (FIN)
5. INTERNATIONAL BUSINESS MANAGEMENT (IBM)
6. OPERATIONS MANAGEMENT (ORM)
7. BUSINESS ANALYTICS (BAN)
8. LOGISTIC AND SUPPLY CHAIN MANAGEMENT (LSC)
9. ENTREPRENEURSHIP (ENT)
10. INFORMATION TECHNOLOGY (IT)

LIST OF COURSES UNDER DIFFERENT SPECIALIZATIONS

DSE – I – MARKETING MANAGEMENT (MRM)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	MRM 01 C	Product and Brand Management	3	0	0	3
2	MRM 02 C	Consumer Behaviour	3	0	0	3
3	MRM 03 C	Marketing of Services	3	0	0	3
4	MRM 04 E	Digital Marketing	3	0	0	3
5	MRM 05 E	Sales and Distribution Management	3	0	0	3
6	MRM 06 E	Integrated Marketing Communication	3	0	0	3
7	MRM 07 E	B2B Marketing	3	0	0	3
8	MRM 08 E	International Marketing	3	0	0	3

DSE – II – HUMAN RESOURCE MANAGEMENT (HRM)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	HRM 01 C	Performance Management and Appraisal	3	0	0	3
2	HRM 02 C	Industrial Relations and Labor Law	3	0	0	3
3	HRM 03 C	Emotional Intelligence and Managerial Effectiveness	3	0	0	3
4	HRM 04 E	Principles of Leadership	3	0	0	3
5	HRM 05 E	Human Resource Planning and Development	3	0	0	3
6	HRM 06 E	HR Analytics	3	0	0	3
7	HRM 07 E	Talent Management	3	0	0	3

DSE – III – RETAIL MANAGEMENT (RTM)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	RTM 01 C	Retail Store Management	3	0	0	3
2	RTM 02 C	Retail Sales and Category Management	3	0	0	3
3	RTM 03 C	E-Retailing	3	0	0	3
4	RTM 04 E	Retail Branding and CRM	3	0	0	3
5	RTM 05 E	Retail Supply Chain Management	3	0	0	3
6	RTM 06 E	Space Planning and Mall Management	3	0	0	3
7	RTM 07 E	International Retail Management	3	0	0	3
8	RTM 08 E	Mall Dynamics and Management	3	0	0	3
9	RTM 09 E	Retail Marketing	3	0	0	3

DSE – IV – FINANCIAL MANAGEMENT (FIN)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	FIN 01 C	Investment Management	3	0	0	3
2	FIN 02 C	International Financial Management	3	0	0	3
3	FIN 03 C	Behavioral Finance	3	0	0	3
4	FIN 04 E	Personal Tax Planning & Tax Management	3	0	0	3
5	FIN 05 E	ESG Investing	3	0	0	3
6	FIN 06 E	FinTech	3	0	0	3

7	FIN 07 E	Equity Derivative	3	0	0	3
8	FIN 08 E	Decentralized Finance	3	0	0	3
9	FIN 09 E	Financial Analytics	3	0	0	3

DSE – V – INTERNATIONAL BUSINESS MANAGEMENT (IBM)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	IBM 01 C	Intercultural Management	3	0	0	3
2	IBM 02 C	International Trade & Export Management	3	0	0	3
3	IBM 03 C	International Marketing	3	0	0	3
4	IBM 04 E	Foreign Exchange Management	3	0	0	3
5	IBM 05 E	International Human Resource Management	3	0	0	3
6	IBM 06 E	International Trade Law	3	0	0	3
7	IBM 07 E	International Financial Management	3	0	0	3

DSE – VI – OPERATIONS MANAGEMENT (ORM)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	ORM 01 C	Supply Chain Management	3	0	0	3
2	ORM 02 C	Service Operations Management	3	0	0	3
3	ORM 03 C	Lean Manufacturing	3	0	0	3
4	ORM 04 E	Total Quality Management	3	0	0	3
5	ORM 05 E	Operations Strategy	3	0	0	3

6	ORM 06 E	Strategic Sourcing and Procurement	3	0	0	3
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DSE – VII – BUSINESS ANALYTICS (BAN)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	BAN 01 C	Data Analytics with R	3	0	0	3
2	BAN 02 C	Business Intelligence and Data Warehousing	3	0	0	3
3	BAN 03 C	Data Mining and Machine Learning	3	0	0	3
4	BAN 04 E	Business Intelligence concepts, tools, and applications	3	0	0	3
5	BAN 05 E	Financial Analytics	3	0	0	3
6	BAN 06 E	Big Data Analytics	3	0	0	3
7	BAN 07 E	Marketing Analytics	3	0	0	3
8	BAN 08 E	HR Analytics	3	0	0	3

DSE – VIII – LOGISTIC AND SUPPLY CHAIN MANAGEMENT (LSC)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	LSC 01 C	Supply Chain Management	3	0	0	3
2	LSC 02 C	Logistics Management	3	0	0	3
3	LSC 03 C	Modelling for Decision Making in Supply Chain	3	0	0	3
4	LSC 04 E	Global Supply Chain & Logistics	3	0	0	3
5	LSC 05 E	Shipping & Warehousing Management	3	0	0	3
6	LSC 06 E	Logistics and Supply Chain Information System	3	0	0	3

DSE – IX – ENTREPRENEURSHIP (ENT)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	ENT 01 C	Entrepreneurship Development	3	0	0	3
2	ENT 02 C	Family Business Management	3	0	0	3
3	ENT 03 C	Feasibility Study & Business Plan	3	0	0	3
4	ENT 04 E	Start-up Ecosystem in India	3	0	0	3
5	ENT 05 E	Entrepreneurial Marketing	3	0	0	3
6	ENT 06 E	Entrepreneurial Finance	3	0	0	3

DSE – X – INFORMATION TECHNOLOGY (IT)						
S. No.	Course Code	Course Name	Periods			Credits
			L	T	P	
1	IT 01 C	Database Management System	3	0	0	3
2	IT 02 C	Digital Business Management	3	0	0	3
3	IT 03 C	Business Intelligence and Applications	3	0	0	3
4	IT 04 E	Web Technologies	3	0	0	3
5	IT 05 E	Cyber Security and Risk Management	3	0	0	3
6	IT 06 E	Knowledge Management and Information System	3	0	0	3
7	IT 07 E	Data Mining and Data Warehousing	3	0	0	3
8	IT 08 E	Python for Managers	3	0	0	3

SEMESTER – I

Course: BUSINESS MATHEMATICS			Semester: I
Course Code: MBA 501	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with Basic Mathematics and its Applications in Business		
COURSE OUTCOMES	Upon completion of the course, students should be able to: <ol style="list-style-type: none"> 1. Understand the important role math plays in all facets of the business world. 2. Apply formulas to solve problems involving simple and compound interest, present value, future value and discounts. 3. Understand and calculate annuities, perpetuities and capitalized cost. 4. Understand matrices, determinants, calculus and their applications to solve business problems. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Financial Mathematics: Rates of Interest: Nominal, Effective and their Inter-Relationships in different compounding situations, Compounding and Discounting of a sum using different types of Rates, Types of Annuities: Ordinary, Due, Deferred, Continuous, and Perpetual, and their Future and Present Values using different types of rates of interest.	11
	2.	Matrices and Determinants: Introduction of matrices , properties of matrices, Algebra of Matrices, Inverse of a Matrix, Solution of System of Linear Equations (having Unique solution and involving not more than three variables) using Matrices, Application of matrices in business problems.	12
	3.	Calculus I: Mathematical Functions and their types: Linear, Quadratic, Polynomial, Concept and Rules of Differentiation, Concept of Derivative as Rate of Change, Maxima and Minima involving Second Order Derivatives	12
	4.	Calculus II: Integration, Standard Forms, Methods of Integration: By substitution, by parts, and by use of Partial Fractions, Basic idea of Definite Integration. Business applications of integration.	10
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Aggarwal, B. M. <i>Business Mathematics and statistics</i>. Ane Books Pvt Ltd. 2. Mizrahi and Sullivan, J.; <i>Mathematics for Business Finance and Economics</i>; Wiley 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Dowling, E.T.; <i>Applied Mathematics</i>; McGraw Hill 2. Budnick, P.; <i>Theory and Problems of Mathematics of Finance</i>; McGraw Hill 3. Ayres, F. Jr.; <i>Mathematics for Economics and Finance</i>; McGraw Hill 		

Course: MACROECONOMIC ENVIRONMENT			Semester: I
Course Code: MBA 502	L T P	3 0 0	Credits: 3

OBJECTIVE	This course introduces the students to formal Modelling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.		
COURSE OUTCOMES	Upon completion of the course, students should be able to: <ol style="list-style-type: none"> 1. Understand macroeconomics and national income accounting concepts. Evaluate economic variables used in economic context. 2. Apply the concept of the investment multiplier in economic analysis. 3. Understand the key concepts of the money and banking system, including the roles of different banks, credit creation, central bank policies, and inflation management. 4. Assess the effects of money supply and demand on the economy and understand the IS-LM curve's role in economic analysis. 5. Evaluate the nature of unemployment, government measures to reduce it, and the Phillips Curve's relevance in economic analysis. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Meaning, Nature and Scope of Macroeconomics, Overview of School of Macroeconomic Thoughts: - Classical, Keynesian and Monetarist. National income accounting (GDP, GNP, & NNP) and problems faced in national income accounting. Real vs Nominal GDP.	08
	2.	Keynesian Theory income & investment; Investment, Types of investment, Determinants of Investment, Investment Multiplier, Calculation of Multiplier; Investment theories.	08
	3.	Money & Banking System: Meaning and objective, types of Banks, functions and credit creation of bank, Central Bank & its monetary policy, inflation – meaning, types and role of central controlling inflation.	11
	4.	Money: Evaluation of Money, Functions & Types of Money, Money Supply and Demand, Measurement of Money (M_0 , M_1 , M_2 , M_3 , M_4), Aggregate Demand & Aggregate Supply, Derivation of aggregate demand and aggregate supply, Interaction of aggregate demand and aggregate supply, ISLM Curve.	07
	5.	Unemployment: Meaning, Nature of unemployment, types of unemployment, measurement of unemployment of India, Major Government Program to eradicate unemployment, Philip Curve.	11
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill. 2. N. Gregory Mankiw. Macroeconomics, Worth Publishers. 3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc. 4. Richard T. Froyen, Macroeconomics, Pearson Education Asia. 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Steven M. Sheffrin, Rational Expectations, Cambridge University Press. 2. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc. 3. Errol D'Souza, Macroeconomics, Pearson Education. 		

	4. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, International Economics, Pearson Education Asia
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Course: MANAGERIAL ACCOUNTING			Semester: I
Course Code: MBA 503	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with financial accounting, cost accounting and management accounting information which are useful for planning, controlling and decision making in business. This also focuses on providing skills on contemporary accounting techniques and issues.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Learn accounting process and preparation of major financial statements like Income statement and Balance sheet. 2. Understand concept and needs of management accounting namely in various corporate decisions, and cost control. 3. Understanding on tools and process of financial statement analysis for various managerial decision making. 4. Concept on budgets for business planning and controlling. 5. Concept of cost and variance analysis for controlling allocated costs. 		
COURSE DETAILS	Module No.	Topic	Hours
	1	Introduction to Financial Accounting and Accounting Process: Introduction to Financial Accounting, importance, objectives and principles, Accounting Concepts and conventions, Ind. AS., Journal and Subsidiary books, ledger, Trial Balance, Classification of Capital and Revenue expenses, Final Accounts, Revenue Recognition, Asset and Liability recognition.	14
	2	Depreciation: Depreciation of fixed assets and method. Straight Line and Written Down Value (WDV) methods	06
	3	Introduction to Management Accounting: Accounting for management, Management accounting and cost accounting as internal control tools, difference between Management Accounting and Cost Accounting. Types of cost.	10
	4	Marginal Costing and Budgeting: Cost volume profit analysis, P/V ratio analysis and its implications, Concept and uses of contribution, Break-even point. Concept of budget: budgeting and budgetary control, Types of budgets, static and flexible budgeting, preparation of cash budget, advantages and limitations of budgetary control.	10
	5	Standard Costing and Responsibility Accounting: Concept, applications of Standard Costing, establishing various cost standards, calculation of Material variance, Labor variance and Overhead variance and its applications and implications. Concept and various approaches to Responsibility accounting, Concept of investment center, Cost center, Profit center and Responsibility center, Transfer pricing: multinational transfer pricing, market-based transfer pricing and cost-based transfer pricing.	05
		Total Hours	45
TEXTBOOK	<ol style="list-style-type: none"> 1. Maheshwari, S.K., <i>Financial Accounting for Managers</i>; Vikas Publishing House 2. Bhattacharya, Ashish K; <i>Financial Accounting for Business Managers</i>; PHI 3. Bhattacharyya, S. K. and Dearden, J.; <i>Accounting for Management</i>; Vikas Publishing House 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Gupta, A. <i>Financial Accounting for Management</i>; Pearson Education India 2. Arora, R. <i>Financial Accounting-Fundamental Analysis and Reporting</i>; Willey Publication. 3. Anthony, R. N., David, F. Hawkins and Kenneth, A. Merchant; <i>Accounting: Text and Cases</i>; McGraw Hill Vij, M.; <i>Management Accounting</i>; Macmillan 		

	<ul style="list-style-type: none">4. Lynch, Richard, M. and Robert, W. Williams; <i>Accounting and Management: Planning and Control</i>; McGraw Hill5. Garrison, R., and Noreen, E.; <i>Managerial Accounting</i>; McGraw Hill
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Course: ORGANIZATIONAL BEHAVIOR			Semester: I
Course Code: MBA 504	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the behavioral aspects of organization, and organizational and individual variants that influence organization's effectiveness.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Define basic organizational behavior principles and analyze how they influence behavior in the workplace. 2. Analyze individual human behavior in the workplace as influenced by personality, values, perceptions, and motivations. 3. Outline the elements of group behavior including group dynamics, communication, leadership, power & politics, and conflict & negotiation. 4. Understand different management styles as it relates to influencing and managing behavior in the organization systems. 5. Analyse individual human behaviour in the workplace as influenced by organizational change and Resistance. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Organizational Behavior: Concept, significance and scope, Contributory disciplines, Levels of studying OB, OB Models.	05
	2.	The Individual: Learning: principles and theories (behaviorism, cognitive theory, social learning theory, constructivism, and humanism), Attitude: concept, components and types, cognitive dissonance, Personality: concept, determinants, dimensions, trait and type theories of personality, Perception: concept, process, perceptual errors, application in management, Motivation: content and process theories.	12
	3.	The Group: Group: definition and classification of group, Stages of group development, Group decision making, Group dynamics, Work team, Leadership: definition, styles and theories of leadership.	06
	4.	Organizational Power and Politics and Conflict Management: Organizational power: concept, sources, tactics, contingency approaches to power, Organizational Politics: definition, determinants, impression management, Organizational conflict: concept, sources, types, classification of conflict: intra-individual and inter-personal, Inter-group, process and resolution of conflict.	11
	5.	The Organization System: Organizational change: nature and forces of change, Resistance to change nature, reasons, overcoming resistance to change, Change process, Organizational development: concept, process and interventions. Organizational culture: concept, functions, creating and sustaining organizational culture.	11
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Robbins, S. P., Judge, Timothy A, Vohra, N.; <i>Organizational Behavior</i>; Pearson Education 2. Luthans, F; <i>Organizational Behavior</i>; McGraw Hill 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Newstorm, W.; <i>Organizational Behavior</i>; McGraw Hill 2. Hersey, P., Kenneth H. B. and Dewey E. J.; <i>Management of Organizational Behavior</i>; Pearson Education 		

Course: MANAGERIAL ECONOMICS			Semester I
Course Code: MBA 505	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the behavioral aspects of organization, and organizational and individual variants that influence organization's effectiveness.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the basic concepts of managerial economics in business decision-making. 2. Analyze the elements involved in theory of Production 3. Comprehend cost and profit related concepts 4. Assess the state of competition between the firms 		
COURSE DETAILS	Module No.	Topic	Hours
	1	Introduction: Nature and scope of managerial economics, Its role and significance in decision-making and forward planning, basic concepts, Positive vs. normative analysis.	05
	2	Consumer Choice and Market Forces: a) Theory of consumer behavior: Consumer preferences, Budget Constraints, Consumer choice, Marginal Utility, Law of Diminishing Marginal Utility, Indifference Curves - Maximization of Utility subject to Budget Constraint, Revealed Preference Theory. b) Demand analysis: Theory of demand – Derivation of Demand Curve, Determinants of demand, Movement Along and Shift in Demand Curve, Market Demand, Network Externalities (Bandwagon and Snob Effects), Elasticity of demand and its measurement (Numerical), Demand Forecasting c) Supply analysis: Supply – Derivation of Supply Curve, Movement Along and Shift in Supply Curve, Market Supply, Determinants of supply.	12
	3	Theory of Production: Function and Cost Analysis, Production Possibility Curve, The Theory of Production–Production function with One Variable Input, Production function with Two Variable Inputs, Returns to Scale. Cost Concepts: Short-run and long-run average cost curves and their analysis, Economies of Scale and Scope.	12
	4	Organization of Firm: a) Profit Maximization and Perfect Competition: Perfectly Competitive Market, MR, MC, and Profit Maximization, Short run equilibrium b) Monopolistic Competition and Oligopoly: Monopolistic Competition, Oligopoly (kinked demand curve model, Cartels) c) Monopoly: Monopoly Power, Sources of Monopoly Power, The Social Costs of Monopoly Power, Short run Equilibrium	16
		Total Hours	45
TEXT BOOK	1. Robert Pindyck, Daniel Rubinfeld and Prem Mehta: “ <i>Microeconomics</i> ” 7th Edition, Pearson Education. 2. Dominick Salvatore & Ravikesh Srivastava: “ <i>Managerial Economics</i> ”, Oxford Higher Education.		
REFERENCE BOOK/ SUGGESTED READING	1. Peterson, W. Crag, Lewis, Cris W. and Jain Sudhir K.: “ <i>Managerial Economics</i> ” Pearson Education. 2. Dean, Joel: “ <i>Managerial Economics</i> ” Pearson Education. 3. Samuelson and Nordhaus: “ <i>Economics</i> ” McGraw-Hill. 4. Sloman, John and Sutcliffe, Mark: “ <i>Economics for Business</i> ” Pearson Education. 5. Gupta, G. S: “ <i>Managerial Economics</i> ” McGraw-Hill.		

Course: LEGAL ASPECTS OF BUSINESS			Semester: I
Course Code: MBA 506	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with basic legal aspects of business encountered in our Managerial Practices.		
COURSE OUTCOMES	Upon completion of the course students should be able to: 1. Understand basic aspects of contracts for making the agreements, contracts and subsequently enter valid business propositions. 2. Differentiate the special contracts and identify their appropriate usage at varied business scenarios. 3. Identify the legitimate rights and obligations under The Sale of Goods Act. 4. Evaluate the provisions under Banking and Company Laws 5. Assess the right and obligations to consumers under Consumer Protection Act, and RTI. 6. Develop skills to initiate entrepreneurial ventures as LLP and One Person Company.		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Indian Contract Act, 1972: Essential of valid contracts, Capacities of parties, Classification of contracts, Quasi contract, Discharge of contracts, Breach of contracts and its remedies, Special contracts: contract of Indemnity and Guarantee, Bailment and Pledge. Contract of Agency – Kinds of Agencies, Duties and Rights of Agents & Principal, Termination of Agency, Power of Attorney.	12
	2.	The Sale of Goods Act, 1930: Essential elements of Contract of Sale, classification of Goods, Transfer of Property, Conditions and warranties, Doctrine of caveat emptor, Unpaid seller – Rights and remedies.	04
	3.	The Companies Act 2013: Essential characteristics, Kinds of companies, Formation of a company, Company Management, Company Meetings & Dissolution of Company under the company act 2013 & insolvency & bankruptcy code 2016. Scope & Objective of Limited Liability Partnership act 2008, Relevant provisions.	06
	4.	Banking and Insurance Laws: Control and Regulation of Banking & Insurance sector in India, some important sections of RBI Act 1934, Banking regulation Act 1949 and The Insurance Regulatory and Development Authority Act, 1999, Negotiable Instruments Act, 1881 – Types of negotiable instruments and its characteristics, Negotiation, Presentment, Endorsement, Crossing of cheque & Material alteration, Dishonour of Negotiable instrument.	05
	5.	Consumer Protection Act, 2019: Meaning of Consumer, Complaint & complainant. Rights of consumer, Product liability and Penal consequences, Unfair and Restrictive Trade Practices, Consumer Protection Councils, Central Consumer Protection Authority, Consumer Disputes Redressal Commissions, Mediation & Appellant Authority, offenses and penalties.	10
	6.	Right to Information Act, 2005: Salient features and Objective of the Act, Terms – Information, Right, Record, Public Authority, Obligations of Public Authority, How to request information, Functions of PIO, Appeals & Penalties.	08
		Total Hours	45
TEXT BOOK	1. Kuchhal, M.C. and Kuchhal, V; <i>Legal Aspects of Business</i> ; Vikas Publishing Hous		

REFERENCE BOOK/ SUGGESTED READING	1. Kapoor N. D; <i>Commercial Law</i> ; S. Chand Publication 2. Singh, A.; <i>Principles of Mercantile Law</i> ; Eastern Book Company 3. Gulshan. S.S., <i>Mercantile Law</i> , Excel Books
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Course: MANAGEMENT CONCEPTS AND PRINCIPLES			Semester: I
Course Code: MBA 507	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the role and functions of a manager, and the principles, concept and techniques used by managers to excel in the corporate world.		
COURSE OUTCOMES	Upon completion of the course students should be able to: 1. Understand the foundational theories in Management 2. Demonstrate Planning and Decision Making activities in Management 3. Understand the organizing function in Management 4. Analyze the qualities of good leaders and comprehend essentials functions of staffing. 5. Evaluating the different types of controlling techniques.		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Nature and purpose of management, Management as science or art, Evolution of management thought. An overview of functions of managers: planning, organizing, staffing, leading and controlling, Coordination: essence of managing, systems approach to management, contingency approach to management.	10
	2.	Planning: Meaning, need and importance, Types: missions or purposes, objectives or goals, strategies and policies, levels, Advantages and limitations, Procedures and rules, Programs and budgets, Steps in planning, Management by Objectives, Policies and planning premises, Strategic planning process, Forecasting: need and techniques, Decision Making: types, process of rational decision making, and techniques of decision making.	12
	3.	Organizing: Nature of organizing, Formal and informal organizations, Organizational levels and span of management, Structure and process of organizing, Line and staff authority, Matrix organization, Decentralization of authority, Delegation of authority, Organization Charts.	12
	4.	Staffing and Leading: Meaning and functions of staffing, Recruitment, Selection, Placement, Promotion, Separation, Performance appraisal, The Peter Principle. Leadership: Meaning, styles, qualities and functions of leader, Leadership Theories, committees and group decision making.	06
	5.	Controlling: Nature, importance and process of controlling, Requirements of effective control, Major controlling techniques: Budgetary and non-budgetary control devices	05
		Total Hours	45
TEXT BOOK	1. Robbins, S.P., DeCenzo, D.A., Bhattacharya, S., Agarwal, M.N.; <i>Fundamentals of Management</i> ; Pearson Education 2. Robbins, S.P., Coulter, M., Vohra, N; <i>Management</i> ; Pearson Education		
REFERENCE BOOK/ SUGGESTED READING	1. Stoner, J.A.F., Freeman, R.E., Gilbert, D.R.; <i>Management</i> ; Pearson Education		

Course: ENGLISH LANGUAGE			Semester: I
Course Code: MBA 508	L T P	3 0 0	Credits: 3
OBJECTIVE	To enhance students' ability to communicate effectively in the corporate world with special focus on writing and speaking skills.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Demonstrate skills related to the corporate world. 2. Learn the basics of formal communication. 3. Develops other essential skills required for the smooth functioning of any organization. 4. Create and effectively deliver oral presentations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1	Effective Communication: <ol style="list-style-type: none"> a. What is effective communication? Informal conversation vs formal expression. Barriers to effective communication and ways to overcome them. b. The importance of correct grammar: tenses, articles, concord, voice, direct and indirect speech, types of sentences, punctuation. 	15
	2	Composition: <ol style="list-style-type: none"> a. Paragraph writing b. Note making c. Precis writing d. Comprehension 	10
	3	Vocabulary: <ol style="list-style-type: none"> a. Synonyms b. Antonyms c. One word substitution d. Homophones 	8
	4	Business Correspondence: <ol style="list-style-type: none"> a. What is business correspondence? b. Types of business correspondence: <ol style="list-style-type: none"> i. Letters: Enquiry, Quotation, Order, Instructions, Sales, Credit, Complaint, Adjustment, and Collection. ii. Notice iii. Agenda iv. Minutes v. Memorandum vi. Job application letters: Cover letter, Resume, Biodata and C.V. 	12
		Total Hours	45
TEXTBOOK	<ol style="list-style-type: none"> 1. Chaturvedi, Courtland L., Bovee J.V, Thill, Mukesh; Business Communication Today, Pearson 2. Wren, and Martin. <i>High School English Grammar & Composition</i>, Wren & Martin. S. Chand Publishing. 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Rentz, Flatley and Lentz, Lesikar's <i>Business Communication: Connecting in a Digital World</i>, New York. McGraw-Hill Irwin. 2. Edmund H Weiss: <i>Writing Remedies: Practical Exercises for Technical Writing</i>. Universities Press, Hyderabad 3. Ronald E. Duleck and John S. Fielden.; <i>Principles of Business Communication</i>. Macmillan. 		

Course: MS Office –I			Semester: I
Course Code: MBA 509 P	L T P	0 0 4	Credits: 2

OBJECTIVE	To familiarize the students with the basic use of different types of office Management software's widely used in business organizations.
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Understand the evolution of computers and their basic technical terms. 2. Apply word processing features in MS Word 3. Create and format documents in MS Word 4. Demonstrate the advanced application of MS word for merging documents and use of macros. 5. Create the applications of MS Excel for creating and formatting of documents.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Word Processing: Word processors, various types of word processing editors, MS word IDE. MS Word: Text Basics, Typing the text, Alignment of text, Editing Text: Cut, Copy, Paste, Select All, Clear, Find & Replace. Formatting tools: Text Formatting and saving file, New, Open, Close, Save, Save As, Font Size, Font Style, Font Colour, Use the Bold, Italic, and Underline, Change the Text Case, Line spacing, Paragraph spacing, shading text and paragraph, Working with Tabs and Indents Working with Objects: Shapes, Clipart and Picture, Word Art, Smart Art, Columns and Orderings - To Add Columns to a Document, Change the Order of Objects, Page Number, Date & Time, Inserting Text boxes, Inserting Word art, inserting symbols, Inserting Chart, Tables, Working with Tables, Table Formatting, Merge and split option, adding a Footnote, Adding Endnote.</p> <p>Advanced MS Words Features: Mail Merge features, need of mail merge, business applications of mail merge, Merging Documents, typing new address list, importing address list from Excel file, Write and insert field, Conditional sorting, Preview Result, merging to envelopes, merging to label, Setting rules for merges, Equation editor, Macros and use of macros.</p> <p>MS Excel: Introduction of MS Excel software, Business Applications, MS Excel IDE, Workbook, Sheets, cells, cell references, types of cell references, protecting the workbook, sheet, cell., Naming Cells, working with excel workbook and sheets.</p> <p>Formatting Excel workbook: New, Open, Close, Save, Save As, Formatting Text: Font Size, Font Style, Font Color, Use the Bold, Italic, and Underline, format the cell, Wrap text, Merge and Centre, Currency, Accounting and other formats</p> <p>Use of Excel Functions: Perform Calculations with Functions, Creating Simple Formulas, Setting up your own formula, Date and Time Functions, Financial Functions, Logical Functions, Lookup and Reference, Functions Mathematical Functions, Statistical Functions, Text Functions.</p>
TEXTBOOKS:	<ol style="list-style-type: none"> 1. Tiwari, H. N. and Jain, H.C; <i>Fundamentals of Computers and Information System</i>; International Book House 2. Microsoft; <i>Microsoft Office, Step by Step</i>; Microsoft Press
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Balaguruswamy, E.; <i>Fundamentals of Computers</i>; McGraw Hill 2. Norton, Peter; <i>Introduction to Computers</i>; McGraw Hill 3. Walkenbach, John; <i>Microsoft Excel, BIBLE</i>; WILEY

Course: BUSINESS NEWS AND INDUSTRY ANALYSIS	Semester: I
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Course Code: MBA 510 P	L T P	0 0 2	Credits: 1
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OBJECTIVE	To help students be informed and stay updated about the latest developments in Indian and Global business scenario, improves their communication skills, and learn how to do industry analysis.
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Inculcate the habit of identifying the sources of news. 2. Collect on a day-to-day basis news relating to business and industry. 3. Understand the importance of digital media. 4. Develop and maintain professional industry network. 5. Understand the role of budget in the economy. 6. Assess the presentations on varied topics of relevance for business program.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Present and discuss recent developments in industry and economy. The source for this could be the business press, such as Economic Times, Business Standard, Mint, CNBC, Moneycontrol.com etc. (available online and on TV News Channels) Each student should be asked individually to speak. Time could be 1-2 minutes per student.</p> <p>Track individual companies or other organizations over a period of time. This could be with respect to their individual company developments, share price movements, analyst reports, etc.</p> <p>Prepare and discuss a Business Plan/Business Proposal for Organization of Choice.</p> <p>Prepare and discuss Budget Proposal for selected Organization.</p> <p>Prepare video presentations on a topic relevant to a business organization</p> <p>Group/Panel discussion on Industry updates & Economics Analysis. Each student shall prepare/update the Linkedin Account and develop a professional network.</p>

SEMESTER II

Course: QUANTITATIVE TECHNIQUES AND OPERATIONS RESEARCH			Semester: II
Course Code: MBA 511	L T P	4 0 0	Credits: 4

OBJECTIVE	The course aims at developing understanding of essential concepts of Business Statistics and Operations Research.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Acquire a fair degree of proficiency in comprehending statistical data, processing and analyzing it using descriptive and inferential statistical tools. 2. Understand the relationship between two variables using concepts of correlation and regression and its use in identifying and predicting the variables. 3. Identify and develop the operations research models and the use of their mathematical tools that are needed to solve optimization problems. 4. Analyze the results and propose recommendations in language understandable to the decision-making processes in Management. 5. Understand the fundamental applications of OR tools in industry and the public sector in context involving uncertainty and scarce or expensive resources. 		
COURSE DETAILS	Module No.	Topic	Hours
	1	Measures of central tendency & Dispersion: Concept of central tendency, Measures of central tendency: The mean & weighted mean, median and mode, Measures of dispersion: range, Interquartile range, average deviation, standard deviation, Skewness and Kurtosis.	08
	2	Correlation Analysis and Regression Analysis: Correlation Analysis: Meaning and significance, Correlation and Causation, Types of correlation, Methods of Simple correlation - Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation coefficient. Regression Analysis: Meaning and significance, Regression vs. Correlation, Simple Regression model: Linear Regression, Conditions for simple linear regression, Standard error of estimate, Tests for the significance of correlation coefficient.	12
	3	Introduction and Linear Programming: Evolution of operations research, Nature and scope of operations research. Formulation of LPP, Solution using graphical and Simplex method for solving LP; Big M Method; Duality theory Overview of Sensitivity analysis, Special cases: Degeneracy (Using Excel solver).	13
	4	Transportation Model and Assignment Models: Transportation problem: formulation, methods of finding feasible solution (NWCM, LCM and VAM), Test for Optimality (MODI Method Only). Assignment problem: formulation and solution of assignment problem (Hungarian algorithm), Travelling Salesman Problem. (using Excel solver)	13
	5	Game Theory, Queuing Theory and Simulation: Game Theory: Pure and Mixed Strategies with Two People Zero Sum Game, Maximin – Minimax Principle, Saddle Point, Principle of Dominance. Graphical Method of Solving a Game. Queuing Theory: Structure of various queuing systems and characteristics of queuing systems, Traffic intensity, Poisson Birth and death model. Simulation, Components of	14

		Simulation Model, Monte–Carlo Simulation, Application of Simulation in Inventory Management, Marketing Management, Financial Management.	
		Total Hours	60
TEXT BOOK	1. Levin, R., Masood, Siddique, H, Rubin, D., and Rastogi, Sanjay; <i>Statistics for Management</i> ; Pearson. 2. Keller, G.; <i>Statistics for Management and Economics</i> ; Cengage 3. Anderson, David R., Sweeney, Dennis J. and Williams, Thomas A., Camm, Jeffrey D. and Cochran, James J.; <i>Quantitative Methods for Business</i> ; Cengage Learning 4. Taha, H.A., Natarajan, A.M., Balasubramanian, P. and Tamilarasi, A; <i>Operations Research</i> ; Pearson Education 5. Vohra, N. D.; <i>Quantitative Techniques in Management</i> ; McGraw Hill 6. Ravindren, Phillips, Solberg “ <i>Operations Research: Principles and Practice, (WSE)</i> ”, Wiley		
REFERENCE BOOK/ SUGGESTED READING	1. Stine, R. and Foster.; <i>Statistics for Business (Decision making and Analysis)</i> ; New Delhi: Pearson. 2. Anderson, David R., Sweeney, Dennis J. and Williams, Thomas A., Camm, Jeffrey D. and Cochran, James J.; <i>Statistics for Business and Economics</i> ; Cengage Learning 3. Vohra, N. D.; <i>Business Statistics</i> ; McGraw Hill. 4. Hiller, Frederick S., Liberman, Gerald J., Nag, B. and Basu, P.; <i>Introduction to Operations Research</i> ; McGraw Hill 5. Winston, Wayne L.; <i>Operations Research Applications and Algorithms</i> ; Thomson Learning 6. Levin, Richard I., Rubin, David S., Stinson, Joel P. and Gardner, Everette S.; <i>Quantitative Approaches to Management</i> ; McGraw Hill		

Course: PRODUCTION AND OPERATIONS MANAGEMENT			Semester: II
Course Code: MBA 512	L T P	3 0 0	Credits: 3

OBJECTIVE	To equip students with a comprehensive understanding of the concepts, methodologies, and strategic importance of production and operations management in manufacturing and service organizations. To enhance decision-making skills related to design, planning, and control of production systems and align operations strategies with organizational goals.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the core features of the operations and production management function at the operational levels. 2. Develop strategy for production system and product design. 3. Understand and apply analytical tools to production activities. 4. Develop inventory management strategy. 5. Understand and apply the principles of Quality Management System. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Nature and scope of production and operations management, Relationship with other systems in the organization, Factors affecting system and concept of production and operations management, Facility location, Layout planning and analysis.	9
	2.	Production Systems and Related Concepts: Types of production systems: continuous production, mass production, Batch production, Job order production, Capacity planning, Product design and development, product reliability, Aggregate planning, Bill of Materials, Material Requirements Planning.	9
	3.	Materials and Maintenance Management: An overview of materials management, Materials planning and inventory control, Inventory modes - ABC analysis, EOQ model, quantity discounts, safety stock, Maintenance Management Types, TPM.	9
	4.	Scheduling and Measuring Production Activities: Scheduling rules, control of schedules, Scheduling n jobs Two Machine, n jobs Three Machine, Two jobs n Machine, Line Balancing.	9
	5.	Quality in Production and Operations Management: Quality assurance, Quality control, Quality control charts. Control charts for attributes, Control charts for variables, control chart patterns, process capability indices.	9
		Total Hours	45
TEXT BOOK	Operations Management: Creating Value along the Supply Chain, Roberta S. Russell & Bernard W. Taylor III, Wiley.		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Charry, S.N.; Production and Operations Management-Concepts Methods and Strategy; Pearson Education 2. Sarin, Rakesh, K. and Buffa, Elwoods, S.; Modern Production Operations Management; John Wiley 3. Joseph, S. Martinich; <i>Production and Operations Management: An Applied Modern Approach</i>; McGraw Hill 4. Stvenson, William J.; <i>Operations Management</i>; McGraw Hill 		

	<p>5. Adam, Ebert; <i>Production and Operations Management: Concepts, Models and Behavior</i>; Pearson Education</p> <p>6. Lee, J. Krajawski, Lerry, P. Ritzman and Malhotra, K. Manoj; <i>Operations Management: Processes and Supply Chains</i>; Pearson Education.</p> <p>7. Chase, Richard B, Shankar, Ravi, Jacobs, Robert F.; <i>Operations & Supply Management</i>; McGraw Hill</p>
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Course: MARKETING MANAGEMENT			Semester: II
Course Code: MBA 513	L T P	3 0 0	Credits: 3
OBJECTIVE	To acquaint the students with marketing concepts, processes and their practical applications		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the basic concepts of marketing, designing market segments and understanding consumer buying behavior. Analyze the product mix of different companies and the product strategy decisions. Compare and contrast the differential pricing strategies and decisions used by different companies. Evaluate the effectiveness of distribution channels in reaching different markets. Develop the promotion strategies relevant in contemporary world to reach the right target audience. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Marketing Concepts: Introduction to Marketing: Needs, wants and demands, exchange process, evolution of marketing philosophies, marketing mix, Pre-requisites of effective segmentation, bases of segmenting consumer markets, Market selection and Positioning strategies. Consumer Buying vs Organizational Buying.	11
	2.	Product Decisions: Product Concept, Classification of Products, Difference between products and services, Product Line and Product Mix decisions, Packaging and Labeling, New Product Development Process, Product Life Cycle, Adoption Process	12
	3.	Price Decisions: Role of Price, Factors influencing price determination, Pricing Approaches, Pricing strategies, Pricing Policies, Non-Price competition	07
	4.	Place Decisions: Need and Functions of Marketing Channels, type of marketing intermediaries, Vertical marketing system, Retailing and wholesaling: types and functions.	07
	5.	Promotion Decisions: Objectives of Promotion, Integrated Marketing Communication, Promotion Mix: Advertising, Sales Promotion, Public Relations and Personal Selling, Direct Marketing, Online Marketing	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Kotler, Philip and Keller, Kevin Lane; <i>Marketing Management- marketing cases in the Indian Context</i>; Pearson Etzet, M. J., Walker, Bruce J., Stanton, William J. and Pandit, Ajay; <i>Marketing: Indian Adaptation</i>; McGraw Hill 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Kotler, P., Armstrong, G., Agnihotri. P.Y., and Haque; <i>Principles of Marketing</i>; Pearson Education Czinkota, Michael R. and Kotabe, Masaaki; <i>Marketing Management</i>; Thomson South-Western Grewal, Dhruv and Levy, M.; <i>Marketing</i>; McGraw Hill 		

Course: FINANCIAL MANAGEMENT			Semester: II
Course Code: MBA 514	L T P	3 0 0	Credits: 3

OBJECTIVE	The objective of this course is to acquaint the students with the objectives of financial management, basic techniques and methods of financial decisions making in business		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the scope of financial management and apply time value of money concepts. 2. Compute specific and weighted average cost of capital and identify influencing factors. 3. Apply capital budgeting techniques to evaluate investment decisions 4. Analyze capital structure theories and leverage for financing decisions. 5. Evaluate dividend policies and theories and perform related calculations. 6. Manage components of working capital and evaluate financing options. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Overview of Financial Management – meaning and scope of finance & financial management, profit maximization vs wealth maximization, role of finance manager in key financial decisions in an organisation, Concept of time value of money. Calculation using Excel.	6
	2.	Cost of Capital: Cost of Capital - Concept, Computation of Specific Cost of Capital for Equity - Preference – Debt, Weighted Average Cost of Capital – factors affecting Cost of Capital. Calculation using Excel.	7
	3.	Capital Budgeting: Capital Budgeting Decisions -meaning, Discounting and Non –Discounting techniques for capital budgeting, advantages and limitations of each method of capital budgeting. Calculation using Excel.	7
	4.	Capital structure: Capital Structure Decision: Concept, factor affecting Capital Structure, theories of Capital Structure (N.I. Approach, NOI Approach, Traditional Approach, M-M Approach) Leverage: Operating Leverage, Financial Leverage, EBIT-EPS Analysis and Combined Leverage. Calculation using Excel.	9
	5.	Dividend Decisions: Dividend Decision, concept, types of Dividend policy, factors influencing Dividend Policy, theories of Relevance and Irrelevance approach of Dividend decision. Calculation using Excel.	8
	6.	Working Capital Decisions: Concept, component and factors affecting Working Capital, Working Capital Financing. Calculation using Excel.	8
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Chandra, P; <i>Financial Management: Theory and Practice</i>; McGraw-Hill. 2. Pandey, I.M.; <i>Financial Management</i>; Vikas Publishing 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Van Horne, J.C.; <i>Financial Management and Policy</i>; Prentice Hall of India 2. Damodaran, A.; <i>Corporate Finance: Theory and Practice</i>; Wiley & Sons 3. Khan, M. Y. and Jain, P.K.; <i>Financial Management</i>; McGraw Hill 4. Rastogi, R.P.; <i>Financial Management</i>; Taxmann Publication 		

Course Name: HUMAN RESOURCE MANAGEMENT			Semester: II
Course Code: MBA 515	L T P	3 0 0	Credits: 3

OBJECTIVE	To provide students with a comprehensive understanding of Human Resource Management (HRM) concepts, functions, and strategic approaches, enabling them to analyze, apply, and evaluate HR practices in areas such as recruitment, performance management, compensation, employee relations, and international HRM, while fostering critical thinking, ethical decision-making, and effective communication skills.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the fundamental concepts, objectives, and strategic approaches of Human Resource Management (HRM). 2. Analyze and apply effective methods for acquiring, managing, and retaining human resources in diverse organizational contexts. 3. Evaluate compensation structures, performance management systems, and employee welfare practices with a focus on ethical decision-making. 4. Design and assess training, development, and career planning programs for enhancing organizational effectiveness. 5. Examine labor relations, collective bargaining, and workplace safety while ensuring compliance with legal and ethical standards. 6. Explore emerging trends in International HRM and the impact of technology on global human resource practices 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Concept, Objectives, Evolution of HRM, HRM Functions, Scope and importance of HRM, System approach to HRM, Strategic management approach to HRM, HRM Policies.	05
	2.	Acquiring Human Resources: Job Analysis: concept, process, methods, HR planning: concept, process, techniques of manpower forecasting, Recruitment and Selection: methods of recruitment and selection process.	07
	3.	Rewarding Human Resources: Performance appraisal: concept, process, techniques of appraisal, Compensation: objectives, components, compensation decisions, methods of payment, issues in compensation administration, employee retirement benefits and services, Pay structure & its components.	10
	4.	Developing Human Resources: Training and Development: concept, importance, process and methods of training, Training evaluation: principles, criteria and models, Career planning and development: concept, career planning, and problems in career planning, succession management.	07
	5.	Employee Relations, Collective Bargaining and Promoting Safety and Health: Trade unions, meaning importance, objective, Process of collective bargaining, Grievances/Redressal, managing employee discipline: process and approaches to discipline, Safety Health, Wellbeing and Security.	11
	6.	International HRM and Contemporary Issues:	05

		International HRM: International HRM and Emerging Horizons of HRM: Concept, importance. Challenges of International HR Managers; Global HR practices; E-HRM, HRM Advisor: Brief Overview.	
		Total Hours	45
TEXT BOOKS	1. 2.	Ivancevich, John M.; <i>Human Resource Management</i> ; McGraw Hill Dessler, G and Varkkey, B; <i>Human Resource Management</i> ; Pearson Education	
REFERENCE BOOKS	1. 2. 3. 4. 5.	Noe, Raymond A.; <i>Human Resource Management: Gaining a competitive advantage</i> ; McGraw Hill Robbins, S. P. and Coulter, M.; <i>Human Resource Management</i> ; Pearson Education Robbins, S. P. and DeCenzo, D. A.; <i>Human Resource Management</i> ; Pearson Education Rao, V.S.P.; <i>Human Resource Management</i> ; Excel Books Byars, R.; <i>Human Resource Management</i> ; McGraw Hill	

Course: BUSINESS RESEARCH METHODS			Semester: II
Course Code: MBA 516	L T P	4 0 0	Credits: 4

OBJECTIVE	To familiarize the students with the concepts and methods of business research. This should enable the students to plan and conduct business research using scientific methods.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand meaning and scope of business research. Familiarize with research terminologies and various types of research design. Get an insight into various scaling techniques and sources of data collection. Get acquainted with various techniques of data analysis and presentation through analytical software. Understand the basic learning of analytics in business. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Foundation of research- meaning, objective, concept of theory, induction and deduction. research process, characteristics of scientific method of research. Business Research- nature, scope, need and role of business research. Types of Business Research – Applied and basic. Research Strategy: Quantitative and Qualitative. Business Research Requests and Proposals: Types, designing and evaluating research proposals.	10
	2.	The Design of Business Research: Research design an overview, types of research design: exploratory, descriptive and causal designs. Measurement & Scaling Techniques: Concept, construct, variable. Concept of measurement: levels of measurements- nominal, ordinal, interval and ratio. Measurement Scales: comparative and non-comparative scaling.	12
	3.	Questionnaire and Instruments: Constructing and refining the Questionnaire & Schedule, drafting and refining the instrument. Reliability and Validity- Tests and importance. Sampling Design: Population, sampling frame, sample, sampling design and sampling error. Types of sampling- probability and non-probability sampling.	12
	4.	Analysis and Presentation of Data: Introduction to Analytical Software, Data preparation and description – editing, coding and tabulation of data. Hypothesis Testing: t-test, z-test, chi-square test, ANOVA.	16
	5.	Report Preparation and Presentation: Types and layout of research, Precautions in preparing the research report, Writing the report, Presentation of statistics, Oral presentations, Review of literature, Issue of plagiarism, Case study approach, Bibliography and annexure in the report: their significance, Drawing conclusions, suggestions and recommendations,	10
		Total Hours	60

TEXT BOOK	<ol style="list-style-type: none"> 1. Cooper, D. and Schindler, P.; <i>Business Research Methods</i>; McGraw Hill 2. Sekaran and Bougie; <i>Research Methods for Business</i>; Wiley India. 3. William G. Zigmund; <i>Business Research Methods</i>; Cengage.
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Saunders, M.N.K.; <i>Research Methods for Business</i>; Pearson Education 2. Turabian, Kate; <i>A Manual for Writers of Research Papers, Thesis, and Dissertations</i>; University of Chicago Press 3. Malhotra, Naresh K. and Dash, Satyabhushan; <i>Marketing Research: An applied orientation</i>; Pearson Education 4. Sekharan, U. and Bougie, Roger; <i>Research Methods for Business: A skill building approach</i>; Wiley 5. Michael, S. Lewis-Beck, Bryman, Alan E. and Tim, Futing Liao; 6. Sage encyclopedia of Social Science Research Methods; Sage Publications

Course: BUSINESS ANALYTICS - I			Semester: II
Course Code: MBA 517	L T P	2 0 2	Credits: 3

OBJECTIVE	To familiarize students with how managers use business analytics to formulate and solve business problems and to support managerial decision making. To become familiar with the processes needed to develop, report, and analyze business data.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand concept of Business Analytics 2. Understanding the basic concept of Descriptive Analytics 3. Analyse the basic concept of Predictive Analytics. 4. Applying the basic concept of Prescriptive analytics. 5. Discussing the case studies where data analytics is applied. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Business Analytics: Definition of Business Analytics, Categories of Business Analytical methods and models, Business Analytics in practice, Big Data - Overview of using Data, Types of Data- Business decision modelling.	10
	2.	Descriptive Analytics: Overview of Description Statistics (Central Tendency, Variability), Data Visualization -Definition, Visualization Techniques – Tables, Cross Tabulations, charts, Data Dashboards using Advanced Ms-Excel or SPSS. Practical Exercises	15
	3.	Predictive Analytics: Trend Lines, Regression Analysis – Linear & Multiple, Predictive modelling, forecasting Techniques, Data Mining - Definition, Approaches in Data Mining- Data Exploration & Reduction, Data mining and business intelligence, Data mining for business, Classification, Association, Cause Effect Modelling. Practical Exercises	13
	4.	Prescriptive analytics: Overview of Linear Optimization, Non Linear Programming Integer Optimization, Cutting Plane algorithm and other methods, Decision Analysis – Risk and uncertainty methods - Text analytics Web analytics. Practical Exercises	12
	5.	Application of Business Analysis: Application of Business Analysis: Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics. Practical Exercises	10
		Total Hours	60
TEXT BOOK	<ol style="list-style-type: none"> 1. Rao, H.P; <i>Business Analytics An Application Approach</i>, P H I Learning Pvt. Ltd 2. Prasad, R. N. and Acharya, S.; <i>Business Analytics</i>, Wiley 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Jiawei, H., Micheline, K. and Jian, P.L.; <i>Data Mining Concepts and Techniques</i>, Elsevier 2. Tan, P. N., Steinbach, M. and Kumar, V.; <i>Introduction to Data Mining</i>, Pearson Education 		

Course: Soft Skills - I			Semester: II
Course Code: MBA 518 P	L T P	0 0 2	Credits: 1

OBJECTIVE	Soft skills provide students with a strong conceptual and practical framework to build, develop and manage teams
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Demonstrate interpersonal skills. 2. Build and improve Team building, Leadership and Interpersonal skills. 3. Develop effective correspondence and resume writing skills. 4. Develop overall personality.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Introduction to soft skills, it's Importance at the Workplace, Interpersonal Skills- Negotiations, listening skills, social skills, assertive skills, cross-cultural communications.</p> <p>Team building and leadership, evolution of groups into teams, group dynamics, emergence of leadership, intra-group dynamics, inter-group dynamics, conflict management, inter dependency, assessment of team-based projects.</p> <p>De-Clutter, prioritization, goal setting, R-A-C Method for effective time management.</p> <p>Leadership Skills, Concepts of leadership, leadership styles, insights from great leaders.</p>
TEXT BOOK	1. Nitin Bhatnagar; Effective Communication and soft skills; Pearson Education India
REFERENCE BOOK/ SUGGESTED READING	1. Jeff Butterfield; Soft skills for Everyone; Cengage Learning

Course: MS Office – II			Semester: II
Course Code: MBA 519 P	L T P	0 0 4	Credits: 2

OBJECTIVE	To familiarize the students with the basic use of different types of office Management software's widely used in business organizations.
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Understand applications and use of MS Excel and its features. 2. Apply the advanced Excel function applications with references to apply them in different business decision making. 3. Apply the advanced MS Excel tools like data analysis and visualization in quick decision making. 4. Understand the skills to make good presentation using the MS PowerPoint with their features and tools. 5. Acquire knowledge and skills required to manage projects.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>MS Excel: Proofing of Worksheet & Data Visualization: Protecting and sharing the work book, Allow user to edit ranges, Proofing and Printing, Sort and Filter Data with Excel, Conditional formatting, Create Effective Charts to Present Data Visually, types of chart: Column, Pie chart etc., Insert Excel Objects and Charts in Word Document and Power point Presentation, Editing data series, what if analysis</p> <p>Advance Excel Functions: Filter, Vlookup, Hlookup, Exact, Frequency, Advance Statistical Function, Conditional Function, Nested IF function, Nested Function, Solver, Data Analysis Tool, What IF Analysis: Goal Seek, Scenario Manager, Data Table, PMT, PPMT.</p> <p>MS Excel tools for Quick Decision Making: Introduction of Pivot tables, need of Pivot Tables, Analyse Data Using PivotTables and Pivot Charts, Understand PivotTables, Create a PivotTable, Framework Using the PivotTable and PivotChart, Create Pivot Chart from pivot Table, Inserting slicer, Creating Calculated fields, Solver tool, Developer tool.</p> <p>MS POWERPOINT: Making the Presentations: Setting Up PowerPoint Environment, Formatting Text. Creating slides and applying themes, Inserting new slide Changing layout of slides, Duplicating slides, Copying and pasting slide, Applying themes to the slide layout , Changing theme color, Formatting slide background, Inserting Word art, symbols, Chart, Hyperlinks and Action Buttons,. Working With Movies and Sounds, Working with Tables and Formatting, Animation and customizing animation, Apply a Slide Transition and Modification.</p> <p>MS Project: Project planning, Project tracking (completion, time and cost), Scheduling and time management, Resource allocation, Budgeting, Communication and collaboration, Documentation, Risk management, develop plans, Assign resources to tasks, Track progress, Manage budgets, Analyse workload</p>
TEXT BOOK	<ol style="list-style-type: none"> 1. Walkenbach, John; <i>Microsoft Excel 2016 BIBLE</i>; WILEY 2. Microsoft; <i>Microsoft Office 2016, Step by Step</i>; Microsoft Press
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Shirodkar, S.; Learning Microsoft Project 2019; Packt Publishing 2. Norton, Peter; Introduction to Computers; McGraw Hill

SEMESTER III

Course: PROJECT MANAGEMENT			Semester: III
Course Code: MBA 601	L T P	3 0 0	Credits: 3

OBJECTIVE	To introduce students to the fundamental principles and practices of project management and develop skills in project planning, scheduling, execution and control.		
COURSE OUTCOMES	Upon completion of the course students should be able to: 1. Understand the core features of project management function at the operational levels. 2. Conduct feasibility study of projects. 3. Understand and apply analytical tools to project management activities. 4. Understand project risks and its management. 5. Understand contract management and termination strategies in Projects		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Project Management: Definitions, Characteristics, Scope and Classification of project, Importance of Project Management, Project Management Processes, Project Management Life Cycle, Project Success Criteria, Key competencies for Project Managers, Project Manager's Role and Responsibilities, Project Stakeholders. Project Creation using MS Project.	08
	2.	Project Planning: Project Feasibility Analysis (Technical, Financial and Market Feasibility), Project Scope and Activity-Planning, Activity Sequencing, Work Breakdown Structure (WBS), Project Plan preparation, Time Estimation and Scheduling, Resource Planning, Duration versus Effort, Task Dependency analysis, Cost Estimation, Cost / benefit analysis, Plan Creation (Gantt Chart preparation) using MS Project.	10
	3.	Project Execution, Monitoring and Control: Project Network Analysis: CPM, PERT and Crashing, New execution models and Agile methodology. Project audit, Analysis of Actual Project Performance against Plan, Contract Management, Project Status Reports, Progress Measurement and Forecasting.	15
	4.	Project Risk Management: Project Risk Assessment, Risk Identification, Quantitative Risk Analysis, Qualitative Risk Analysis, Risk Management Plan, Risk Monitoring & Control.	09
	5.	Project Closure: Project Closure, termination strategies and termination procedures; Overview of the PMP Certification Examination.	05
		Total Hours	45
TEXTBOOK	1. Pinto J. K.; <i>Project Management - Achieving Competitive Advantage</i> . Pearson Education.		
REFERENCE BOOK/ SUGGESTED READING	1. Scott, Donald J.; <i>Project Management: A Quick Start Beginner's Guide for The Serious Project Manager To Managing Any Project Easily</i> ; Kindle Edition 2. Larson, Erik W. and Gray, Clifford F.; <i>Project Management: The Managerial Process</i> ; McGraw-Hill Series Operations and Decision Sciences 3. Gray Clifford F., Larson E. W. Desai G. V.; <i>Project Management: The Managerial Process</i> . McGraw Hill Education.		

	<p>4. Meredith, Jack R., Mantel, Samuel J. Jr., and Shafer, Scott M.; <i>Project Management: A Managerial Approach</i>; Wiley.</p> <p>5. Kerzner, Harold; <i>Project Management: A Systems Approach to Planning, Scheduling, and Controlling</i>; Wiley</p>
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Course: INTERNATIONAL BUSINESS			Semester : III
Course Code: MBA 602	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the nature, scope and structure of International Business, and the influences of various environmental factors on International Business Operations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understanding the Fundamentals of International Business Expansion. 2. Analyzing International Business Environments and Trade Theories. 3. Examining International Economic Integration and Institutions. 4. Evaluating Regional Economic Cooperation. 5. Managing Entry and Operations in Global Markets. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Introduction to globalization Concept and reason of International Business Expansion Nature, Scope, and Importance of International Business. EPRG Framework. Internationalization process Models and its Managerial Implications: <ul style="list-style-type: none"> • The Uppsala internationalization model • The transaction cost analysis (TCA) model • The network models. • Born global. 	09
	2.	Competitive environmental framework: The cultural, political, and legal environments facing business. Theories of International Trade and Implications of Trade: Theories: <ul style="list-style-type: none"> • Factor Endowment (Heckscher-Ohlin) Theory • Country Similarity Theory • International Product Life-Cycle Theory International Trade Patterns and Balance of Payments: Major components of India's Foreign Trade Policy 2023	09
	3.	International Economic Integration: Trade Protectionism, Tariff and Non-Tariff Barriers; CounterTrade Global Exchange system and international monetary Market: International Economic Institutions and Agreements: GATT; WTO, IMF, world Bank, BRICS-NEW development Bank Structure, Objectives and Agreements with references to India.	10
	4.	Regional Economic Groupings and their classification: Regionalism VS Multilateralism issues and requirements Structure and functioning and objectives of European Union (E.U.), USMCA (NAFTA), ASEAN, BRICS. Regional Comprehensive Economic Partnership (RCEP) vs Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).	10
	5.	Entering the International Market Developments and Issues in International Business: Modes of entry into market, Issues in Foreign Investment.	07

		Technology Transfer; Global Pricing Framework; Promotions in International Market; Cross-Cultural Communication and Human resource management Global Operations and Supply Chain Management.	
		Total Hours	45
TEXT BOOK	1. Hill, Charles W., Arun, K; <i>International Business: Competing in the Global Marketplace</i> , McGraw Hill 2. Daniels, J. H. and Lee, H. R.; <i>International Business: Environments and Operations</i> ; Pearson Education		
REFERENCE BOOK/ SUGGESTED READING	1. Bennet, Roger; <i>International Business</i> ; Pitman Publishing 2. Cateora, Philip R. & Graham, John L.; <i>International Marketing</i> ; Tata McGraw Hill 3. Griffin, Ricky W. and Pustay, Michael W.; <i>International Business: A Managerial Perspective</i> ; Addison Wesley		

Course: MANAGEMENT INFORMATION SYSTEM			Semester: III
Course Code: MBA 603	L T P	2 0 0	Credits: 2

OBJECTIVE	The objective of this course is to introduce the students to the managerial issues relating to Information Systems, its role in organization, support for decision-making and how information systems can be leveraged to provide business value.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the evolution and impact of Information System on business. 2. Understand the role of cloud platforms and related security threats to information systems of organizations. 3. Learn about various Enterprise Systems and uses in different management domains. 4. Understand the complexities and applications of Data resource management. 5. Learn Managerial Decision Making with Business Intelligence and Digital platform of Business. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Organizations and Information Systems: Modern Organization and Information System's impact on organizations, Alignment of Business and IT strategies, Information landscape in modern Organization. Types of Information Systems (TPS, MIS, DSS and EIS), Decision Making with MIS (Tactical, Operational and Strategic). MIS project life cycle.	04
	2.	Information Systems Evolution: Internet, Cloud and Wireless revolution. Impact of Cloud technology in Business. Information Security, IT Governance, Ethical and Social Issues related to Information privacy. Information Systems Security and Control (Threats, Encryption, Cryptography, Firewall and Disaster recovery plan). Study Cloud services using Google Cloud Platform, AWS and Azure.	08
	3.	Integrated Enterprise Systems : Importance of Integrated Systems, Enterprise Resource Planning Systems, Supply Chain Management Systems, Customer Relationship Management Systems, Master Data Management Systems. Case Studies.	05
	4.	Data Resources Management: Challenge of Data Management, Data Independence, Data Redundancy reduction and Normalization, Data Consistency, Database concept, RDBMS, Database Model and ER diagram, ETL process, Data Warehouse and Data Mart, importance of Dimensional Modelling in Strategic Reporting, Distributed Filing Systems to manage Big data, Structured, Semi-structured and Unstructured Data.	07
	5.	Business Intelligence ,Analytics and Social Network: Business intelligence: concept, environment and tools. Importance of Business Intelligence and analytics. Impact of Social Media in Business, Digital Marketing, Text and emotion mining using Social media Data and importance of Web Analytics, metaverse, virtual reality, augmented reality, mixed reality.	06
		Total Hours	30
TEXT BOOK	<ol style="list-style-type: none"> 1. O' Brein and George Marakas James; <i>Introduction to Information Systems</i>, McGraw Hill 2. Laudon and Laudon; <i>Management Information Systems</i>; Pearson India. 		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none">1. Principles of Information Systems (A Managerial Approach) – By Ralph Stair & George Reynolds2. Davis, Gordon. B & Olson, Margrethe. H, <i>Management Information Systems</i>; McGraw Hill
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Course: Soft Skills - II			Semester: III
Course Code: MBA 604 P	L T P	0 0 2	Credits: 1

OBJECTIVE	To familiarize students with soft skills like Communication Skills, People Skills, etc. and personality traits to enhance their interactions, job performance and career prospects.
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Apply conceptual understanding of communication into everyday practice. 2. Understand the importance of teamwork and group discussion skills. 3. Apply techniques for self-awareness and self-development. 4. Develop insights on how to cope up with work stress and students will develop time management skills. 5. Apply business etiquette skills on professional front and will bring a change in organizational culture.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Communication Skills: Communication Skills in Business Context— Verbal Communication, Nonverbal Communication- Kinesics, Paralanguage and Proxemics. Writing - Business Reports and Executive Summaries Presentation Skills - Multimedia Presentation: Understanding the Basics, Features, Structure, Tools like Canva, Prezi, Presentation and Interaction. Public Speaking- Art of Public Speaking, the Rhetoric of making a Public Speech, Exploring Rhetorical Elements through various Videos.</p> <p>Interview Readiness: Cover Letter Writing for B-school Graduates, Interview Formats: HR, Technical, Panel, Stress Test, STAR Method for Behavioral Interviews, Mock Interviews with Individualized Feedback</p> <p>Global Business Etiquette and Professional Conduct: Professional Grooming and Dressing for Global Business - How to carry yourself; Dressing- Selection of Proper Attire as per the Situation. Punctuality. Social Etiquette- Meeting People, Greetings, Introductions, Dining & Corporate Event Etiquette. Professional Etiquette - Phone Etiquette - Tone and Pitch of the Voice, Voice Mail, Correspondence Etiquette, Video Call Etiquette, Netiquettes, Cross-Cultural Business Etiquette (Asia, Europe, U.S.), Networking Skills (In-person and Virtual)</p>
TEXT BOOK	1. Nitin Bhatnagar; <i>Effective Communication and Soft Skills</i> ; Pearson Education India
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Daniel Coleman; <i>Emotional Intelligence</i>; Bantam Book, 2006 2. Butterfield Jeff; <i>Soft Skills for Everyone</i>; Cengage Learning, 201

Course: Business Analytics-II			Semester: III
Course Code: MBA 605P	L T P	0 0 4	Credits: 2

OBJECTIVE	To familiarize students with how managers use R Programming to formulate and solve business problems and to support managerial decision making. To become familiar with the processes needed to develop, report, and analyze business data.
COURSE OUTCOMES	Upon completion of the course students should be able to: 1) Understanding the basic concept of R 2) Understanding the basic concept of Data files using R. 3) Analyse the basic concept of probability concepts and probability distributions. 4) Apply the basic concept of Hypothesis testing Using R. 5) Apply Parametric Tests.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Basics Of R Programming: Introducing to R – R Data Structures , Creating matrices – Matrix operations – Applying Functions to Matrix Rows and Columns – Adding and deleting rows and columns, lists – Creating lists – General list operations – Accessing list components and values – applying functions to lists , Creating Data Frames – Matrix-like operations in frames – Merging Data Frames – Applying functions to Data frames</p> <p>Working With Various Data Files Data Cleaning – Data Manipulation Descriptive Statistics – Summary statistics [Mean/Median/Mode/Quartiles, Percentiles / Standard Deviation / Coefficient of Variation/Measures of Skew ness & Kurtosis]</p> <p>Importance of data visualization- types of charts - Bar/Pie Charts -Histogram -Box and Whisker Chart -Scatter Diagram – Introduction to ggplot</p> <p>Hypothesis testing Using R: Tests for Mean and Proportions –One Sample test [One Sample z Test - One Sample t Test-] , Testing of Hypothesis (two sample test)</p> <p>Parametric Tests using R: Univariate Analysis, Bivariate Analysis, Chi Square Analysis, Analysis of Variance, Correlation, Regression Analysis.</p>
TEXT BOOK	1. Dr. Bharti Motwani, <i>Data Analytics with R</i> , Wiley 2. Sandeep Rakshit, <i>R for Beginners</i> , Mc Graw Hill
REFERENCE BOOK/ SUGGESTED READING	1. Rao, H.P; <i>Business Analytics An Application Approach</i> , P H I Learning Pvt. Ltd 2. Prasad, R. N. and Acharya, S.; <i>Business Analytics</i> , Wiley

Course: CREATIVE PROBLEM SOLVING AND DESIGN THINKING			Semester: III
Course Code: MBA 606 P	L T P	0 0 2	Credits: 1

OBJECTIVE	To expose the student to new modes of thinking such as creative problem solving and Design Thinking
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Distinguish between logical and creative thinking. 2. Develop one's creative thinking tool kit. 3. Identify Creative solution to Business problems. 4. Evaluate the Innovative processes in organizations.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Creative Problem Solving: Role of Creativity and Innovation in managerial Life , Logical, Convergent and Divergent Thinking Blocks to Creativity. Creative Thinking Arsenal: Fluency, Flexibility, Brainstorming, Synaptic Edward De Bono's Concept of Lateral Thinking, Lateral Thinking Tools – PMI, OPV, Six Thinking Hats, Six Action Shoes etc. Group Activities and case studies.</p> <p>Design Thinking: Design Thinking Process, Empathize with People, Design for You, Define the Design Challenge, Prototype and Test. Innovation in Organizations, Activities, real life cases and Role Plays</p>
TEXT BOOK/ REFERENCE BOOK	<ol style="list-style-type: none"> 1. Khandwalla, Pradip N.; <i>Fourth Eye: Excellence through Creativity - A Fresh Approach to Effective Management of Individual, Organizational and Social Creativity</i>; AH Wheeler Publishing Co, Ltd. 2. Khandwalla, Pradip, N.; <i>CORPORATE CREATIVITY: The Winning Edge</i>; kabdwalbookdotcom 3. Vijay Kumar; <i>101 Design Methods: A Structured Approach for Driving Innovation in Your Organization</i> Kindle Edition 4. Klein, Gary; <i>Seeing What Others Don't: The Remarkable Way We Gain Insights</i>; Public Affairs, a member of the Perseus Books Group

Course: BUSINESS INTELLIGENCE USING POWER BI			Semester: IV
Course Code: MBA 607 P	L T P	0 0 2	Credits: 1

OBJECTIVE	The objective of the course is to work with Power BI to easily connect data sources, visualize, share and publish your findings with anyone and everyone.
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand basic concepts of business intelligence using the BI tool. 2. Retrieve and manipulate data from one or more sources. 3. Transform and combine data from multiple sources. 4. Visualize and interpret data based on various analyses.
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Introduction to Power BI: What is Business Intelligence? What is Microsoft Power BI? Why Power BI? Power BI Components, Power BI Architecture, Types of Power BI Tools, Installation of Power BI Desktop, Introduction to Power BI User Interface</p> <p>Managing Data Source in Power BI: Managing Pages in Power BI, Data Sources in Power BI, Importing Data</p> <p>Data Formatting with Power BI: Introduction to Query Editor, Data Types, Data Transformation, Change the Data Type of Columns, Creating Bins, Combining Data from Multiple Tables, Date Formatting, Pivot Table, Data Sorting</p> <p>Data Visualization: Card, Line Chart, Area Chart, Clustered Chart, Donut Chart, Funnel Chart, Pie Chart, Ribbon Chart, Stacked Area, Scatter Chart, Map, Filled Map,</p> <p>Power BI Filters and Calculated Fields: Slicer, Basic Filters, Advanced Filters, Top N Filters, Filters on Measures, Page-Level Filters.</p>
TEXT BOOK	1. Errin O'Connor, " <i>Microsoft Power BI Dashboards Step by Step</i> ", Pearson
REFERENCE BOOK/ SUGGESTED READING	1. Ferrari Alberto, "Introducing Microsoft Power BI", Microsoft Press

Course: STUDENT INTERNSHIP PROGRAM (SIP) & VIVA- VOCE			Semester: III
Course Code: MBA 608	L T P	0 0 0	Credits: 6

OBJECTIVE	Objective: To assess the performance and learning of the student during the Student Internship Program.
COURSE DETAILS	The student will undergo a Student Internship Program after Semester – II. A Report has to be submitted. This will be followed by a Presentation and Viva-Voce.

SEMESTER IV

Course: STRATEGIC MANAGEMENT			Semester: IV
Course Code: MBA 609	L T P	3 0 0	Credits: 3
OBJECTIVE	To familiarize the students with the concept of corporate and business strategy and its formulation, implementation and evaluation.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand various perspectives and concepts in the field of Strategic Management. 2. Understand the basic concepts, principles and practices associated with strategy formulation and implementation. 3. Understand industry analysis, environment analysis and competitive analysis in brief. 4. Analyze the corporate level strategies for effective decision making. 5. Analyze different aspects of strategy implementation, evaluation and control in real life situations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Definition, Scope, Characteristics and importance of Strategic management, Strategic management process, Dimensions and levels of strategy.	05
	2.	Strategy Formulation: Strategic planning, Strategic decision making, Vision, Mission and purpose, Objectives and goals of a business organization. Business Model. Balanced Scorecard Approach to Objective-setting. Critical Success Factors, Key Performance Indicators.	08
	3.	Environmental Appraisal: External analysis: Porter's 5 forces model, industry organizational view (I/O view), industry analysis, environment analysis and competitive analysis, EFE Matrix, Competitive Profile Matrix, Internal analysis: resource-based view of the firm, capabilities, core competence, VRIO framework, Value chain analysis, IFE Matrix.	10
	4.	Strategic Analysis and Choice: Corporate level strategies: growth, stability, retrenchment and combination, integration strategies, and diversification strategies, Cooperative level strategies: mergers and acquisitions, joint ventures, and strategic alliance, Business level strategies: Michael Porter's generic strategies, BCG matrix, GE matrix, Ansoff Matrix.	09
	5.	Strategy Implementation, Evaluation and Control: Resource allocation, Strategy and different types of organizational structures, McKinney 7S framework, Barriers to strategy implementation, Structural, behavioral, functional and operational aspects of strategy implementation. Symptoms of malfunctioning of strategy, Strategic control and Operational Control: Analyzing variances and Evaluation techniques.	13
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Dess, G., Lumpkin, G. T., Eisner, Alan E. and McNamara G; <i>Strategic Management: Text and Cases</i>; McGraw Hill 2. Thompson, Arthur A. Jr. and Strickland, A. J.; <i>Strategic Management: Concepts and Cases</i>; McGraw Hill 		
REFERENCE BOOK/	1. Hitt, M. A., Ireland, Duane R. and Hoskisson, Robert E.; <i>Strategic Management Concepts</i> ; Cengage Learning		

SUGGESTED READING	<ol style="list-style-type: none">2. Pearce II, John A., Robinson, Jr., Richard, B. and Mital, Amita; <i>Strategic Management: Formulation, Implementation and Control</i>; McGraw Hill3. Kazmi, Azhar; <i>Strategic Management and Business Policy</i>; McGraw Hill4. Haberberg, Adrian and Rieple, Alison; <i>Strategic Management: Theory and Application</i>; Oxford University Press5. Ansoff, H. Igor; <i>Strategic Management</i>; John Wiley6. Drucker, Peter F.; <i>Management: Task, Responsibilities, Practices</i>; Harper Collins.
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Course: BUSINESS ETHICS & CORPORATE SOCIAL RESPONSIBILITY			Semester: IV
Course Code: MBA 610	L T P	3 0 0	Credits: 3
OBJECTIVE	To acquaint students with the ethical framework within which corporations should function and to give an overview of the corporate governance system and corporate social responsibility. Acquainting the students with societal needs and enabling a community to connect.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the concept of Business ethics and its relevance in organization. 2. Understand the scriptures of Indian ethics & their application in business. 3. Understand ethical issues in different dimensions of business. 4. Analyze the emerging trends in corporate social responsibility in the global and Indian context and its impact on stakeholders. 5. Adapt to the community requirements by performing field activities. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Business Ethics: Concept of Ethics, Ethics and Morality, Sources of ethics, Theories of business ethics: Deontological and Teleological theories, Utilitarianism (Rule & Act), Egoism.	10
	2.	Indian Ethos: Principles of Indian ethos, Teachings from Major Indian Scriptures and its Application of Indian Ethos to Management.	10
	3.	Ethical Issues in Business: Impact of Ethics in business, Ethical issues in capitalism and market systems, Ethics in marketing, Ethics in finance, Ethics in human resource, Intellectual property rights (Designs, Patents, Trademarks, Copy rights), Ethical issues in IPR.	11
	4.	Corporate Social Responsibility: Concept, Rationale of CSR, Drivers of CSR, Social responsibility theories, Pyramid of Corporate social responsibility. Contemporary CSR concepts: corporate sustainability, Reputation management and social impact management, Triple Bottom Line, CSR and business ethics, Environmental aspect of CSR, CSR models (Redman's). Cases on Corporate social responsibility. Field work: Complete a mini project on Community Services.	14
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Velasquez; <i>Business Ethics: Concepts and Cases</i>; Pearson Education 2. Mallin, Christine A.; <i>Corporate Governance</i> (Indian Edition); Oxford University Press 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Hartman, Laura P. and Chatterjee, A.; <i>Business Ethics</i>; McGraw Hill 2. Blowfield, Michael, and Murray Alan; <i>Corporate Responsibility</i>, Oxford University Press 		

Course: SPIRIT OF ENTREPRENEURSHIP			Semester: IV
Course Code: MBA 611	L T P	2 0 0	Credits: 2

OBJECTIVE	To familiarize students with entrepreneurship developments, process of establishing an enterprise and the types of support available from various government and non-government institutions.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Develop entrepreneurship as a field of study and as a profession. 2. Understand the creative process of opportunity identification and screening. 3. Understand the importance of innovation in the creation of sustainable competitive advantage and to test a business model to ensure its viability. 4. Develop a well-presented business plan that is technically and economically feasible. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Entrepreneurship: Concept, theories, process, factors impacting emergence of entrepreneurship, Growth of entrepreneurship environment in India, Role of entrepreneurship in economic development, Traits of successful entrepreneurs; Managerial vs. entrepreneurial approach, Entrepreneurial promotion in India.	06
	2.	Starting the Venture: Creative thinking, Business idea generation (Business cases on entrepreneurship), Environmental scanning pertaining to business idea: Feasibility study: Market feasibility, Technical/ Feasibility operations, financial feasibility, Project Report.	06
	3.	Functional Plans: Drawing a business plan, selecting organization type for business, Organization structure and Job designs, designing financial plan: Investment, Incomes and Expenditure, understanding profitability.	09
	4.	Sources of Finance: Understanding Financial Framework: Debt Equity Financing, Commercial banks, Financial Institutions supporting entrepreneurs, Angel Investors. Venture Capital & Private Equity Firms.	09
		Total Hours	30
TEXT BOOK	<ol style="list-style-type: none"> 1. Charantimath, Poornima, <i>Entrepreneurship Development & Small Business Enterprises</i>, Pearson Education. 2. Hisrich, Robert D., Michael Peters and Dean Shepherd, <i>Entrepreneurship</i>, Tata McGraw Hill, New Delhi 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Barringer, Brace R., and R. Duane Ireland, <i>Entrepreneurship</i>, Pearson Education. 2. Kuratko, Donand and Richard Hodgetts, <i>Entrepreneurship</i>, Cengage Learning India Pvt. Ltd., New Delhi 		

Course: Soft Skills- III			Semester: IV
Course Code: MBA 612 P	L T P	0 0 2	Credits: 1

OBJECTIVE	To bring enhancement in students through personality development training on Communication Skills, People Skills, and improving personality traits to embellish their profiles and enrich their career prospects.
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Apply the conceptual understanding of communication into everyday practice. 2. Understand the importance of teamwork and group discussion skills. 3. Design a meaningful and aesthetically sound resume/curriculum vitae. 4. Create and present insightful write ups pertaining to contemporary topics on business and other topics of both national and global importance. 5. Apply business etiquette skills on professional front and will bring a change in organizational culture
COURSE DETAILS	<p style="text-align: center;">Topic</p> <p>Introduction to Personality Development Program: Soft skills v/s Hard skills, Skills required for personality development. Professional opportunities for MBA graduates.</p> <p>Candidate's profile description: Concept and creation of an effective resume and curriculum vitae. Designing an influential Cover Letter. Practical sessions on making resume and cover letter.</p> <p>Preparing for Interviews and Group Discussion: Self-introduction: a two-minute self-marketing tool; mandatory inclusions in self-introduction. Group discussion: Factual topics, controversial topics, abstract topics and case- based group discussions. Interviews: Types, relevance and frequently asked questions during interviews with their psychological implications and most appropriate answers. Rigorous training through multiple in-class activities on self- introduction, extempore, group discussion and mock interview.</p>
TEXT BOOK	Nitin Bhatnagar; <i>Effective Communication and Soft Skills</i> ; Pearson Education India
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Daniel Coleman; <i>Emotional Intelligence</i>; Bantam Book, 2006 Butterfield Jeff; <i>Soft Skills for Everyone</i>; Cengage Learning, 201

Course: AI Applications in Business Course Duration: 30 Hours			Semester:4
Course Code: MBA 613	L T P	2 0 0	Credits: 2

OBJECTIVE	This course aims to equip MBA students with practical knowledge of Artificial Intelligence (AI) and its applications in business decision-making, automation, and strategic management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand core AI concepts and their impact on modern business strategy. 2. Develop AI-driven business models for competitive advantage. 3. Apply AI tools for market analysis, customer segmentation, and financial forecasting. 4. Leverage automation & AI-powered analytics for efficiency improvements. 5. Explore ethical and regulatory challenges surrounding AI in business. 		
COURSE DETAILS	Module No.	Topic	Hours
	1	Foundations of AI in Business Introduction to AI: Concepts & Evolution AI vs. Traditional Business Models Machine Learning & Neural Networks (Practical Examples) AI-Driven Business Intelligence & Predictive Analytics Case Studies: AI Success Stories in Leading Companies	10
	2	AI Applications Across Business Functions Marketing: AI-Powered Personalization & Consumer Behavior Forecasting Finance: AI for Fraud Detection, Risk Assessment, and Automated Trading Operations: AI-Driven Supply Chain Optimization & Inventory Management Human Resources: AI in Talent Acquisition & Performance Analysis Case Study Analysis: Real-World Implementations of AI	10
	3	AI-Driven Automation & Decision-Making Business Process Automation (AI & RPA Integration) Chatbots, Virtual Assistants & AI in Customer Service AI-Enhanced Strategic Decision Making AI Ethics, Compliance & Regulatory Challenges Using AI tools like Power BI, Tableau & Machine Learning APIs Blockchain & AI: Impacts on Finance & Security	10
		Total Hours	30
TEXTBOOK	1. <i>Artificial Intelligence for Business</i> – Rajendra Kumar 2. <i>Machine Learning for Business</i> – Doug Rose		
REFERENCE BOOK/ SUGGESTED READING	1. <i>AI Superpowers: China, Silicon Valley & The New World Order</i> – Kai-Fu Lee 2. <i>Data Science for Business</i> – Foster Provost & Tom Fawcett 3. <i>Deep Learning with Python</i> – François Chollet		

Course: DEEP IMMERSION PROJECT REPORT & VIVA-VOCE			Semester: IV
Course Code: MBA 614	L T P	0 0 0	Credits: 4

OBJECTIVE	To facilitate students towards: <ol style="list-style-type: none"> 1. Experiential learning 2. Fieldwork research 3. Effective, timebound teamwork 4. Documentation and presentation of fieldwork research
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Undertake an experiential learning research. 2. Learn the etiquette of teamwork. 3. Familiarize students with a research issue in-depth. 4. Develop the skills to collect, organize and present their study.
COURSE DETAILS	<p style="text-align: center;">Activity Details</p> <p>Deep Immersion Planning (DIP) is an experiential learning component. DIP facilitates students to explore, understand, and experience the life-world issues of select social conditioning. Students are trained through exclusive sessions to prepare themselves for a collective study through interaction and informed discussion.</p> <p>Some of the aspects of the study include social, economic, cultural, historical, political, and aesthetic aspects of the lifeworld that includes studying trade, traditions, social customs, livelihood practices, festivals, rites, rituals, customs, practices, social transitions, communities, gendered realities, fine and performing arts practices, historical monuments and architecture and so on.</p> <p>The program is designed to be faculty-mentored, exploratory experiential learning, that allows students to understand an inclusive liberality through their studies of cultural and historical traditions.</p> <p>The deep Immersion will be organized through Student work teams of 10 to 12 members mentored by a faculty. They would be facilitated to develop a thematic topic related to any crucial aspect of the study location.</p> <p>The students shall be prepared through classroom sessions on the basics of research methodology: asking the right question, framing a basic research design, conducting surveys research, report writing, and presentations.</p> <p>The procedure followed will be:</p> <ol style="list-style-type: none"> a. initial coursework for students b. The students submit an initial report on the research question, along with their methods of inquiry. c. This is followed by a 7-days field visit under the supervision of a faculty mentor to their chosen site for the purposes of collecting primary data through experiential learning. d. Post the fieldwork, the students come back to the school and they are guided to analyse the data collected from their field experience. e. Under the guidance of the mentoring faculty the student should submit a 60-80 page final report on the lessons learnt. f. The program culminates with a public presentation and exhibition of their findings where the groups illustrate some of the unique features of their topic of study by employing various creative methods and presenting their findings before a panel of experts

Specializations Offered

MARKETING MANAGEMENT (MRM)

Course: PRODUCT AND BRAND MANAGEMENT			Semester: III
Course Code: MRM 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize students with the fundamental understanding to develop, measure, analyze and manage brands and product categories of an organization.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Identify the factors influencing product management, Analyze and compare product management strategies of different companies. Analyze the product concept generation, concept selection, concept testing, product architecture, design for manufacturing and prototype product. Develop a conceptual understanding of the models in brand management. Understand metrics and measures that evaluate brand equity. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Product Management: Introduction to product management, Products and their types, Product focused organization v/s Market focused organization, Product management: facts versus fiction, changes affecting product management.	06
	2.	Product Strategy: Product mix: length, width, depth and consistency, Product line extensions and contractions, Product line filling and line pruning, Strategies used in PLC (Product Life Cycle), Adopter Categories	10
	3.	New Product Development: Classification of new products, new product development process: idea generation, idea screening, concept development and testing, Business analysis, Product development, Market testing and commercialization, Product Diffusion and Adoption	10
	4.	Brand Management: Brand Management: Meaning, and characteristics of Brand, Branding Challenges and Opportunities, Brand vs Product. Brand Element: Criteria for choosing Brand Element, Brand image, Brand knowledge, Secondary Brand knowledge, Brand Identity, Brand Personality, Brand Architecture and Brand Hierarchy, Brand positioning.	10
	5.	Brand Equity: Steps in Brand Building: Brand Resonance Model, Brand value chain Model. Brand Equity: Meaning and Importance of Brand Equity, Brand loyalty, Internal Branding. Co-Branding. Strategic Brand Management process, Brand Extensions. Brand Audit.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Keller L Kevin; <i>Strategic Brand Management</i>; Pearson Education Lehmann, D.R and Winer, R.S; <i>Product Management</i>; McGraw Hill 		
REFERENCE BOOK/	<ol style="list-style-type: none"> Kapferer, J.N.; <i>The New Strategic Brand Management</i>; Kogan Page Aaker, D.; <i>Aaker on Branding: 20 Principles That Drive Success</i>; Sage Publications Majumdar, R.; <i>Product Management in India</i>; Pearson Education 		

SUGGESTED READING	4. Crawford, C. Merle and Anthony Di Benedetto; <i>New Products Management</i> ; McGraw Hill
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Course: CONSUMER BEHAVIOR			Semester: IV
Course Code: MRM 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with issues in and dimensions of consumer behavior.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the different models of consumer behaviour. Develop consumer insights relating to different products. Identify different factors that influence consumer behaviour. Evaluate the different marketing strategies that lead to consumer adoption. Students would develop their skill of understanding and analyzing consumer information and using it to create consumer-oriented marketing strategies. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Nature & scope of consumer behavior, Role of consumer behavior, Determinants of consumer behavior, Market Segmentation and Positioning.	06
	2.	Consumer Buying Process: Types of consumers buying behavior: extensive problem solving, limited problem solving, routine problem solving and dissonance reducing behavior, Consumer decision making process: Pre purchase, purchase and post purchase behavior, Organizational buying behavior.	11
	3.	Internal Determinants of Buying Behavior: Consumer Motivation and involvement, Personality and Self-Concept, Consumer perception, Consumer attitude & Learning.	10
	4.	External Determinants of Buying Behavior: Reference groups and group dynamics, Family as Consuming unit, Social and cultural environment of consumer: Social class and social stratification, Cultural, Sub-Cultural and Cross-Cultural influences. Social class and social stratification.	10
	5.	Innovation Diffusion and Consumer Adoption Process: Diffusion of innovation and consumer adoption process. Consumer satisfaction, Consumer Loyalty, Opinion leadership.	08
		Total Hours	45

TEXT BOOK	<ol style="list-style-type: none"> Ramesh Kumar S., Schiffman Leon, Kanuk, Leslie Lazar; <i>Consumer Behavior</i>; Pearson Loudon, David L. and Della, Bitta Albert J.; <i>Consumer Behavior</i>; McGraw Hill.
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Engel, James F., Roser, D. Blackwell, and Paul, W. Miniard; <i>Consumer Behavior</i>; Dryden Press Hawkins, Dal., Roger, J. Best and Kenneth, A. Coney; <i>Consumer Behavior Implication for Marketing Strategy</i>; McGraw Hill Hoyer, Wayne D. and Debovar, J. MacInnis; <i>Consumer Behavior</i>; Houghton Mifflin Company Wikie, William L; <i>Consumer Behavior</i>; Wiley Assael, H.; <i>Consumer Behavior and Marketing Action</i>; SouthWestern Publishing Company

Course: MARKETING OF SERVICES			Semester: IV
Course Code: MRM 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To acquaint students with the concepts and processes of services marketing and to enable them to solve problems relating to marketing of services.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Differentiate the process of marketing of goods as compared to marketing of services. 2. Identify the applications of marketing of services in different industries. 3. Understand the metrics to measure service quality. 4. Understand revenue management in service marketing. 5. Visualise future changes in the services industry. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Concepts and Issues of Services Marketing: Service, core and supplementary services, Service levels and delivery, Classification and characteristics of services, Emergence of service economy, Factors affecting growth of service sector.	06
	2.	Strategic Issues in Services Marketing: The service encounter, Managing customer expectations, Level of expectations, Zone of tolerance. customer perceptions of service, Consumer behavior in service marketing, Segmentation, Targeting, Differentiation and Positioning of services.	10
	3.	Concept of Service Marketing Mix: Price: pricing concepts and issues in pricing, pricing approaches, Pricing strategies. Promotion: internal and external communication and issues in services promotion, Place: service distribution, channel options, service distribution strategy, physical evidence and the servicescape.	10
	4.	Managing Service Quality & Service Design: Essentials of a service system, Components of services, designing the service, Service delivery system, Measuring service quality: Gap Model of service quality SERVQUAL. Managing Demand and Capacity.	10
	5.	Application of Services Marketing: Financial services, Hospitality services, Healthcare services, educational services and professional services.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Zeithaml, G. B., and Pandit, A.; <i>Services Marketing</i>; McGraw Hill 2. Lovelock, Christopher, Wirtz, Jochen and Chatterjee, Jayanta; <i>Services Marketing: People, Technology and Strategy</i>; Pearson Education. 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Nargundkar, Rajendra; <i>Services Marketing: Text and Cases</i>; McGraw Hill 2. Verma, H. V.; <i>Services Marketing: Text and Cases</i>; Pearson Education 3. Apte, G.; <i>Services Marketing</i>; Oxford University Press 		

Course: DIGITAL MARKETING			Semester: III/IV
Course Code: MRM 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To equip students with the skills and knowledge needed to develop effective digital marketing strategies, create compelling content, optimize campaigns, and measure their effectiveness and students will have a thorough understanding of the key principles and best practices in digital marketing and be able to apply them to real-world business scenarios.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the basics of digital marketing and the various channels that can be used for digital marketing. 2. To create and develop effective websites using WordPress, with a strong understanding of website planning, domain, and web hosting. 3. Develop an understanding of search engine optimization (SEO) techniques and be able to effectively optimize websites for search engines. 4. Understand the basics of social media marketing, develop effective social media campaigns, and measure their effectiveness. 5. To understand various Analytics tools of online marketing 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Digital Marketing: Digital Marketing: Introduction, Definitions and Significance of Digital Marketing. Traditional Marketing Vs Digital Marketing, Opportunity, implications, and the various channels of digital marketing, Digital Marketing Process, Digital Transformation framework, Online consumer behaviour.	06
	2.	Creating Digital Assets: Website Planning and Development: Types of websites, Keywords, Understanding Domain and Webhosting, Website Development Process, Building Website/Blog using CMS WordPress, Using WordPress Plug-ins, Creating Digital User-experiences.	08
	3.	Engaging Digital Audience: Content Marketing: The Importance, Objectives and Types of Content Marketing, Stages of the Content Marketing Funnel. Search Engine Optimization (SEO): Understanding the basics of search engine optimization, Keyword research and analysis, On-page and off-page optimization techniques, Understanding the role of content in SEO. Search Engine Marketing (SEM) and Pay-per-click (PPC) advertising: Creating effective search engine advertising campaigns, Understanding Google AdWords, Using keywords, ad groups, and targeting options to optimize campaigns.	12
	4.	Digital Representation: Social Media Marketing: Understanding the basics of social media marketing, Introduction of Social Media Channels: Facebook, Instagram, Linked-in, Twitter etc. Social Media Strategy, Creating effective social media campaigns. Email Marketing: Introduction and Significance, campaigns using Mail Chimp; Email Marketing Strategy and Monitoring. Video Marketing. Mobile Marketing.	11
	5.	Optimizing and Managing Digital Marketing: Using Digital Marketing Analytics Tools: Understanding Digital Marketing analytics tools. Google Analytics: Introduction and Significance, Google Analytics Interface and Setup, Understanding Goals and optimizing Conversions. Online PR and Reputation Management.	08

		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Chaffey, D., & Smith, P. R. <i>Digital marketing excellence: planning, optimizing, and integrating online marketing</i>. Taylor & Francis. 2. Stokes, R. Blake, S. and Education, Q.; <i>eMarketing: The Essential Guide to Marketing in Digital World</i>; Quirk eMarketing 3. Ryan, D. and Jones, C.; <i>Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation</i>; Kogan Page 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Chaffey, D., Chadwick, F.E.; <i>Digital Marketing: Strategy, Implementation and Practice</i>; Pearson Education 2. Punit Singh Bhatia, <i>Fundamentals of Digital Marketing</i>, Pearson Education. 3. Charlesworth, A. (2020). <i>Digital Marketing: A Practical Approach</i>, Routledge. 4. Ian Dodson, <i>The Art of Digital Marketing</i>; Wiley Publication 		

Course: SALES AND DISTRIBUTION MANAGEMENT			Semester: III/IV
Course Code: MRM 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the fundamental elements of the sales function and prepare them for a career in Sales.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Develop selling skills. 2. Analyze the processes involved in sales force management. 3. Identify strategies used to develop sales organisation. 4. Create and implement an effective Sales plan with strong sales techniques. 5. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Sales: The Nature and Role of Selling, Types of Selling, Selling as a career, Specific characteristics of a successful salesman, Theories of selling, The Nature and Role of Sales Management, The Marketing Concept, The Relationship between Sales and Marketing.	06
	2.	Process of personal selling & Sales Techniques: Personal Selling Skills, Need and Problem Identification, Presentation and Demonstration, Dealing with Objections, Negotiation, Closing the Sale, Follow-Up, Key Account Management, Relationship Marketing.	08
	3.	Building & Leading Sales Organization: Types of sales organizations and their structure, Functions and responsibilities of sales staff, Recruiting, Selection & Training. Territory Management. Salesforce motivation, Sales force compensation: Designing incentives and contests, Sales forecasting, Sales budget, Sales quota, Building sales reporting mechanism and monitoring, Salesforce appraisal.	11
	4.	Distribution Management: Definition of Distribution Management, Need and classification of Distribution Channels, Marketing Intermediaries, Type of Distribution Channels, Channel Selection Criteria, Patterns of Distribution, Flow in Distribution Channels, Value Addition through Distribution.	10
	5.	Channel Designing & Management: Channel design & planning process, Selection, Training & motivation of channel Partners, Channel design comparison factors, Channel design implementation: Vertical integration and outsourcing. Channel Management: Use of Channel power, Channel conflicts & coordination, Distribution management for services.	10
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Johnston, Mark & Marshall, Greg; <i>Sales Force Management</i>, McGraw-Hill-Irwin 2. Jobber, David & Lancaster, Geoff; <i>Selling Management</i>, Pearson Education. and <i>Sales</i> 3. Havaladar, K.K, Cavale, V.M, Sales & Distribution Management Text & Cases; Tata Mc Graw Hill. 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Spiro, R.L., Stanton, W.J., Rich, G.A.; <i>Management of Sales Force</i>; Tata McGraw Hill 2. Still, R.R., Cundiff, E.W., Govani, N.A.P.; <i>Sales Management</i>; Pearson Education 3. Dyche, J., <i>The CRM Handbook: A Business Guide to Customer Relationship Management</i>; Pearson Education. 		

Course: INTEGRATED MARKETING COMMUNICATION			Semester: III/IV
Course Code: MRM 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the nature, purpose and complexity in planning and execution of an effective integrated marketing communication program.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the perspective of Integrated Marketing Communications. Develop integrated marketing campaigns. Analyze the advertising and communication strategies of different companies. Compare the media strategies of different companies. Apply IMC concepts in developing a limited promotional campaign that includes message development and media selection for a product or service. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Communication Mix, Concept of IMC, IMC planning process, Communication process: traditional and alternative response hierarchy models, establishing objectives and budgeting, determining promotional objectives, DAGMAR approach, Promotional budget, Advertising spiral.	10
	2.	Creative and Media Strategy: The creative process: inputs, Advertising appeals and execution, Media planning and strategy: developing a media plan, Market analysis and establishing media objectives, Developing, and implementing media strategies, Evaluation and follow up.	10
	3.	Managing Mass Communication: Developing and managing advertising programs, Advertising, Sales promotion (Consumer and Trade), Public relation and support media.	10
	4.	Managing Personal Communication: Direct marketing, Personal selling process, Sales force design, Word of mouth, Interactive marketing.	08
	5.	Evaluation of Media: Advantage and Limitations of TV, Newspaper, radio, internet and other media.	07
		Total Hours	45

TEXT BOOK	<ol style="list-style-type: none"> Clow, K.E. and Baack, D.; <i>Integrated Advertising, Promotion and Marketing Communication</i>; Pearson Education. Belch, George E. and Belch, Michael E.; <i>Advertising and Promotion: An Integrated Marketing Communications Perspective</i>; McGraw Hill
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Kotler, P., Keller, K., Koshy, L. and Jha, M.; <i>Marketing Management-A South Asian Perspective</i>; Pearson Education Batra, R., Myers, J. G. and Aaker, D. A.; <i>Advertising Management</i>; Pearson Education Shah, K., D'Souza, A.; <i>Advertising and Promotions: An IMC Approach</i>; McGraw Hill

Course: B2B Marketing			Semester: III/IV
Course Code: MRM 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course aims to develop students' understanding of B2B marketing strategies, buyer behaviour, and inter-firm relationships to enable effective decision-making in industrial and institutional markets.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the fundamental concepts, scope, and strategic importance of B2B marketing in contemporary business environments. 2. Analyze the organizational buying process, including the roles within buying centers and factors influencing purchasing decisions. 3. Apply segmentation techniques and develop targeting and positioning strategies tailored to business markets. 4. Design and implement product, pricing, distribution, and communication strategies suitable for B2B markets. 5. Develop and manage long-term customer relationships using CRM tools and ethical practices in B2B contexts. 		
COURSE DETAILS	Module no	Topic	Hours
	1.	Foundations of B2B Marketing: Introduction to B2B Marketing: Definition and scope, Differences between B2B and B2C marketing, Importance of B2B marketing in the current business landscape. Business Market Environment: Market structure and demand characteristics, Types of business customers: commercial enterprises, government, and institutions, Classification of industrial products and services. B2B marketing in the digital era.	8
	2.	Organizational buying and buying behavior: Organizational Buying Behavior: The organizational buying process, Types of purchase or Buying Situations, Buying center roles and dynamics, Buygrid framework, Factors influencing organizational buying decisions.	7
	3.	B2B Market Segmentation and Targeting: Market Segmentation: Bases for segmenting business markets, Nested approach to segmentation, Criteria for effective segmentation. Targeting and Positioning: Evaluating segment attractiveness, Selecting target segments, Developing value propositions. Positioning strategies in B2B markets.	8
	4.	B2B Marketing Mix Strategies: Product and Service Strategies: Managing industrial product lines, New product development process, Product life cycle in B2B context. Pricing Strategies: Factors influencing B2B pricing decisions, Pricing methods: cost-based, value-based, and competition-based, Competitive bidding and negotiated pricing. Distribution and Channel Management: Designing and managing B2B marketing channels, Role of intermediaries: distributors, agents, and brokers, Logistics and supply chain management. Marketing Communications: B2B advertising and promotion, Personal selling and sales force management, Trade shows, exhibitions, and digital marketing in B2B.	12
	5.	Relationship Management and CRM in B2B Marketing: Customer Relationship Management (CRM): Importance of CRM in B2B markets, Strategies for building and maintaining long-term relationships, Key account management. Buyer-Seller Relationships: Types of relationships: transactional, collaborative, and strategic alliances. Trust and commitment in B2B relationships. Conflict resolution and negotiation strategies.	10
		Total hours	45

TEXT BOOK	<ol style="list-style-type: none"> 1. Havaldar, K. K., & Cavale, V. M. (2021). B2B marketing: Text and cases (5th ed.). Tata McGraw-Hill Education. 2. Hutt, M. D., Speh, T. W., & Hoffman, D. (2024). Business marketing management: B2B (13th ed.). Cengage Learning.
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Brennan, R., Canning, L., & McDowell, R. (2020). Business-to-business marketing (5th ed.). SAGE Publications. 2. Anderson, J. C., Narus, J. A., & Narayandas, D. (2009). Business market management: Understanding, creating, and delivering value (3rd ed.). Pearson Prentice Hall.

Course: INTERNATIONAL MARKETING			Semester: III/IV
Course Code: MRM 08 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The course aims at providing an understanding on how international marketing concepts and theories are useful in decision making. The course also provides an appreciation and application of various international marketing theories in different situations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Describe the concept of International Marketing Understand the influence of Environment in International Marketing Operations Assess the implications of major decisions to be taken in International Product Planning Analyse the outcomes of Pricing and Distribution Decision in International markets. Identify the impact of Promotion Strategies in international markets. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Nature, Importance and scope of international marketing, international market orientation and involvement, Physical, Demographic, Economic, Socio cultural, Political and legal environments in international marketing operations, Emerging trends in international marketing	06
	2.	International Product Planning: Major product decisions: product features and quality, product design, labelling, packaging, branding and product support services, Product standardization vs. adaptation, Managing product line, international product life cycle, new product development.	10
	3.	Pricing for International Markets: Factors affecting international price determination, international pricing process and policies, Delivery terms and currency for export price quotations.	10
	4.	International Distribution Decisions: Distribution channel strategy: international distribution channels, their roles and functions, Selection and management of overseas agents, international distribution logistics, Inventory management.	10
	5.	International Promotion Strategies: Communications across countries: complexities and issues, international promotion tools and planning: advertising, personal selling, publicity, and sales promotion, Developing International promotion campaign.	09
		Total Hours	45
TEXT BOOKS	1. Fayerweather, J.; <i>International Marketing</i> ; Pearson Education 2. Cateora, Philip R. and John, L. G.; <i>International Marketing</i> ; McGraw Hill		
REFERENCE BOOKS	1. Justin Paul; <i>International Marketing</i> ; McGraw Hill 2. Kotabe, Masaaki and Kristiaan, Helsen; <i>Global Marketing Management</i> ; John Wiley		

HUMAN RESOURCE MANAGEMENT (HRM)

Course Name: PERFORMANCE MANAGEMENT AND APPRAISAL			Semester: III
Course Code: HRM 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The course is designed to acquaint the students with the changing role and system of performance appraisal in business organizations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Design an organization's performance management process that supports organizational mission and strategy; Develop job-related performance standards and performance indicators that reflect the employee's range of responsibilities; 2. Identify and communicate appropriate actions with employees (e.g. training and development, wage increase, promotion, bonus etc.) based on their performance strengths and weaknesses. 3. Compare and contrast various organizational performance management programs to increase the effectiveness and apply the strategies for Rewards & Performance management. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Concept, Principles and Contribution of Performance Management, Dangers of poorly implemented performance management, Background to Performance Management, Performance Management and Performance Appraisal, Ethical Considerations and Legal Issues in Performance Management, Model and Process of Performance Management, Performance Management Cycle (Role Definition, Personal Developmental Plan, Performance Agreement, Performance Review), Balance Scorecard approach to PMS, Benchmarking process	16
	2.	Performance Appraisal System: Meaning, Features and Objectives of Performance Appraisal, Evaluation of a Performance Appraisal System, Factors affecting Performance Appraisal, Benefits of Performance Appraisal, Problems with Performance Appraisal, Essentials of a Good Appraisal System, Appraisal Methods on the basis of approaches (Ranking, Forced Distribution, Paired Comparison, Check List, Critical Incident, Graphic Rating 720 Degree Scale, BARS, 360 Degree Feedback), Potential Appraisal, Requirements for an Effective Potential Appraisal System, Performance Appraisal and Potential Appraisal practices in Indian Industries.	18
	3.	Competency Mapping: Concept of Competency and Competence, Constituents of Competencies, Types of Competencies, Competency, Significance of competency-based performance management, Competency based performance management strategy, Intervention and drivers, Trends and practices in selected industries, Competency mapping.	11
		Total Hours	45
TEXT BOOKS	1. Armstrong, M.; <i>Performance Management-Key strategies and Practical Guide</i> ; Kogan Page 2. Rao, T. V.; <i>Performance Management and Appraisal Systems</i> ; Response Books		
REFERENCE BOOKS	1. Hartle, F.; <i>Transforming Performance Management Process</i> ; Kogan Page 2. Sanghi, S; <i>The Handbook of Competency Mapping</i> ; Sage Publication.		

Course Name: INDUSTRIAL RELATIONS AND LABOUR LAW			Semester: IV
Course Code: HRM 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To impart knowledge about concepts, functions, importance and major theories of industrial relations & labour law and to familiarize students with various labour enactments and legislations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Analyze the present state of Industrial relations in India. 2. Develop critically informed analysis of management and union strategies. 3. Draw strategies related to collective bargaining, workers participation grievance redressal, and employee discipline and dispute resolution. 4. Understand the various processes and procedures of handling Employee Relations and apply aspects of employment law to real workplace situations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Industrial relations – An Overview, Meaning and Scope of IR, Perspectives/Approaches to IR, Major stake holders of IR, Evolution of IR in India, Changing Dimensions of IR in India, Impact of globalization on IR, ILO.	08
	2.	Trade Unions and Labor Problems: Concepts, Functions, Objectives, Structure, Kinds of Trade Unions, Problems of Trade Unions, Trade union movement in India, Trade Union Act, 1926, Role of Trade Unions in Collective Bargaining.	12
	3.	Dispute Resolution: Causes of Industrial Disputes, Standing Orders & Grievance Procedure, The Industrial Employment (standing orders) Act, 1946, Workmen's Compensation Act, 1923, Employees' Provident Fund, 1952. • The Industrial Disputes Act, 1947, Concept of Industry and workman, Dispute Resolution Methods & Machinery, Conciliation, Arbitration, Adjudication, Layoff, Closure, Retrenchment, Strike.	13
	4.	Labour Legislations: Evolution and importance of Labour Legislation in India, Protective Legislation, The Factories Act, 1948, Wage Legislation, Minimum Wages Act, 1948, Payment of Wages Act, 1936, Equal remuneration Act, 1976, Payment of Bonus Act, 1965, Payment of Gratuity Act, 1972, Social Security Legislation, Employees State Insurance Act, 1976, The Maternity Benefit Act, 1961, Unorganized Workers Social Security Act 2008.	12
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Srivastava, S. C. <i>Industrial Relations and Labour Laws</i>. Vikas Publishing House. 2. Padhi, P. K. <i>Labour and industrial laws</i>. PHI Learning Pvt. Ltd. 3. New Labour & Industrial Laws with Draft Rules; Taxmann 4. Labour Laws Bare Acts; Taxmann 5. Monappa, A.; <i>Industrial Relations and Labor Laws</i>; McGraw Hill. 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Venkata, R. C. S.; <i>Industrial Relations</i>; Oxford University Press. 2. 		

Course: EMOTIONAL INTELLIGENCE AND MANAGERIAL EFFECTIVENESS			Semester: IV
Course Code: HRM 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To make the students adept with managing emotions leads to building stronger relationships, succeeding at work and achieving career and personal goals.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Use the concept of Emotional Intelligence at their workplace. 2. Apply the concept of Self-Awareness, Self-Regulation and Self-Motivation to be an effective manager. 3. Use empathy and Social Skills to be an effective manager. 4. Assess the potential effects of emotional intelligence on various stakeholders. 5. Use Emotional Intelligence for increasing their effectiveness as a manager. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Emotional Intelligence: Introduction to Emotional Intelligence, understanding difference between Emotional Intelligence and Intelligence Quotient, Understanding emotions and its kinds, Nature of Emotional Intelligence.	11
	2.	Self-Awareness, Self-Regulation and Self-Motivation: Self-Awareness, Life Positions, Soothing Anxiety, Power of positive thinking, Emotional literacy, Johari window, Transactional Analysis,	11
	3.	Empathy and Social Skills: Empathy, Barriers to empathy, creating a powerful first impression, assessing a situation	07
	4.	Effect of Emotional Intelligence: Effect of EI for manager, Staff, Customers and Self	07
	5.	Applications of Emotional Intelligence: Work Life Balance, Stress Management, Conflict Resolution, Management of Change, Managing Diversity	09
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Goleman, Daniel; <i>Emotional Intelligence: Why it can matter more than IQ</i>, Bloomsbury 2. Dann, Jill; <i>Emotional Intelligence</i>, Hodder Education 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Lencioni, Patrick M. and Bradberry, Travis and Greaves, Jean; <i>Emotional Intelligence 2.0</i>; Talent Smart 2. Walton, David; <i>Introducing Emotional Intelligence: A Practical Guide</i>; Icon 		

Course: PRINCIPLES OF LEADERSHIP			Semester: III/IV
Course Code: HRM 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To know and understand critical underlying theories and concepts that guide the formation, and development of effective leadership.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand how ethics, morals, and values relate to their leadership dilemmas. Integrate their lived experiences into their leadership development process. Explore their own competence with regards to the dimensions of difference, especially as it relates to others in their communities. Enhance the impact of team leadership through active group participation. Engage in conflict productively and work toward conflict resolution. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Concept of leadership, Leadership skills, Managerial leadership roles, Leadership theory paradigm: Trait Theory, Behavioral Theory, Contingency theory, Situational Leadership, Path-goal Theory, Charismatic leadership theory, Transformational and transactional leadership theory, Mc-Gregor Theory.	09
	2.	Assessing Leadership and Measuring its Effects: Managerial incompetence, Leadership talent management, assessing leadership potential, measuring effects of leadership, Methodologies used to study leadership: qualitative and quantitative.	09
	3.	Leadership Traits and Ethics: Personality traits and leadership, Intelligence and leadership, Emotional intelligence and leadership, Cross-cultural leadership, Ethics and leadership, Case studies of Indian and international leaders.	09
	4.	Influencing: Power, Politics, Negotiation and Networking: Sources of leader's power, Leader motives, Types of influence tactics and power, Organizational politics, Networking, Negotiation.	09
	5.	Contemporary Issues in Leadership: Change management and strategic leadership, Role of leaders in creating a learning organization culture, Crisis leadership, Team leadership, Inspiring leadership, Spiritual leadership.	09
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> Achua, Christopher F. and Lussier, Robert N.; <i>Effective Leadership</i>; Cengage Learning. Yukl G.; <i>Leadership in Organization</i>; Pearson Education 		
REFERENCE BOOKS	<ol style="list-style-type: none"> Hughes, Richard L., Ginnett, Robert C. and Curphy, Gordon; <i>Leadership: Enhancing the Lesson of Experience</i>; McGraw Hill Rowe, W. Glenn; <i>Cases in Leadership</i>; Sage Publications Spitzer, Robert J; <i>The Spirit of Leadership</i>; Executive Excellence Publishing 		

Course: HUMAN RESOURCE PLANNING AND DEVELOPMENT			Semester: III/IV
Course Code: HRM 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The objective of this course is to co-create a comprehensive view of Human Resource Planning & Development (HRPD) through assessment of theories and practices of HRD.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Develop employees for achieving personal and organizational goals. 2. Analyze the strategic issues and strategies required in manpower planning. 3. Estimate current competencies and skills and existing gaps in human resources. 4. Learn to address the realities of organizations while developing context specific strategies for human resource development. 5. Learn the techniques of HRD program application and trends like Competency mapping, Balanced Score Card etc. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Human Resource Planning: Human Resource Planning: objectives, concept, importance, process. Techniques of ascertaining HR Demand: Trend Analysis, Delphi technique, Nominal group technique, HR Budgets, Downsizing and restructuring. Assessing HRD needs, Training and development: need, design, conduct and evaluation.	07
	2.	Career Planning: Concept, objectives, career stages, significance of career planning, need and components of career planning, concept, approaches of career and process of development, Succession planning and management, concept and process of career planning.	10
	3.	Introduction to HRD and Activities: HRD matrix; HRD interventions; Role and competencies of HRD professionals; HRD audit; Approaches to employee development, action learning, assessment, and development centres; Intellectual capital and HRD; HRD mechanisms for workers; Industrial relations and HRD;	10
	4.	HRD Applications and trends: Training and Management development, organization development and change, HRD and diversity: diversity training, coaching and mentoring, Employee counseling; PCMM, Balanced Score Card, Appreciative inquiry; HR scorecard, Competency mapping, Integrating HRD with technology, Employer branding and other emerging trends.	09
	5.	HRD in Organizations: Selected cases covering HRD practices in government organizations, manufacturing and service industries and MNCs; International experiences of human resource development, Contemporary issues and challenges of human resource planning and development.	09
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Belcourt, Monica and McBey, Kenneth J.; <i>Strategic Human Resource Planning</i>; Cengage Learning 2. Werner, Jon M. and DeSimone, Randy L.; <i>Human Resource Development: Foundation, Framework and Applications</i>; Southwestern (Cengage Learning) 		

REFERENCE BOOKS	<ol style="list-style-type: none">1. Rao, T. V.; <i>Human Resource Development</i>; Oxford University Press2. Aswathapa, K.; <i>Human Resource and Personnel Management Text and Cases</i>; McGraw Hill3. Desimone and Harries; <i>Human Resource Development</i>; Thomson Learning4. Phillips, J. M. and Gully, S. M.; <i>Strategic Staffing</i>; Pearson Education
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Course: HR ANALYTICS			Semester: III/IV
Course Code: HRM 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To develop the ability to apply HR analytics and predictive Modelling techniques for data-driven decision-making across core human resource functions.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Explain the role, frameworks, and implementation steps of HR Analytics to enhance organizational decision-making. 2. Apply predictive Modelling techniques and regression analysis to forecast HR outcomes and improve performance. 3. Analyze HR research data using statistical tools and interpret HR metrics for strategic decision-making. 4. Develop predictive models for recruitment by preparing, splitting, and analyzing HR datasets. 5. Evaluate turnover data using predictive models to recommend retention strategies 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	HR Analytics in Perspective Role of Analytics, Defining HR Analytics, Significance of HR Analytics, Steps to implement HR Analytics. HR Analytics Frameworks: LAMP framework, HCM framework, Talent ship framework, overarching components of effective analytics framework.	10
	2.	HR Analytics and Predictive Modelling Steps involved in predictive analytics: Determine key performance indicator, analyze and report data, interpreting the results and predicting the future, Metrics and Regression analysis and Causation, Multiple Regression to Predict employee Performance.	09
	3.	HR Business Process and HR Metrics Statistics and Statistical Modelling for HR Research and HR Decision making, HR Research Tools and Techniques, Data Analysis for Human Resources, Parametric and Non-Parametric Tests, HRIS for Decision making, HR Metrics, Recruitment Metrics, Metrics for Training and Development Function, Ethics of measurement and evaluation, HR Dashboards: Statistical software used for HR Analytics	09
	4.	Predictive HR Analytics in Recruitment and Selection Installation of packages and import datasets, normalizing a dataset, Splitting data into training and test data. Areas of application of analytics to recruitment, Reliability & Validity of Selection Methods.	09

	5.	Predictive HR Analytics in Turnover and Separation Turnover intent and job attitudes, KNN model performance, Model performance from accuracy to ROC, Exit interview analysis and Retirement analysis.	08
		Total Hours	45
TEXT BOOKS	1. Bhattacharya, D. K.; <i>HR Analytics</i> ; Sage Publishing House.		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Fitz-Enz, J.; <i>The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investment</i>; AMACOM Div American Mgmt Assn. 2. Edwards, M. R., & Edwards, K. <i>Predictive HR Analytics: Mastering the HR Metric</i>. Kogan Page Publishers. 		

	<p>3. Fitz-Enz, J., & John Mattox, I. I. Predictive analytics for human resources. John Wiley & Sons.</p> <p>4. Isson, J. P., & Harriott, J. S. People analytics in the era of big data: Changing the way you attract, acquire, develop, and retain talent. John Wiley & Sons.</p>
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Course: TALENT MANAGEMENT			Semester: III/IV
Course Code: HRM 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course intends to give insights on how to identify, integrate, and retain talent in an organization to deliver high performance.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Develop understanding to evaluate the talent management in the organization. 2. Familiarize with different approaches of talent management which will enable them to identify talent and develop retention strategies. 3. Develop and promote leadership competencies that will frame the behaviors expected for organizational success. 4. Identify when and how to use assessment tools for both talent selection, talent development and team formation purposes. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Basics of Talent Management: Talent Concept- the talent value chain, elements of talent friendly organizations, Talent Management Program: From Blueprint to Action, Talent Management System - Components of Talent Management System; creating TMS, challenges of TMS, Building blocks of talents management.	10
	2.	Succession Planning: Concept, succession management process, integrating succession planning and career planning, designing succession planning program, Succession planning challenges & opportunities, talent development budget, building a reservoir of talent, compensation management within the context of talent management, CEO Succession planning.	12
	3.	Enhancing and Retaining Talent: Potential identification and development, coaching for sustained & desired change, integrating coaching, training and development with talent management, The role of HR technology in Talent Management.	11
	4.	Competency mapping and Assessment: Concept and definitions of competency; Types of competencies, 5 level competency model, competency profiling, A Competency driven approach to Talent Management. Competency driven careers, Competency linked competitive remuneration.	12
		Total Hours	45
TEXT BOOKS	1. Berger A.L. & Berger D.R, The Talent Management Handbook, Mc Graw Hill Education India.		
REFERENCE BOOKS	1. Berger, L. A.; <i>Talent Management; Handbook</i> 2. Caplan, J., <i>The Value of Talent: Promoting Talent Management Across the Organization</i> . Cogan Page. 3. Merleved, P.; <i>Talent Management- A focus on Excellence</i> 5; Book Boon Pub. 4. Shermon. G.; <i>Competency based HRM: A Strategic resource for competency mapping, assessment and development centres</i> ; Mc Graw hill		

RETAIL MANAGEMENT (RTM)

Course: RETAIL STORE MANAGEMENT			Semester: III
Course Code: RTM 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To enable the students to understand and analyze retail store management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> To identify and solve problems about retailing, To select and use modern technological tools required for retail and merchandising applications, and to use information technologies effectively at the basic level, To have knowledge of store atmosphere, employee health and work safety, To work effectively individually and in a team, and to have self-esteem to take responsibility, To analyze and interpret consumer behaviors, and to manage sales, 		
5COURSE DETAILS	Module No.	Topic	Hours
	1.	Store Organization and Human Resource Management: Meaning and importance, Principles of effective store organization and management, Formal organization structures, Informal organization: objectives, policies and procedures, Staffing of Store Personnel.	08
	2.	Store Location and Design: Store Location: selecting a city, Types of locations within a city, Trading area analysis, Catchment area analysis, Site evaluation, Terms of occupancy, Site Selection, Location and site evaluation.	10
	3.	Store Layout and Space Planning: Store layout and space planning, Types of layouts, Role of visual merchandiser, Visual merchandising techniques, Exteriors, Interiors.	09
	4.	Store Operation: Importance of store operations, Store maintenance, merchandising handling and controlling, purchasing store supplies and equipment, Operations control: expense control, Store Maintenance, Insurance, Outsourcing, Credit management.	09
	5.	Store Management: Store management, Responsibilities of store manager, Store security, Parking space problem at retail centers, Facilities Management.	09
		Total Hours	45
TEXT BOOKS	1. Berman, Barry and Joel, R. Evans; <i>Retail Management: A Strategic Approach</i> , Pearson Education		
REFERENCE BOOKS	1. Reynolds, Jonathan and Christine, Cuthbertson; <i>Retail Strategy: The View from the Bridge</i> ; Elsevier 2. Oldfield, Brenda M.; <i>Contemporary Cases in Retail Operations Management</i> ; Macmillan 3. Oliver, Preston Robinson and Norris, B. Brisco; <i>Retail Store Organization and Management</i> ; Pearson Education 4. David, J. Rachman; <i>Retail Strategy and Structure: A Management Approach</i> ; Pearson Education		

Course: RETAIL SALES AND CATEGORY MANAGEMENT			Semester: IV
Course Code: RTM 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To enable students to learn the components of retail sales and category management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Discuss the sales, sales management and related concepts. 2. Explain the structure and objectives of a sales organization. 3. Understand the methodologies of category management. 4. Know the process of merchandise planning and preparing the OTB plan. 5. Know about strategic issues in category management and do SWOT analysis. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Retail Sales: Introduction to retail sales, Buyer-seller dyads, Personal selling in retail: its importance, steps in personal selling process in retail, lead generation, Models of communication: AIDA model, Lavidge Steiner model, Innovation-Trial-Adoption Model.	09
	2.	Retail Shopper Decision Making: Retail shopper decision making process: need/problem recognition, information search, outlet selection and purchase, alternative evaluation in shopping, Shopping behavior: post-purchase behavior, factors influencing shopper behavior, Consumer behavior in retail scenario.	09
	3.	Category Management in Retail: Concept: categories and their definitions, beneficiaries of category management, use of category management, Methodology of category management: data retrieval analysis and applications.	09
	4.	Merchandise Planning: Merchandise plan, Need for a merchandise plan, Process of merchandise planning, Preparing the OTB plan, An alternative model for merchandise planning, Unit planning method, Sales curve.	09
	5.	Strategic Issues in Category Management: Strategic issues in category management: understanding the purpose, Business situation analysis, Threat of substitutes, SWOT analysis, PLC in category management, Category roles in category management, Strategic moves and alternative portfolio model, Expansion or growth strategies for product categories, Analyzing and identifying potential product categories.	09
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Chiplunkar, R.M.; <i>Product Category Management</i>; McGraw Hill 2. Pradhan, S.; <i>Retailing Management: Text and Cases</i>; McGraw Hill 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Sivakumar, A.; <i>Retail Marketing</i>, Excel Books 2. Berman, Barry and Joel, R. Evans; <i>Retail Management: A Strategic Approach</i>; Pearson Education 3. Reynolds, Jonathan and Christine, Cuthbertson; <i>Retail Strategy: The View from the Bridge</i>; Elsevier 		

Course: E-RETAILING			Semester: IV
Course Code: RTM 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The course enables students to learn the essentials of e-retailing.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the application domain of e-Retailing. Plan the market mix strategies in e-Retailing. Understand the different channels of e-Commerce. Assess the importance of customer relationship management in e-retailing. Apply current trend analysis and measures of e-Retailing. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Foundation of e-Retailing: Meaning, Definition, Transition from traditional marketing to e-marketing, Demographics and targeting, Advantages of e-retailing, Shortcomings of e-retailing.	08
	2.	e-Retailing: The Application Domain: e-retailing practices, e-retailing application perspective, e-retailing Online merchandising techniques, Online store front, creating look and feel, Online brand management, Online purchasing.	08
	3.	e-Retailing: The Current Trends: Current trend analysis and measures, Current status of online retailing, e-retailing statistics.	06
	4.	e-Commerce: Procedures and methods, Meaning and usage, B2B model, B2C model, C2C model, B2G model, P2P model, M-commerce, e-commerce payment systems, e-payment security challenges, e-payment business risks, e-commerce security solutions.	08
	5.	e-Retailing: Marketing Mix: The roles of cyber intermediaries in e-retailing, e-retailing and supply chain management system, Concept of online pricing, Factors affecting online pricing, Different methods of online pricing, Price discrimination in e-retailing, Pricing strategies for information goods, Dynamics of pricing for e-retailing, Promotional strategies of e-retail business.	09
	6.	Customer Relationship Management in e-Retailing: Reconfiguring and redesigning the reward system for frequent buyer programs.	06
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> Pradhan, Swapna; <i>Retailing Management – Text and Cases</i>; McGraw Hill Hanson, W. and Kalyanam, K.; <i>E-Commerce and Web Marketing</i>; Cengage learning 		
REFERENCE BOOKS	<ol style="list-style-type: none"> Madaan, K.V.S.; <i>Fundamentals of Retailing</i>; McGraw Hill Rajaraman, V.; <i>Essentials of E-commerce Technology</i>; Pearson Education Roberts, Mary Lou; <i>Internet Marketing</i>; Cengage learning 		

Course: RETAIL BRANDING AND CRM			Semester: III/IV
Course Code: RTM 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The objective of course is to provide insights into importance and essentials of differentiated Retail Branding and managing continual customer relationship.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Know the basics of retail branding. 2. Understand the retail branding procedure. 3. Plan the CRM strategies in retailing. 4. Understand the branding strategies in retailing. 5. Know the importance of customer relationship management in services. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Perspectives on Retailing: World of retailing, Retail management: introduction, meaning, characteristics and emergence of organizations of retailing, types of retailers, multichannel retailing, customer buying behavior.	10
	2.	Retail Branding Basics: Branding perspectives, Branding challenges and opportunities, Brand equity concept, Strategic brand management process, Identifying and establishing brand positioning and values, Customer based brand equity, Brand positioning and values, Positioning guidelines.	12
	3.	Retail Branding Procedure: Planning and implementing brand marketing programs, choosing brand elements to build brand equity, Designing marketing programs to build brand equity, Product strategy, Pricing strategy, Channel strategy, Integrating marketing communications, Building brand equity.	11
	4.	CRM in Services and CRM Strategies: Status of CRM in India, Benefits of implementing a CRM system, CRM in customer service, Relationship marketing strategies and customer perceived service quality, Organizing for relationship management, Strengthening relationships that lead towards increased business.	12
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Dunne, Patrick M., Robert F. Lusch and Griffith, David A.; <i>Retailing</i>; Thomson Learning 2. Mukerjee, Kaushik; <i>Customer Relationship Management: A Strategic Approach to Marketing</i>; Pearson Education 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Gilbert, David; <i>Retail Marketing Management</i>; Pearson Education 2. Shajahan, S.; <i>Relationship Marketing</i>; McGraw Hill 		

Course: RETAIL SUPPLY CHAIN MANAGEMENT			Semester: III/IV
Course Code: RTM 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course will enable the students in understanding the retail supply chain management to achieve cost effective supply and distribution of goods and services to meet varying customer demand.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the functions of retail business and various retail formats and retail channels. 2. Understand the difference between Retail and Manufacturing Supply Chain. 3. Understand, key drivers of retail supply chain and how to select a retail store location. 4. Analyze Retail Market and Financial Strategy including product pricing. 5. Integrate the various Supply Chain partners and how to collaborate with them. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Retail SCM: Retail Supply Chain, Merchandise replenishment and budgeting, Types of retail supply chain Businesses, Retail supply chain change drivers, Supply chain risk, Supply chain metrics, Internationalization of retail supply chain.	09
	2.	Retail Strategy and Supply Chain: The conventional chain, Modules for supply chain design, Activity systems and process definition, Supply chain process improvement cycles.	08
	3.	Retail Supply Chain Process Improvement: Continuous Improvement Cycles, Collaboration with supply chain partners, Demand driven supply chain, Product tracking along retail supply chains.	10
	4.	Financial Success in Retail Supply Chain: Supply chain costs, Collaboration to reduce costs, Retail return loops, Logistics costs with emphasis on packaging.	09
	5.	Managing Inventory and Logistics: What to order, How often to order, Monitoring stock levels, Managing the logistics mix, Balancing cost and Service requirements.	09
		Total Hours	45
TEXT BOOKS	1. Ayers, James B. and Odegaard, Mary Ann; <i>Retail Supply Chain Management</i> ; Auerbach Publications		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Christopher, John Fernie and Martin, L.; <i>Logistics and Supply Chain Management</i>; Pitman 2. Chopra, Sunil and Peter, Meindl; <i>Supply Chain Management: Strategy, Planning and Operation</i>; Pearson Education 3. Sahay, B.S.; <i>Supply Chain Management for Global Competitiveness</i>; Macmillan 4. Weele, Arjan J. Van; <i>Purchasing and Supply Chain Management-Analysis, Planning and Practice</i>; Thomson Learning 		

Course: SPACE PLANNING AND MALL MANAGEMENT			Semester: III/IV
Course Code: RTM 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To acquaint students with the concept of merchandising and impart knowledge about effective space planning in malls.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Comprehend the mall architecture and mall project handling. 2. Selecting the mall locations and identify the catchment areas. 3. Understand the tenant relationship. 4. Analysis the location and space management. 5. Understand the leasing administration. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Mall Management: Concept of shopping malls, Growth of malls in India, Challenges of mall development in India, Comparison of Indian and western shopping malls, Shopping centers v/s Malls: the paradox, Types of shopping malls, Mall management.	09
	2.	Mall Development Process: Planning and design decisions, Site selection for shopping malls, Mall design process.	06
	3.	Location and Space Management: Choosing a store location, Importance, Trading-area analysis, Benefits, Geographic information system, Size and shape of trading areas for new stores, Reilly's law of retail gravitation, Characteristics of trading areas, Store allocation, Leasing negotiations, Maintenance and repairs, Security and safety procedures and regulations, Operational activities, Footfalls measurement, Common area management.	12
	4.	Tenant Relationship: Tenant relationship management, Selection of anchor Tenant, Tenant mix, Types of retail tenants, Anchor tenants, Tenant mix decisions, Owner-tenant relationship, Handling anchor tenants.	10
	5.	Leasing Administration: Leasing, Types of leasing, leasing process, Rent changes in leasing agreement, Best leasing practices, Lease preparation, Expiry and termination of lease agreement.	08
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Singh, H. and Srinivisan, S. R.; <i>Mall Management: Operating in Indian Retail Space</i>; McGraw Hill 2. Pradhan, S.; <i>Retailing Management: Text and Cases</i>; McGraw Hill 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Das, A.; <i>Mall Management with Case Studies</i>; Taxmann Publications 2. Berman, Barry and Joel, R. Evans; <i>Retail Management: A Strategic Approach</i>; Pearson Education 3. Reynolds, Jonathan and Christine, Cuthbertson; <i>Retail Strategy: The View from the Bridge</i>; Elsevier 		

Course: INTERNATIONAL RETAIL MANAGEMENT			Semester: III/IV
Course Code: RTM 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The course establishes to understand the nature of retailing with regards to international retailing environment, strategies and key theoretical concepts of retail industry.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Traditional and contemporary frameworks of global retailing. 2. Ways for an international retailing company to plan for and adapt to a complex, changing environment. 3. Principles of strategic retail management, which the international retailing companies should implement in building their retail strategy on the global market. 4. Understand the contemporary trends in global retailing. 5. Plan and design the integrated retail strategy at global level. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Global Strategy: Role of retailing, Retail Strategy, Wheel of retailing, Retail institutions by ownership, Retail institutions by store-based strategy mix, Global retailers, Future of retailing.	06
	2.	Retail Mix: Trading area analysis, Site evaluation, Site selection, Development of merchandising plans, Implementation of merchandising plans, Category management Retail pricing, financial aspects of retail operations, Non-financial aspects of retail operations.	10
	3.	Retail Strategy and Execution: Development of global retail strategy in food and non-food Business, Retail organization and HR management, Customer service, Performance standards Retail strategy and execution, Contemporary retail formats, evaluation of retailer's store atmosphere, Retail presentation, Retail store layout, design and visual merchandising, Store planning, Retail strategy and execution, Retail communications strategy, Strategic aspects of retail promotion, Evaluation of retailer's financial strategy, Electronic commerce.	12
	4.	Contemporary Trends in Global Retailing: Global consumer trends, Consumer behavior, Consumer attitudes towards shopping, Service retailing, Indian retail market structure and trends, Patterns of development of emerging retail markets	10
	5.	Integrated Retail Strategy: Development of shopping malls, Integrated strategy for mall-based retailers, Key success factors for retailers in mall environment, Putting together all components of retail mix	07
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Berman, B. and Evans, Joel R.; <i>Retail Management: A Strategic Approach</i>; Pearson Education 2. Gilbert, D.; <i>Retail Marketing Management</i>; Pearson Education 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Levy, M. and Weitz, A.; <i>Retailing Management</i>; McGraw Hill 2. Sternquist, B.; <i>International Retailing</i>; Fairchild Books & Visuals 3. Underhill, P.; <i>Why we buy: The science of shopping</i>; Simon & Schuster 		

	4.	Whalin, G; <i>Retail Success!</i> Willoughby Press
	5.	Nicholas, Alexander; <i>International Retailing</i> ; Oxford University Press

Course: MALL DYNAMICS AND MANAGEMENT			Semester: III/IV
Course Code: RTM 08 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The course is designed to familiarise the students with the fundamentals of Mall dynamics and Management. The course also aims at providing the students an opportunity to have in depth knowledge of Retail Marketing.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Comprehend the mall architecture and mall project handling. 2. Selecting the mall locations and identify the catchment areas. 3. Understand the components of Mall Management. 4. Analysis the location and space management. 5. Understand the process of handling a mall project. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Mall Management: Concept of Mall, Definition, types, genesis of malls, growth of malls globally, Diffusion of the concept to India, growth of malls in India, future trends and projections, advantages of mall over other retail formats, comparison of US and the Indian Malls.	12
	2.	Mall Architecture: A description of the various components of mall architecture and their significance like Facade, Atrium, parking, Circulation path and utilities	10
	3.	Handling a Mall Project: Choosing the macro and micro locations, Identifying the catchment, deciding tenant-mix and anchor tenant(s), Concept planning and retail zoning, A comment on suitability of popular retail formats as anchor tenants like Hyper markets, Department Stores, Multiplexes and Eating joints.	13
	4.	Components of Mall Management: Concept and tenant-mix planning, Lease Management, Marketing and space selling, Facilities and Utilities management, Security and information systems, Mall promotion and events management.	10
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Das, Abhijit; <i>Mall Management with Case Studies</i>; Taxmann 2. Singh, Srinivasan; <i>Mall Management: Operating in Indian Retail Space books</i>; McGraw Hill 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Levy, Michael and Weitz, Barton A.; <i>Retail Management</i>; McGraw Hill 		

Course: RETAIL MARKETING			Semester: III/IV
Course Code: RTM 09 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The main purpose of the course is to introduce the student to the area of retailing marketing and help them to understand the various issues faced by retailers and develop retail strategies.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Apply the principles, practices, and concepts used in retail marketing management. 2. Describe the complex nature and environment of retail marketing management together with the buying and selling of goods, services, and ideas to the final consumer. 3. Understand the conceptual and organizational aspects of the retail sector, including strategic planning and management in the retail industry. 4. Understand the key elements in planning, managing, and executing the retail marketing mix as they relate to the product, price, distribution, and promotion. 5. Identify the approaches to and guidelines used to analyze and solve retailers' problems and make decisions in retail organizations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Overview of Retailing Environment and Management: Introduction to retailing: economic significance, Functions of retailing, Retailing in India: evolution of retail in India, drivers of retail change and challenges to retail development in India, FDI in Retail.	07
	2.	Business Models in Retail: Retail institutions by ownership, Retail institutions by store-based strategy mix, Web, non-store-based, and other forms of non-traditional retailing, targeting customers and gathering information, Communicating with customers, Promotional strategies.	08
	3.	Understanding the Retail Consumer: Need for Studying Consumer Behavior, Factors Influencing Retail Shopper, managing retail services, servicing the retail customer.	06
	4.	Retail Mix: Merchandising decisions, Pricing Decisions in retail, Promotion and Communication Mix in Retail, Multi-Channel Retailing, Managing Retail Services, Category Management, Merchandise management and Planning Process, Retail Store Location and Supply chain Management: Trading-area analysis, Site selection, Store Layout, Design and Visual Merchandising.	09
	5.	Retail Operations : Supply Chain Management and Vendor Relation role in Retail, Management of Human Resources, Financial Management issues in retail, The strategic Profit Model, The Profit path, Store Operations – size and place allocation, Store Maintenance, Inventory Management, Retail Management Information.	09
	6.	Internationalisation of Retailing: Concept of Globalisation, Market entry Decision, The Internationalisation process, Culture, business and legal aspects in international retail management.	06

		Total Hours	45
TEXT BOOKS	1. 2.	Berman, B. and Evans, Joel R.; <i>Retail Management: A Strategic Approach</i> ; Pearson Education Pradhan, Swapna; <i>Retailing Management</i> ; McGraw Hill	
REFERENCE BOOKS	1. 2.	Michael, L. M. and Weitz, B. W., and Pandit, A; <i>Retailing management</i> ; McGraw Hill Newman, A. J., and Cullen, P.; <i>Retailing environment and operations</i> ; Cengage Learning	

FINANCIAL MANAGEMENT (FIN)

Course: INVESTMENT MANAGEMENT			Semester: III
Course Code: FIN 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with theories and practices of Security Analysis, Portfolio Management and Investment Decision Making Process.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. recognize and apply appropriate theories, principles and concepts relevant to securities analysis and portfolio management. 2. Develop a reasoned argument to the solution of problems relevant to securities analysis and portfolio management. 3. Analyse investment opportunities in stock markets 4. Formulate and exercise appropriate judgment in selecting and presenting information using various methods relevant to securities analysis and portfolio management. 5. Analyse and evaluate portfolio performance. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Investment: Concept, objectives, comparison with Speculation and Gambling, Selection of Investment in Global Market, stock market indicators.	07
	2.	Indian Capital Market: Overview, types, function powers, limitations and its Institutional Structure, SEBI and its Role.	06
	3.	Security Analysis: Concept of Valuation of Fixed and Variable Income Securities; Fundamental Analysis, Technical Analysis and Efficient Market Hypothesis. DOWS Theory, Elliott Wave Theory, Random Walk Theory.	12
	4.	Portfolio Analysis and Selection: Concept, composition, process, objectives, calculation of Risk and Return of Portfolio, Optimum Portfolio Selection, Markowitz Portfolio Theory, Capital Asset Pricing Model, Arbitrage Pricing theory and Characteristic Lines (SML, CML).	12
	5.	Portfolio Performance Evaluation: Sharpe Measure, Treynor Measure, Jensen Alpha, Fama's Measure, Portfolio Revision, Portfolio Rebalancing, Portfolio Revaluation, Guidelines for Investment Decision, Portfolio Management in India.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Chandra, Prasanna; <i>Investment Analysis and Portfolio Management</i>; McGraw Hill 2. Pandian, P.; <i>Security Analysis and Portfolio Management</i>; Vikas Publishing House 3. Khatri, D.; <i>Security Analysis and Portfolio Management</i>; Macmillan 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Jordan, R.J and Fischer, Donald. E; <i>Security Analysis and Portfolio Management</i>; Pearson Education 2. Avadhani, V.A.; <i>Security Analysis and Portfolio Management</i>; Himalaya Publishing House 3. Rustagi, R.P.; <i>Investment Analysis and Portfolio Management</i>; Sultan Chand 4. Luenberger, D.G.; <i>Investment Science</i>; Oxford University Press 		

Course: International Financial Management			Semester: III/IV
Course Code: FIN 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To equip students with the knowledge and analytical skills necessary to understand, evaluate, and manage financial decision-making in an international context, focusing on exchange rate mechanisms, global financial markets, foreign investment strategies, and risk management for multinational corporations.		
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Understand the role and functioning of multinational corporations in the international financial system and analyse the determination of exchange rates and balance of payments. 2. Explain the structure and functioning of foreign exchange markets and evaluate the use of derivatives, such as forwards, futures, swaps, and credit derivatives, in managing foreign exchange risk. 3. Identify, measure, and apply appropriate strategies to manage translation, transaction, and economic exposures in multinational financial operations. 4. Analyse international financing options and the role of national and Euromarkets in raising and allocating capital for multinational corporations. 5. Evaluate corporate strategies related to foreign direct investment and design efficient internal capital markets and global remittance policies within multinational enterprises. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	<p>The International Financial Management Environment: Introduction of Multinational Corporations and Financial Management: The rise of the multinational corporation; The internationalization of business and finance. The Determination of Exchange Rates: Setting the equilibrium spot exchange rate; Expectations and the asset market model of exchange rates; The fundamentals of central bank intervention; The equilibrium approach to exchange rates. The Balance of Payments and International Economic Linkages: Theory of Balance-of-payments & its categories; Trend of international flow of goods, services, and capital</p>	9
	2.	<p>Foreign Exchange Market: The Foreign Exchange Market: Organization of the foreign exchange market; The spot market; The forward market Currency, Interest Rate, And Credit Derivatives and Swaps: Interest rate and currency swaps; Interest rate forwards and futures; Credit default swaps</p>	9
	3.	<p>Managing Foreign Exchange Exposures: Measuring And Managing Translation and Transaction Exposure: Alternative measures of foreign exchange exposure; Managing translation and transaction exposure. Measuring and Managing Economic Exposure: Foreign exchange risk and economic exposure; The economic consequences of exchange rate changes; Identifying economic exposure.</p>	9
	4.	<p>The International Capital Markets: International Financing and National Capital Markets: Corporate sources and uses of funds; National capital markets as international financial centers; Development banks; Project finance.</p>	9

		The Euromarkets: The eurocurrency market; Eurobonds; Note issuance facilities and Euronotes; Euro-commercial paper; The Asia currency market	
	5.	International Investment Management: Corporate Strategy and Foreign Direct Investment: Theory of the multinational corporation; Designing a global expansion strategy Managing The Internal Capital Markets of Multinational Corporations: The value of the multinational financial system; Intercompany fund-flow mechanisms: costs and benefits; Designing a global remittance policy.	9
		Total Hours	45
TEXT BOOK	1. 2.	Apte, P. G.; International Finance-A Business Perspective; McGraw Hill Shapiro, A. C.; Multinational Financial Management; Pearson Education	
REFERENCE BOOK/ SUGGESTED READING	1. 2.	Vij, M.; International Financial Management; Excel Books Sharan, V.; International Financial Management; Pearson Education	

Course :- Behavioral Finance			Semester: III/IV
Course Code: FIN 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with an overview of important results of behavioural finance, as well as the implications of these results for the traditional finance theory and practice.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand and apply the main concepts of behavioural finance that help to reveal biases and heuristics in the decision-making process. Contrasting traditional and behavioural approaches. Understand different types of biases existing in the area of Behavioural Finance. Present the main results in the field of behavioural finance focusing on financial market processes. Explore behavioural finance, considering financial and investment decisions. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Introduction and evolution of Behavioural Finance, Utility of Money, Expected Utility vs Prospect Theory, pioneers in the field of Behavioural Finance.	10
	2.	Probability and Related Errors: Problems with Probability, Correlation and Causation Error, Probability Weighting.	10
	3.	Herd, Herd, Herd and Availability Bias: The Availability Heuristic, Framing, Mental Accounting and Expenditures, Loss Aversion, Representativeness, Overconfidence, Belief Perseverance and Confirmation Bias, Herd.	10
	4.	Money Management and Decision Making: Management of Money, Financial Decision making, Benefits of saving early, Market Bubbles and Crashes, anomalies.	10
	5.	Neurofinance: Concept, challenges and advantages.	05
		Total Hours	45
TEXT BOOKS	1. Forbes, William; <i>Behavioral Finance</i> ; Wiley		
REFERENCE BOOKS	1. Chandra, Prasanna; <i>Behavioral Finance</i> ; McGraw-Hill		

Course: PERSONAL TAX PLANNING & TAX MANAGEMENT			Semester: III/IV
Course Code: FIN 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To equip students with a comprehensive understanding of personal tax planning and management, enabling them to apply tax laws effectively, minimize tax liability through legal means, and make informed financial decisions for individuals by leveraging available deductions, exemptions, and investment avenues.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the fundamental concepts of tax planning, tax avoidance, tax evasion, and tax management, and analyse their implications in determining the residential status and incidence of tax on individuals and entities. Apply appropriate tax planning strategies to salary components and retirement benefits to legally reduce tax liabilities, including the use of tax relief under Section 89(1). Develop tax-efficient approaches for managing income from house property and business, including presumptive taxation schemes and eligible deductions under Sections 80C and 80EEA. Evaluate and implement tax planning measures for capital gains and income from other sources, including effective use of indexation, clubbing provisions, and gift taxation norms. Identify and assess various tax-saving investment options and applicable deductions and rebates under the Income Tax Act to optimize personal tax liability. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Concept of Tax Planning: Introduction to Tax Planning: Meaning of tax planning, tax avoidance, tax evasion and tax management; Objectives of tax planning; Case studies, i.e., practical questions relating to tax planning, tax avoidance, tax evasion and tax management. Residential Status Tax Planning with reference to residential status: Relevance of residential status in computing taxable income; Determination of residential status of an individual, HUF, company, other persons; Relationship between residential status and incidence of tax; Case studies, i.e., practical questions relating to residential status; Double taxation relief under Sections 90 and 91.	08
	2.	Tax Planning with reference to Salary Income: Salary Income: (i) Tax planning in respect of salary income: Bonus; Fees; Commission and Allowances; Valuation of Perquisites; Allowances; Retirement benefits like Gratuity, leave encashment, pension, Tax relief under Section 89 (1) (arrears of salary).	09
	3.	Tax Planning in relation to Income from House Property and Business Income: House Property: (i) Tax Planning in respect of self-occupied house property, let-out house property partly let out and partly self-occupied house property; and property used for business or profession of the assessee. (ii) Set-off and carry forward of house property losses. (iii) Tax planning related to Section 80C and Section 80EEA. Business Income: Tax Planning related to business income covering a) Presumptive schemes of computing business income (Section 44AD, 44ADA, 44AE) b) Provisions relating to maintenance of accounts (Section 44AA) c) Provisions relating to audit of accounts (Section 44AB)	10
	4.	Tax Planning in relation to Capital gains and Other Sources: Capital Gains: (i) Tax planning with reference to long-term and short-term capital assets and choice of price inflation indexation; Capital gains on equity and non-equity financial instruments.	09

		Other Sources: (ii) Tax planning in relation to gifts received from relatives and non-relatives Clubbing of Income: (i) Income of others' liable for clubbing.	
	5.	Tax Planning through investments: Tax planning through various tax saving investment avenues available for individual like Mutual funds, Unit linked insurance plans, bonds, Equity linked saving schemes, Post office savings schemes and others. Deductions: (ii) Deductions under Sections 80C, 80CCD (1), 80CCD (1B), 80CCD (2), 80D, 80DD, 80DDB, 80E, 80EEA, 80G, 80TTA, 80TTB, 80U Rebate: (iii) Rebate under Section 87A Preparation of Return: (iv) Payment of Tax, Tax Deduction at source etc.	09
		Total Hours	45
TEXT BOOK	1. Singhanian, V.K: Direct Tax Planning and Management, Taxman, Delhi -Taxman 2. Ahuja, G. and Gupta R.: Systematic Approach to Income Tax, Commercial Law Publishers (India) Pvt. Ltd 3. E. A Srinivas: Corporate Tax Planning: Corporate Tax Planning; Tata Mc – Graw Hill 4. Kushal Kumar Agrawal: Direct Tax Planning and Management; Atlantic Publishers		
REFERENCE BOOK/ SUGGESTED READING	1. Singhanian V. K: Direct Taxes Laws and Practices, Taxman, N. Delhi -Taxman 2. Ahuja, G. and Gupta R.: Direct Tax Ready Reckoner with Tax Planning, Commercial Law Publishers (India) Pvt. Ltd		

Course: ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) INVESTING			Semester: III/IV
Course Code: FIN 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To provide learners with a clear understanding of ESG investing, covering its history, key factors, analysis methods, and practical use in portfolio management, to support informed and responsible investment decisions.		
COURSE OUTCOMES	<p>Upon completion of the course students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the historical development, core concepts, and practical implications of ESG investing, and assess the influence of ESG factors on financial markets and investment decision-making. 2. Analyse key environmental issues and megatrends and evaluate their systemic impacts on business operations and investment risks. 3. Identify and assess material social and governance issues and integrate these considerations into responsible investment strategies. 4. Apply both qualitative and quantitative ESG analysis tools to integrate ESG factors into security valuation and portfolio construction. 5. Design ESG-aligned investment mandates and evaluate portfolio performance and client reporting practices that reflect ESG objectives and compliance. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to ESG Investing and ESG Markets: ESG Investing: History of ESG Investing: History of Sustainability, Early Phase of ESG Investing, Modern Responsible Investment; Definition and Scope of ESG Issues; Types of Responsible Investment; Challenges in Integrating ESG Factors; ESG Factors' Influence on Financial Performance; ESG Investing into Practice: Investment Decisions, Shareholder Engagement, Policy Engagement; ESG Market: Market Drivers of ESG and Challenges in ESG Integration.	09
	2.	Environmental Factors Key Environmental Issues: Climate Change, Pressures on Natural Resources, Pollution, Waste, and Circular economy; Systemic Relationships between Business Activities and Environmental Issues: The Relationship between Natural Resources and Business, Supply, Operational, and Resource Management Issues; Key "Megatrends" and Drivers Influencing Environmental Change in Terms of Potential Impact on Companies and Their Environmental Practices.	10
	3.	Social and Governance Factors Social Factors: Introduction to Social Factors; Social and Environmental Megatrends; Key Social Issues and Business Activities: Internal and External Social Factors; Identifying Material Social Factors for Investors; Application of Social Factors in Investments. Governance Factors: Corporate Governance: Accountability and Alignment; Formalized Corporate Governance Frameworks; Characteristics of Effective Corporate Governance: Board Structure, Transparency, Capital Allocation, and Business Ethics; Corporate Governance and the Investment Decision-Making Process.	10
	4.	ESG Analysis, Valuation, and Integration Different Approaches to Integrating ESG: Qualitative and Quantitative ESG Analysis; Tools and Elements of ESG Analysis; Elements of ESG Integration; Investment Decision and Portfolio Construction and ESG Integration; Discussion of ESG in Fixed Income and Differences to Equity; Challenges to ESG Integration; Company ESG Assessment and Rating.	10

	5.	Investment Mandates, Portfolio Analytics, and Client Reporting Clarifying Client Needs: Defining the ESG Investment Strategy; Fully Aligning Investment with Client ESG Beliefs; Developing Client-Relevant ESG-Aware Investment Mandates; Tailoring ESG Investment Approach to Client Expectations; Holding Managers to Account: Monitoring Delivery, Measurement and Reporting.	06
		Total Hours	45
TEXT BOOK	1. CFA Certificate in ESG Investing Curriculum: ESG Investing Official Training Manual, Paperback 2. Suman, V. <i>ESG and Sustainable Investing: From Principles to Practice</i> . Notion Press. 3. Hill, J. <i>Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio</i> . Academic Press.		
REFERENCE BOOK/ SUGGESTED READING	1. Nakajima, T. <i>ESG Investment in the Global Economy (SpringerBriefs in Economics)</i> . Springer. 2. Bradley, B. <i>ESG Investing For Dummies</i> . John Wiley & Sons. 3. Keeley, T. <i>Sustainable: Moving Beyond ESG to Impact Investing</i> . Columbia Business School Publishing. 4. Krosinsky, C., & Purdom, S. <i>Sustainable Investing: Revolutions in Theory and Practice</i> . Routledge. 5. Schoenmaker, D., & Schramade, W. <i>Principles of Sustainable Finance</i> . Oxford University Press. 6. Fulton, J. (Ed.). <i>Handbook of ESG Investing</i> . Edward Elgar Publishing. 7. PRI Association. <i>Principles for Responsible Investment: A Guide to ESG Data and Reporting</i> . PRI Association.		

Course: FINTECH			Semester: III/IV
Course Code: FIN 06 E	L T P	0 0 3	Credits: 3

OBJECTIVE	Understand FinTech innovations and how growth opportunities can be unlocked. Understand block chain technology and key concepts such as cryptography, crypto currency, and analysis. Understand the emerging uses cases and the underlying technology across digital payments and lending.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understanding FinTech Innovations and Strategy. 2. Identify Opportunities in FinTech and Block chain technologies. 3. Analyze the trading strategies for Crypto markets 4. Describe the FinTech use, risk and regulations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1	FinTech: Introduction and Overview FinTech: Introduction - Transformation – FinTech Evolution: Infrastructure, Banks Startups and Emerging Markets - Collaboration between Financial Institutions and Startups –FinTech Typology - Emerging Economics: Opportunities and Challenges.	06
	2	Big Data and AI for Fintech Big Data and AI for Fintech Applications of AI in FinTech; Role of AI in reshaping Financial Services; AI tools used in FinTech; AI and future of finance: digital payments, mobile wallets, payment platform, crypto assets and currencies.	06
	3	Fintech leadership in financial services Fintech in financial services and banking; Disruptive financial technologies; Fintech revolution with specific case studies; Crypto Assets and Cryptocurrencies; Fundamental analysis and trading strategies for Crypto Markets	08
	4	FinTech-associated risk and Regulations. Cyber risk in data-centric financial systems; Operational risk and its impact in FinTech; Risk associated with payment, Lending, and supply chain financing; Credit risk modelling and alternative approaches to FinTech regulations; Role of Central Bank in regulation; Regulatory licensing Scheme; Latest regulatory changes in India.	10
		Total Hours	30
TEXT BOOKS	1. Emerging FinTech: Understanding and Maximizing Their Benefits by Paul Taylor, (Business Expert Press).		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Chishti, S., & Barberis, J. <i>The Fintech book: The financial technology handbook for investors, entrepreneurs and visionaries</i>. John Wiley & Sons. (Springer). 2. Lynn, T., Mooney, J. G., Rosati, P., & Cummins, M. <i>Disrupting finance: FinTech and strategy in the 21st century</i> Springer Nature. 		

Course: EQUITY DERIVATIVES			Semester: IV
Course Code: FIN 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The Students will understand about basics of the equity derivatives, trading strategies using equity futures and equity options, clearing, settlement and risk management as well as the regulatory environment in which the equity derivatives markets operate in India.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the basics of Indian equity markets, various trading strategies that can be built using futures and options on both stocks and stock indices. Understand the clearing, settlement and risk management. Understand the operational mechanism related to equity derivatives markets. Know the regulatory environment in which the equity derivatives markets operate in India. Assist students in preparing for the National Institute of Securities Markets (NISM Series VIII) Equity Derivatives Certification Examination. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Basics of Derivatives: Basics of Derivatives, Types of Derivatives instruments, Derivatives Market – History & Evolution, Indian Derivatives Market, Market Participants, Types of Derivatives Market, Significance of Derivatives, Various risks faced by the participants in derivatives.	07
	2.	Understanding Index: Introduction to Index, Significance of Index, Types of Stock Market Indices, Attributes of an Index, Major Indices in India.	06
	3.	Introduction to Options, Futures, Forwards: Basics of options Pay off Charts for Options, Black Scholes Option Pricing Model, Option Greeks, Uses of Options, Futures and Forwards. Option Trading Strategies: Option Spreads, Straddle, Strangle, Covered Call, Protective Put, Collar, Butterfly Spread	14
	4.	Introduction to Trading Systems: Trading System, Selection criteria of Stocks for trading, Selection criteria of Index for trading, Adjustments for Corporate Actions, Position Limit, Using Daily Newspapers to Track Futures and Options. Introduction to Clearing and Settlement System: Clearing Members, Clearing Mechanism, Settlement Mechanism.	10
	5	Legal and Regulatory Environment: Securities and Exchange Board of India Act, 1992, Regulation in Trading, Regulations in Clearing & Settlement and Risk Management, Major recommendations of Dr. L. C. Gupta Committee, Major recommendations of Prof. J. R. Verma Committee. Accounting and Taxation: Accounting, Taxation of derivative transaction in securities.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> NISM Series VIII – Published by Taxmann NISM Series VIII – Published by NISM Hull, J.C., Options, Future & Other Derivatives, (Financial Derivatives) By PHI. 		
REFERENCE BOOK/	<ol style="list-style-type: none"> Gupta S.L., <i>Financial Derivatives, Theory, Concept and Problems</i>; PHI, Kumar S.S.S.; <i>Financial Derivatives</i>; PHI 		

SUGGESTED READING	3.	Chance, Don M; <i>Derivatives and Risk Management Basics</i> , Cengage Learning, Delhi.
	4.	Stulz M. Rene, <i>Risk Management and Derivatives</i> , Cengage Learning, New Delhi.

Course: DECENTRALIZED FINANCE			Semester: III/IV
Course Code: FIN 08E	L T P	3 0 0	Credits: 3

OBJECTIVE	To introduce students with the foundational knowledge of the growing phenomena of decentralized finance (DeFi) and its importance in today's world.		
COURSE OUTCOMES	<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how DeFi works and how it could revolutionize the market structure of finance. 2. Identify the advantages and disadvantages of DeFi compared to traditional finance. 3. Assess the role played by cryptocurrencies as mean of transaction and as store of value. 4. Describe the difference between digital currencies and cryptocurrencies. 5. Explain how smart contracts work and why they are important for finance. 6. Assess the risk that the value of digital assets diverges from the fundamental value (price bubbles) 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Decentralized Finance (DeFi) Fundamentals: Introduction to Decentralized Finance (DeFi), History of DeFi, Issues that DeFi Solve, Objectives and Advantages of DeFi Centralized (Traditional) Finance Vs Decentralized Finance (CeFi Vs DeFi).	10
	2.	Infrastructure of Decentralized Finance (DeFi): Infrastructure of Decentralized Finance (DeFi) Overview, Infrastructural Components of DeFi, Blockchain, Crypto Currency- Bitcoin: Birth of (Public) Blockchain, Smart Contract Platform- Ethereum: Birth of Smart Contract Platform, Oracles, Stable Coins, Infrastructure of a DeFi Platform, <i>Demo- Decentralized Finance (DeFi) Platforms</i> .	12
	3.	Blockchain Technology used in DeFi: Overview, Transactional Processing, DeFi Building Blocks and Services- Asset Tokenization, NFT, Stablecoin, Token Types, Non-Fungible Tokens, Decentralized Exchange, DEX vs. CEX, Decentralized Lending- Flash Loans.	11
	4.	Decentralized Finances Key Features and Risk: Overview, DeFi Security- Issues: Network attacks, Consensus attacks, Smart Contract code bugs, DeFi Protocol Composability attacks, Bridge attacks, Governance attacks. Technical structure security, Economic incentive security; DeFi Privacy.	12
		Total Hours	45

TEXT BOOK	<ol style="list-style-type: none"> 3. Campbell R. Harvey, Ashwin Ramachandran and Joey Santoro, DeFi and The Future of Finance, 2021, Wiley. 4. Eswar S. Prasad, The Future of Money, 2021, Harvard University Press. Baxter Hines, Digital Finance, 2021, Wiley.
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Shermin Voshmgir, Token Economy: How the Web3 reinvents the Internet?. Token Kitchen. 2. Seoyoung Kim, DeFi For Dummies, John Wiley & Sons,

Course: FINANCIAL ANALYTICS			Semester: III/IV
Course Code: FIN 09 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course aims to provide the students with the fundamental concepts, principles and approaches of corporate finance, enable the students to apply relevant principles and approaches in solving problems of corporate finance and help the students improve their overall capacities.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Learn Financial Data Analysis and Interpretation for Decision Making. 2. Adept various Statistical tools to be used for financial data analysis. 3. Do Analysis of risk and return of individual security and evaluation of portfolio performance. 4. Learn Statistical tools for predictive and forecasting Modelling with financial data using MS-Excel. 5. Construct and optimize asset portfolios as well as evaluate and model Risk on various financial assets. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: A Brief History of the Evolution of Analytic. Why is Analytics Important to the Finance Field, Business Model and Changing Role of Financial Department and Uses of Financial analytics Work with variable, Data files from other Statistical Tools and access and use of various packages for financial analytics, Introduction to Financial Securities.	07
	2.	Dataset Analytics, Visualization and Presentation of Financial Data: Understanding of Financial Datasets with descriptive statistics – univariate and bivariate analysis, Using financial Datasets for creating Graphs, Making Histograms, Bar graphs, Line graphs etc. with base and other packages.	10
	3.	Risk & Return Measurement of individual security and Portfolio: Importing daily stock price data, checking and plotting of data, risk and return of individual security and portfolio, Sharpe Ratio and Markowitz mean – variance optimization, Black Scholes Model.	10
	4.	Predictive Modelling and Forecasting: Predictive Modelling with Single, Multiple and Logistic Regression model, Time series Modelling, Examining time series, trend analysis, stationary time series, auto regressive moving processes and data transformation, GARCH & ARIMA Modelling.	10
	5.	Financial Statement Analysis using Excel: Balance Sheet, Income Statement, Cash Flow Statement, Understanding the Financial Statements and their interlinking and financial statement forecasting.	08
		Total Hours	45
TEXT BOOK	1. Bennett Mark J. & Dirk L Hugen; Financial Analytics with R; Cambridge University Press.		
REFERENCE BOOK/	1. Rustagi, R. P.; <i>Fundamentals of Financial Management</i> ; Taxmann publication (Pvt) Ltd. 2. Pandey, I.M., <i>Financial Management</i> ; Vikas Publishing House Pvt. Ltd.		

SUGGESTED READING	<ol style="list-style-type: none"> 3. Van Horne, J.C. <i>Financial Management and Policy</i>, Prentice Hall of India. 4. Levy, H. and Sarnat, M. <i>Principles of Financial Management</i>, Prentice Hall. 5. Brealey, Richard, A., Myers, Stewart, C. & Allen, Franklin; <i>Principles of Corporate Finance</i>; McGraw Hill. 6. Williams E & Doblman J; <i>Quantitative Financial Analytics</i> World Scientific Publisher. 7. Nielsen A; <i>Practical Time Series Analysis</i> O'Reilly Publication
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INTERNATIONAL BUSINESS MANAGEMENT (IBM)

Course: INTERCULTURAL MANAGEMENT			Semester: III
Course Code: IBM 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To enable the students to understand the impact of culture on international companies and to improve their cross-cultural competencies.		
COURSE OUTCOME	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Students will be able to understand the cross-cultural differences and dimensions. Students will be able to understand the role of cross-cultural competence. Students will be able to learn the concepts of intercultural communication and negotiate in the international market. Students will be able to learn about the organization culture and cultural diversity at international firms. Student will be able to learn the leadership and managing cultural diversity. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: The concept of culture, Key cultural values, Cross cultural differences, Globalization and culture, Role of culture in global business management, Cultural dimensions — Hofstede model and Trompenaars model	10
	2.	Cross-cultural competence: Cross-cultural competence — concept, Stages of Cross-cultural competence, Learning process, Resistance to cross-cultural competence, Cultural intelligence	08
	3.	Cross-cultural Communication and Negotiation: Intercultural interaction, Communicating and negotiating across the cultures, Principles of Effective Communication and Negotiation, Different communication and negotiation Styles, Challenges of communicating and negotiating across Cultures, High context vs. low context cultures, Global and culture-specific advertising	11
	4.	Intercultural Management in Organization: Organizational culture fundamentals, Relationship between national culture and organizational culture, Intercultural encounters and self-awareness, Ethical behavior in the global marketplace	09
	5.	Intercultural Teams and Leadership: Leadership in international organization, managing cultural diversity, managing inter-cultural teams, Creating Cultural Synergy, Motivating the Global Workforce	07
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> Barmeyer, C., & Franklin, P. (Eds.). <i>Intercultural management: a case-based approach to achieving complementarity and synergy</i>. Macmillan International Higher Education. Thomas, D. C., & Peterson, M. F. <i>Cross-cultural management: Essential concepts</i>. Sage Publications. Browaeys, M.J., & Price, R.; <i>Understanding Cross Cultural Management</i>, (3rd Ed.), Pearson 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Hall, Edward T. <i>Beyond Culture</i>, Garden City, New York, U.S.A: Anchor Press/Doubleday Hendon, D. W., Hendon, D. W., Hendon, R. A., Hendon, R. A., & Herbig, P. A.. <i>Cross-cultural business negotiations</i>. Greenwood Publishing Group. Robinson-Easley, C. A. <i>Beyond Diversity and Intercultural Management</i>. Palgrave Macmillan US Usunier, J. C. <i>International and cross-cultural management research</i>. Sage. Gannon, M.J & Newman,; <i>Handbook of Cross Cultural Management</i>, Blackweel. 		

Course: INTERNATIONAL TRADE AND EXPORT MANAGEMENT			Semester: IV
Course Code: IBM 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To enable the students to understand the impact of culture on international companies and to improve their cross-cultural competencies.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the concept of Import and Export. Understand the export import policy of India. Describe the process of Export Order. Identify the role of Export Promotion Organization. Analyze the impact of Export-Import policy of India on international business. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Import-Export Management: Overview Import-export management: key features, foreign trade: institutional framework and functions, documentation overview and facilitation, improving export performance.	09
	2.	Processing of Export Order Processing of export order, Nature and format of export order, Examination and confirmation of export order, Manufacturing or procuring goods, Pre-Shipment inspection, Transportation of goods to port of shipment, Dispatch of documents by forwarding agent to the exporter, Presentation of documents to bank, Claiming export incentives, Duty drawback.	12
	3.	Export Promotion Organization Export promotion organization: its objectives, Importance of institutional infrastructure, Govt. policy making and consultations, FERA and FEMA, Foreign Trade policy. Indian trade promotion organization (ITPO), Indian Institute of Foreign Trade (IIFT), Indian Institute of Packaging (IIP), Indian Counsel of Arbitration (ICA), Federation of Indian Export Organization (FIEO), Export Processing Zones (EPZ), Export Oriented Units (EOUs), Facilities for Units in EOUs, EPZs, EHTPs and STPs.	15
	4.	Export Import Policy of India Meaning and General objectives, Highlights and implications of latest Export-Import Policy. Significance of EXIM Policy, Impact on the Indian Economy.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Francis, C.; <i>International Trade and Export Management</i>; Himalaya Publishing House Khurana, P.K.; <i>Export Management</i>; Galgotia Publishing 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Varma, M. L.; <i>International Trade</i>; Vikas Publishing House Kumar, A.; <i>Export and Import Management</i>; Excel Books Govt. of India; <i>EXIM Policy</i>; Ministry of Commerce and Industry Varma, S.; <i>International Business</i>; Pearson Education Justin P.; <i>International Business</i>; PHI Learning 		

Course: INTERNATIONAL MARKETING			Semester: IV
Course Code: IBM 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The course aims at providing an understanding on how international marketing concepts and theories are useful in decision making. The course also provides an appreciation and application of various international marketing theories in different situations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Describe the concept of International Marketing 2. Understand the influence of Environment in International Marketing Operations 3. Assess the implications of major decisions to be taken in International Product Planning 4. Analyse the outcomes of Pricing and Distribution Decision in International markets. 5. Identify the impact of Promotion Strategies in international markets. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Nature, Importance and scope of international marketing, international market orientation and involvement, Physical, Demographic, Economic, Socio cultural, Political and legal environments in international marketing operations, Emerging trends in international marketing	09
	2.	International Product Planning Major product decisions: product features and quality, product design, labelling, packaging, branding and product support services, Product standardization vs. adaptation, Managing product line, international product life cycle, new product development.	11
	3.	Pricing for International Markets Factors affecting international price determination, international pricing process and policies, Delivery terms and currency for export price quotations.	08
	4.	International Distribution Decisions Distribution channel strategy: international distribution channels, their roles and functions, Selection and management of overseas agents, international distribution logistics, Inventory management.	08
	5.	International Promotion Strategies Communications across countries: complexities and issues, international promotion tools and planning: advertising, personal selling, publicity, and sales promotion, Developing International promotion campaign.	09
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Fayerweather, J.; <i>International Marketing</i>; Pearson Education 2. Cateora, Philip R. and John, L. G.; <i>International Marketing</i>; McGraw Hill 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Justin Paul; <i>International Marketing</i>; McGraw Hill 2. Kotabe, Masaaki and Kristiaan, Helsen; <i>Global Marketing Management</i>; John Wiley 		

Course: FOREIGN EXCHANGE MANAGEMENT			Semester: III/IV
Course Code: IBM 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The course aims at providing a detailed knowledge of Foreign Exchange Management and various related regulations.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the concept of Foreign Exchange Management. 2. Analyze the implication of FOREX tools on international business. 3. Identify the methods of Exchange Rate Determination 4. Describe Exposure Management. 5. Understand the technical analysis of exchange rate determination. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Types of foreign exchange markets and transactions, Quoting foreign exchange rates, Spread, Official and free market rates, Cross rates, forward rates, Quoting forward rates.	09
	2.	FOREX Tools Organization of foreign exchange markets, Currency futures, Currency options, Currency swaps, corporate exposure management.	12
	3.	Exchange Rate Determination Theory and practice of forecasting exchange rates: economic fundamentals, Financial and socio-political factors, technical analysis, Tax treatment of foreign exchange gains and losses.	12
	4.	Exposure Management Exposure information system, Alternative strategies for exposure management, Exposure management techniques, Organization of the exposure management function, Parameters and constraints on exposure management.	12
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Thomas, W. McRae and Walker, David P.; <i>Foreign Exchange Management</i>; Pearson Education 2. Shapiro, A. C.; <i>International Financial Management</i>; Wiley 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Aliber, R.Z.; <i>Exchange Risk and Corporate International Finance</i>; Macmillan 		

Course: INTERNATIONAL HUMAN RESOURCE MANAGEMENT			Semester: III/IV
Course Code: IBM 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To explore the concepts and techniques of International Human Resource Management and to enable the students to recognize the challenges in managing and communicating with human resources across international borders.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the concept of International Human Resource Management and the challenges faced by Multinational Corporations. 2. Identify the challenges in international recruitment and selection. 3. Assess the performance appraisal processes across international organizations. 4. Analyze the training and development perspectives across international organizations. 5. Understand the Repatriation and Expatriation. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction IHRM- Nature and Scope, Difference between domestic and international HRM, IHRM-Managing people in an international context, Linking HR to international expansion strategies.	06
	2.	Recruitment and Selection of International Managers Recruitment and selection of international managers, concept, criteria for recruitment and selection, sources, advantages and disadvantages of employing Parent Country Nationals (PCNs), Third Country Nationals (TCNs), Host Country Nationals (HCN), Dual career couples, Issues in selection, Global pressures in selection, Managing Diversity in International Organizations.	09
	3.	International Training and Management Development Expatriate training strategies and objectives, HCN training- process, emerging, trends in training for competitive advantage, Cross Cultural Training (CCT)- phases in CCT program, Evaluating the Effectiveness of CCT, frameworks of CCT, Challenges of communicating across Cultures, High context vs. low context cultures, Cultural dimensions — Hofstede model and Trompenaars model	12
	4.	Performance Appraisal and International Compensation Performance Appraisal: factors associated with individual performance and appraisal: Organizational strategy and performance management, setting individual performance goals, Identifying variables affecting performance, Appraising the performance, Issues in managing performance in global context, Difficulties in assessment, International Compensation: Objectives, components and approaches, Issues in international compensation.	12
	5.	Repatriation and Expatriation Repatriation: Process, challenges, designing a repatriation program, Expatriate: Concept, Causes for Expatriate Failure, Managing Expatriate Failure.	06
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Dowling, P. J. and Welch, D. E.; <i>International Human Resource Management</i>; Managing People in a multinational context; Thomson. 2. Harzing A. W., Pinnington A., <i>International Human Resource Management</i>; Sage Publication 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Brewster, C., Sparrow, P. and Vernon, G.; <i>International Human Resource Management</i>; Universities Press 2. Lucas, R. and Lupton, B.; <i>Human Resource Management in an International Context</i>; Jaico Publishing House 3. Edwards, T. and Rees, C.; <i>International Human Resource Management</i>; Pearson Education 		

	4. Thomas D.C., Lazarova M.B., Essentials of Human Resource Management; Sage Publications
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Course: INTERNATIONAL TRADE LAW			Semester: III/IV
Course Code: IBM 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To provide knowledge and understanding of laws and procedures in international trade, and to train students in dealing with issues and challenges of international trade.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the international monetary system. 2. Understand the concept of International Trade Law. 3. Analyse the Legal Regimes in International Trade 4. Understand the International Financial Institutions and assess Regulatory Role of the United Nations 5. Understand about GATT and World Trade Organization (WTO) in detail. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction International trade law: definition, scope and development, International Trading System — liberalization and commerce, History and development of international trade, Trade theories, international trade and human rights.	10
	2.	Legal Regimes in International Trade National treatment, Most Favored Nation Treatment (MFNT), The Principle of Non-Discrimination and Equality of states, Regional Trade Agreements — laws and regulations, Protection of domestic industry.	11
	3.	International Financial Institutions and Regulatory Role of the United Nations Contribution of Bretton woods System, International Monetary Fund (IMF), United Nations Conference on Trade and Development (UNCTAD), United Nations Commission on International Trade Law (UNCITRAL), World Bank Group, GATT/WTO.	12
	4.	GATT and World Trade Organization (WTO) Provisions relating to the General Agreement on Tariffs and Trade (GATT), Trade Related Aspects of Intellectual Property Rights (TRIPS), Trade Related Investment Measures (TRIMS), Trade in Services — GATS, WTO dispute settlement – Appellate Body.	12
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> 1. Schnitzer, Simone; <i>Understanding International Trade Law</i>; Universal Publication 2. Kaul, A. K.; <i>Guide to the WTO and GATT: Economics, Law and Politics</i>; Kluwer Publication 		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Goyal, Arun; <i>WTO in the new Millennium: Commentary, Case Law, Legal Texts</i>; MVIRDC World Trade Centre 2. Carr, Indira; <i>International Trade Law</i>; Cavendish Publishing House 		

Course: INTERNATIONAL FINANCIAL MANAGEMENT			Semester: III/IV
Course Code: IBM 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To impart knowledge about the various theories and concepts of international financial management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the concept of International Financial Management and its Environment. Assess the importance of Exchange Rates and Foreign Exchange Market in current global scenario. Describe Financial Risk Exposures and its Management. Identify the Financial Management practices in Multinational Corporations. Understand the capital structure of the multinational corporations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	International Financial Environment Global financial markets, Interest rates in the global money markets, Bretton Woods system of exchange rate, International monetary system, International monetary fund (IMF), International liquidity and special drawing rights (SDRs).	11
	2.	Exchange Rates and Foreign Exchange Market Fundamental parity relationships, Exchange rate determination, Exchange rate forecasting and exchange rate of rupee, Structure of foreign exchange market, Mechanics of currency trading, Types of transactions and settlement dates, Forward contracts, Currency futures and options, Currency and interest rate swaps.	15
	3.	Financial Risk Exposures and its Management Overview of risk exposures, Measuring exposure risk, Management of currency exposure.	09
	4.	Financial Management in Multinational Corporations Long term sources of international financing, short term borrowing and investment, International cash transmission, SWIFT code, Cash transmission, Methods of payment, Capital budgeting, Cost of capital and capital structure of the multinational corporations.	10
		Total Hours	45
TEXT BOOKS	<ol style="list-style-type: none"> Apte, .P. G.; <i>International Finance-A Business Perspective</i>; McGraw Hill Shapiro, A.; <i>Multinational Financial Management</i>; Pearson Education 		
REFERENCE BOOKS	<ol style="list-style-type: none"> Albir, R. Z.; <i>Exchange Risk and Corporate International Finance</i>; Macmillan Vij, M.; <i>International Financial Management</i>; Excel Books Sharan, V.; <i>International Financial Management</i>; Pearson Education 		

OPERATIONS MANAGEMENT (ORM)

Course: SUPPLY CHAIN MANAGEMENT			Semester: III
Course Code: ORM 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the mechanism of Supply Chain Planning, design, and operations. This will help to manage facilities, inventory, transport, and information about the key drivers of Supply Chain Management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand and identify goals of supply chain and its processes. Design distribution network after understanding the importance of its influencing factors. Understand supply chain strategy and competitive strategy and achieve strategic fit. Understand the role of Logistics in Supply chain and identify different modes of transportation. Apply Information Technology in the supply chain drivers. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Supply Chain Management: Supply Chain, Objectives, Importance, Decision Phases, Process View, Competitive and Supply Chain Strategies, Achieving Strategic Fit, Supply Chain Drivers – Obstacles, Framework, Facilities, Inventory, Transportation, Information, Sourcing, Pricing.	08
	2.	Designing the Supply Chain Network: Designing the Distribution Network, Role of Distribution, Factors influencing Distribution, Design Options, E-Business and its impact, Distribution Networks in Practice, Network Design in the Supply Chain, Role of Network, Factors Affecting the Network Design Decisions, Modelling for Supply Chain.	09
	3.	Planning Demand and Supply in SCM: Demand forecasting in a supply chain; Aggregate Planning in a Supply Chain, Planning Supply and Demand in a Supply Chain, Managing Predictable Variability.	11
	4.	Transportation Networks and Sourcing: Role of Transportation, Modes and their Performance, Transportation Infrastructure and Policies, Design Options and their Trade-offs, Tailored Transportation. Sourcing: In-house or outsource, 3rd and 4th PLs, Supplier Scoring and Assessment.	09
	5.	Coordination in a Supply Chain: Lack of Supply Chain Coordination and the Bullwhip effect, Obstacle to coordination, Managerial levels, Building Partnerships and Trust, Continuous Replenishment and Vendor-Managed Inventories – Collaborative Planning, Forecasting and Replenishment.	08
		Total Hours	45
TEXT BOOK	1. David, Simchi-Levi, Philip, Kaminsky and Edith, Simchi-Levi; Designing and Managing the Supply Chain; McGraw Hill.		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Chopra, Sunil, Meindl, Peter and Kalra, D. V.; Supply Chain Management– Strategy, Planning and Operation; Pearson Education. Altekar, R.; Supply Chain Management: Concepts and Cases; PHI Learning. Raghuram, G.; Logistics and Supply Chain Management; Macmillan. Sahay, B.S.; Supply Chain Management; Macmillan. Balou, R. H.; Supply Chain Management; Pearson Education. 		

Course: SERVICE OPERATIONS MANAGEMENT			Semester: IV
Course Code: ORM 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the concept, principles and tools of Total Quality Management including ISO 9000 Quality Management System Standards.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand and be able to explain the critical perspectives on the nature of service. Understand and apply a range of methods for assessing the needs, expectations and perceptions of customers. Explain and apply the principles, tools and techniques of service design. Explain the methods with which organizations can measure their service performance and improve service. Demonstrate how organizations can deal with challenges such as customer complaints and service failures. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Nature and Characteristics of Services, Classification of Services; Service Operations and their Management Fundamentals; Service Strategy; Positioning of Services in the Organization Value Chain, Growing Importance of Service.	08
	2.	Service Process Design and Automation Service Design and Delivery Process, Service Process Strategies, Technology Automation, Service Encounter.	08
	3.	Service Quality and Continuous Improvement Concept of Service Quality, Quality Service by Design, Service Process Control, Measurement of Service Quality, Quality Philosophies and Performance Excellence, Service Recovery and Guarantee; New Service Development.	10
	4.	Facility Design for Services Service Facility Design, Process Analysis of Facility Layouts, Facility Location Decision Factors, Quantitative Models for Facility Location Based on Different Objective Functions of Optimization Criteria; Off-Shoring & Outsourcing; Human Factor in Services; External Associates in Service Processes.	10
	5.	Demand and Capacity Management in Services Forecasting Demand in Services, Smoothing Customer Demand in Services, Service Capacity Management, Yield Management, Resource and Workforce Scheduling in Services.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Fitzsimmons, B., James, A. and Fitzsimmons, Mona J.; <i>Service Management: Operations, Strategy, and Information Technology</i>; McGraw Hill Johnston, Robert and Clark, Graham; <i>Service Operations Management</i>; Pearson Education 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Haksever, C., Render, B., Russel, S. R. and Murdick, R. G.; <i>Service Management and Operations</i>; Pearson Education. Metters, Richard, Metters, Kathryn King, Pullman, Madeleine and Walton, Steve; <i>Service Operations Management</i>, Cengage Learning Haksever, Cengiz, Render, Barry, Russell, Roberta S. and Murdick, Robert G.; <i>Service Management and Operations</i>; Pearson Education 		

Course: LEAN MANUFACTURING			Semester: IV
Course Code: ORM 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarise the students with Lean Manufacturing to understand the tools and techniques involved in Lean Management. Moreover, enable them to execute a Lean project to achieve specific goals that will benefit the organizations and society.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> To understand issues & challenges in implementing & developing lean manufacturing techniques from TPS & its contribution for improving organizational performance. Apply lean techniques to bring competitive business culture for improving organization performance. Analyzing how lean techniques can create value generation for organization. Explain the approaches to, concepts, and theories of Lean Manufacturing, including key aspects of Six Sigma. Apply appropriate approaches to project using Lean tools and techniques. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to TPS & Lean: Introduction to Toyota Production System (TPS), Pillars of TPS, JIT & Heijunka, TPS core principles, seven waste and their narration, Value flow and Muda, Muri and Mura, Introduction to lean, lean manufacturing implementation, the machine that change the world, world class manufacturing	09
	2.	Lean Manufacturing: Philosophy & objectives of lean manufacturing, TPS vs Lean, mass manufacturing vs lean manufacturing, foundation of quality control & foundation of quantity control, significance of lead time, benefits of lead time reductions, techniques to reduce lead times, Fundamental blocks of Lean, Implementation of TPM, 5s, MSA, and Overall Equipment Effectiveness (OEE) and its computation.	10
	3.	Lean Implementation: Fundamental issues of cultural changes, problem solving & Standardized work, Continuous improvement, strategies to become lean- takt calculation, basic time study calculation, balancing study, spaghetti study, value stream mapping, cellular manufacturing.	10
	4.	Lean system & Six Sigma: Lean systems: Features manufacturing and services, Workflow, Small lot sizes, Pull Method, Kanban, Process Capability and Performance; Lean Six Sigma.	09
	5.	Project Selection for Lean: Resource and project selection, Process mapping, Current and future value stream mapping, preparing project plan, implementation, review project suitable for lean initiatives, Productivity Improvement: Process, machinery Operator and equipment.	07
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> William M Feld, "Lean manufacturing tools & techniques & how to use them" Charron, R., Harrington, H. J., Voehl, F., & Wiggin, H., The lean management systems handbook, CRC Press. Lean production for competitive advantage- a comprehensive guide to lean methodologies & management practice, John Nicholas, Productivity Press, NY. ISBN-978-1-4398-2096-4 		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. James Womack and Daniel Jones, <i>Lean Thinking</i>, Free Press. 2. Goldratt, Eliyahu M., 1947-2011. <i>The Goal: a Process of Ongoing Improvement</i>. Great Barrington, MA: North River Press. 3. Jeffrey Liker, <i>The Toyota Way</i>, McGraw-Hill. 4. Askin, R.G. and J.B. Goldberg, <i>Design and Analysis of Lean Production Systems</i>, John Wiley & Sons Inc. 5. Improving business performance with lean, James R Bradley, Business expert Press, NY, ISBN-978-1-60649-246-2
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Course: TOTAL QUALITY MANAGEMENT			Semester: III/IV
Course Code: ORM 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the concept, principles and tools of total quality management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Know prerequisites of evolution of total quality management and significance of quality gurus' works to the management of modern organizations. 2. Know the principles of total quality management and peculiarities of their implementation. 3. Be able to use quality management methods analyzing and solving problems of organization. 4. Understand and apply the five-step DMAIC model as a framework to organize process improvement activity. 5. Know Quality Management Standards and be able assess an organization's performance making reference to their criteria. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Total Quality Management: Concept and Fundamentals Definition and Dimensions of Quality, Evolution of Quality Management, TQM Framework, Principles of TQM, Philosophies of Quality Gurus: Deming's 14 Points, Crosby's Four Absolutes, and Juran's Trilogy, Barriers to TQM.	10
	2.	Human Aspect of Total Quality Management TQM Culture, Resistance to Change, Quality Leaders: Role and Characteristics, Employee Involvement, Motivation, Empowerment, Recognition and Reward, Quality Council, Teamwork for TQM.	07
	3.	Total Quality Management Tools & Techniques- I Statistical Process Control (SPC), Seven QC Tools, Continuous Improvement: PDSA cycle, Business Process Re-Engineering (BPR), Benchmarking, Quality Function Deployment (QFD), Failure Mode and Effect Analysis, Malcolm Baldrige Award Model, TQM Implementation Process.	11
	4.	Total Quality Management Tools & Techniques- II Process Capability, Concept and Benefits of Six Sigma, DMAIC Approach, Implementation Process. Six Sigma Team; Total Productive Maintenance (TPM): Concepts, Improvement needs; Performance Measures.	09
	5.	Quality Management System Quality Statements; Customer Focus: Customer Orientation, Customer Satisfaction, Customer Complaints, Customer Retention; Cost of Quality: Direct and Indirect Cost. Total Quality Cost Curve, Quality Index, ISO9001 Quality Standards, and Quality Audits.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Besterfield, D.H., Besterfield, C., Besterfield, G.H. and Besterfield, M.; <i>Total Quality Management</i>; Pearson Education 2. Ross, J.E.; <i>Total Quality Management: Text, Cases, and Readings</i>; St. Lucie Press 		
REFERENCE BOOK/	<ol style="list-style-type: none"> 1. Evans, J.R. and Lindsay, W.M.; <i>An Introduction to Six Sigma and Process Improvement</i>; Thomson Learning 2. Thomas Pyzdek and Keller, Paul; <i>The Six Sigma Handbook</i>; McGraw Hill 		

SUGGESTED READING	3. Pande, P., Neuman, R. and Cavanagh, R.; <i>The Six Sigma Way</i> ; McGraw Hill
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Course: OPERATIONS STRATEGY			Semester: III/IV
Course Code: ORM 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	1. Introduce a conceptual framework for defining operations strategy in a business organization. 2. Give participants skills to develop a sustainable competitive advantage through a company's operating and technological resources. 3. Give participants an ability to assess the management of a firm's operations functions in a global and changing business environments.		
COURSE OUTCOMES	Upon completion of the course students should be able to: 1. Evaluate the link between corporate/business and operations strategies. 2. Critically identify the drivers of firms' operations relevant to its competitive position 3. Apply the concepts and methods related to designing and managing operations functions in order to satisfy market requirements. 4. Assess an organization's operational processes to effectively and efficiently produce goods and services to meet the goals of an organization. 5. Demonstrate the applicability of operations strategy principles in real life business situations working in groups and teams.		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Operations Strategy, Framework for Company's Operations Strategy, Key Premise and Goals, Framework for Operations Strategy, Operations Strategy Framework for Specific Business Situations.	07
	2.	A Framework for Operations Strategy Competition, Competencies and Operations Concepts of Operational Trade-Off, Competency Focus related to Strategic Positioning and Operational Efficiency, Qualitative and Quantitative Methods to Evaluate a Firm's Operations Strategy, Strategic Response based on Process and Resource Capabilities.	09
	3.	Capacity Sizing and Timing Developing a Capacity Strategy: Sizing, Timing, Type, and Location of each Asset Change, Approaches to Changing Capacity, Effect of Capacity on Responsiveness and Competitiveness.	07
	4.	Capacity Flexibility and Strategic Sourcing Decision for Building New Capacity, Type of Capacity, Type of Technology and Facility, Product-Dedicated or Product-Flexible Technology, Response to Changes in Demand, Supply or Processing, Strategic Sourcing: Suppliers, Goods or Services and Managing Supplier Relationship, Concept of Total Landed Cost.	12
	5.	Demand Management using Mass Customized Service and Technology Design Efficient and Effective Processes for Customer Services, Strategies to provide Mass Customized Service, Information Technology Facilitating Customized Services, Concept of Cost-To-Serve, Assessing Attractiveness and Long-Term Feasibility of Mass Customized Service.	10
		Total Hours	45
TEXT BOOK	1. Operations Strategy, Slack, N., Lewis, M. and Sharma, M.G., Pearson. 2. Hayes, Robert H., Pisano, Gary P., Upton, David M. and Wheelwright, Steven C.; <i>Operations, Strategy, and Technology: Pursuing the Competitive Edge</i> ; Wiley Higher Education		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none">1. Walter, David; <i>Operations Strategy</i>; Palgrave/ Macmillan.2. Beckman, S. L. and Rosenfield, D. B.; <i>Operations Strategy</i>; Tata McGraw Hill3. Hill, Terry; <i>Manufacturing Strategy</i>; Tata McGraw Hill
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Course: STRATEGIC SOURCING AND PROCUREMENT			Semester: III/IV
Course Code: ORM 06 E	L T P	3 0 0	Credits: 3

OBJECTIVES	To highlight the strategic role and importance of procurement and sourcing in logistics operations; to provide exposure to developing requirements, identifying applicable standards, purchasing policies, processes and activities in procurement of material and services; and to learn to develop collaborative alliances, relationship with partners and suppliers.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. To apply the main philosophy and principles of procurement and sourcing strategies and compare different modes of procurement and sourcing procedures. 2. Demonstrate effective implementation of purchasing activities to procure material or services in right quantity at competitive prices. 3. Apply negotiations and develop long term collaborative relationship with suppliers. 4. Suggest changes and improvements needed in processes and systems in order to improve and strengthen collaborative relationships. 5. Evaluate the performance of different suppliers in a purchasing relationship and monitor their progress. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Role and Understanding Strategic Nature of Procurement and Sourcing in Logistics, Purchasing and Sourcing Decision Process, Purchasing Integrated Logistics Interface, Stages of Sourcing Strategies, Purchasing and Sourcing Strategic Development Process.	10
	2.	Sourcing Management Establishing Requirements, Developing Specification and Formats; Types of Purchasing and Sourcing.	06
	3.	Supplier Selection and Performance Measurement Locating and Developing Sources of Supply, Types of Relationships: Buyer-Supplier Relationships: Transactional, Collaborative and Alliance Relationships. Selecting Suppliers and Measuring Performance.	10
	4.	Contract Design and Contract Management Contract Requirements, Applicable Standards, Contract Types, Letter of Intent, Methods of Exchange, Contract Reviews. Contract Compliance, Tracking and Expediting Deliveries and Handling Supplier Related Deliveries.	09
	5.	International Sourcing & Purchasing Constituents of International Sales Contract. Methods of Payment: Cash in Advance, Letter of Credit, Bill of Exchange, Open Account. International Trade Specialists. Role of Intermediaries in Trade Logistics, International Freight Forwarders/NVOCC/EMC	10
		Total Hours	45
TEXT BOOK	Robert B Handfield, Larry C Giunipero, James L Patterson and Robert M. Monczka, Sourcing and Supply Chain Management, Cengage India.		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Robert M. Monzcka, Robert B. Handfield, Larry C. Giunipero and James L. Patterson, Purchasing and Supply Chain Management, Cengage International. 2. Ram Singh, International Trade Logistics, Oxford. 3. Thomas E. Johnsen, Mickey Howard and Joe Miemczyk, Purchasing and Supply Chain Management: A Sustainability Perspective, Routledge. 4. David Burt, Sheila Petcavage and Richard Pinkerton, Proactive Purchasing in the Supply Chain: Key to World Class Procurement, McGraw-Hill. 5. Peter Baily, David Farmer, Barry Crocker, David Jessop and David Jones, Procurement Principles and Management, Pearson.
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BUSINESS ANALYTICS (BAN)

Course: DATA ANALYTICS WITH R			Semester: III
Course Code: BAN 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The course is intended to impart knowledge of how to program in R and to use R for effective Data Analysis. The course covers fundamental knowledge in R programming.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand basic concepts such as data type and data structures. 2. Demonstrate the use of basic functions in R. 3. Conceptualize and create loops to solve different types of problems. 4. Create customized functions and various ways of data visualization. 5. Construct tables, figures and perform statistical operations. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Basic of R Introduction, R – environment set up: installation, understanding and working, Basic Data types and data structures, editing data in R vectors: creating and naming, Vector Arithmetic and Logical vectors, Matrices, Arrays, Class, Operators: AND, OR and NOT, Conditional statements.	08
	2.	Functions and Programming of R Introduction, writing a function, Mathematical functions, Lists: creation, accessing list elements, manipulation in list elements and merging, Basic R programming techniques, Syntax, variables and data types. Control structures and functions: Conditional statements, Different types of loops such as: for () and while () loops; Use IF statements in for loops.	09
	3.	File Management Editing and Reading Data from Files; Editing data in R; Generating data from any distributions; Reading a data from a file; Loading data from other R packages; Save the data in R.	07
	4.	Data Visualisation: Data Visualisation; Exploratory Data Analysis (EDA) and Regression Analysis; Features of data distributions; Plotting data; Descriptive statistics for generated data; EDA such as stem- and – leaf plot, Histogram and Boxplot.	08
	5.	Statistical Analysis Application of R to compute: Descriptive statistics, Table in R, correlation and covariance, compare means: Parametric Techniques, One Sample t-Test, Time Series Models: Time Series objects in R, creating Time Series Objects, creating a Subset, Multiple Time-Series Chart	13
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Srinivasa, K.G., Siddesh, G.M., Shetty, Cheatan and Sowmya, B.J.: <i>Statistical Programming in R</i>; Oxford University Press 2. Rakshit, Sandip: <i>R programming for Beginners</i>; McGraw Hill Education 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Kabacoff, R.I.; <i>R in Action – Data Analysis and Graphics with R</i>; Manning Publications 2. Verzani. J; <i>Using R for Introductory Statistics</i>; Chapman and Hall, Taylor and Francis groups 		

Course: BUSINESS INTELLIGENCE AND DATA WAREHOUSING			Semester: IV
Course Code: BAN 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The main objective of this course is to explain the meaning and importance BI and DW in business.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the meaning and importance of Business Intelligence in business. 2. Understand the meaning and importance of Data Warehousing in business. 3. Understand the concepts of OLAP, OLTP and Data Integration. 4. Apply the tools of Business Intelligence and Data Warehousing 5. Understand the Multi-Dimensional Data Modelling. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Definition of Business Intelligence (BI), Data Warehousing (DW) and Corporate Performance Management (CPM), Evolution of BI, Role of DSS, EIS, MIS and dashboards, Data Warehouse and BI, Drivers for BI and DW, BI component Framework and Architectures.	09
	2.	Digital Data Structured data, Unstructured Data, Managing and storing unstructured data, Storage Challenges of Unstructured Data, Extraction of information from unstructured data, UIM Architecture for unstructured data. Semi-Structured Data, Sources of Semi-Structured Data. Managing, Storing and extracting information from semi-structured data, XML as a solution for Semi-structured data.	10
	3.	OLAP and OLTP OLTP, Advantages, challenges, Shortcomings of OLTP, OLAP, Dimensions of Data -One Dimensional, Two Dimensional and Three Dimensional Data, Beyond Third Dimension, MOLAP, ROLAP, HOLAP, OLAP versus OLTP,, Data Models for OLAP and OLTP, OLAP Operations on multi - dimensional data: Slicing, Dicing, Roll Up, Drill Down, Drill Across, Drill Through.	09
	4.	Data Integration Need for Warehouse, Data Mart, ODS, Kimball's approach versus Inman's approach to Data warehousing, Goals of Data Warehouse, Data Sources for Data Warehouse, ETL, Data mapping, data staging, Approaches to Data integration, needs and advantages, Data Integration Technologies, Data Quality, maintaining data quality, Data Profiling.	08
	5.	Multi-Dimensional Data Modelling Data Modelling Basics: Entity, Attribute, Cardinality, Types of Data Models: Conceptual data model, Logical data model, Physical model, Normalization modelling, Dimensional Modelling, Fact Table, Dimension Table, Hierarchies and Types, Star and Snowflake Schema, Designing a dimensional model. MS Excel 2010 Based Activity, Performance Management & Enterprise Reporting –Measures, Metrics, KPIs.	09
		Total Hours	45
TEXT BOOKS	1. David Loshin, Business Intelligence, Morgan Kaufmann Publishers.		

REFERENCE BOOKS	<ol style="list-style-type: none">1. Cindi Howson, Successful Business Intelligence: Secrets to making Killer BI Applications, TMH2. Stephen Few, Information dashboard design: The Effective Visual Communication of Data, O'Reilly Media.3. Mike Biere, Business intelligence for the enterprise, IBM Press4. Hoffer Jeffrey, Prescott Mary, Modern Database Management, Pearson.
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Course: DATA MINING AND MACHINE LEARNING			Semester: IV
Course Code: BAN 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	This course covers various analytical techniques to extract managerial information from large data warehouses. A number of well-defined data mining tasks such as classification, estimation, prediction, affinity grouping and clustering, and data visualization are discussed. Design and implementation issues for corporate data warehousing are also addressed.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the data mining and machine learning process. 2. Understand the meaning and importance of Business Intelligence in business. 3. Apply the classification and prediction method. 4. Understand the meaning and importance of Data Mining in business. 5. Understand the concept of Data Modelling using ML. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Motivation for Data Mining - Data Mining-Definition and Functionalities – Classification of DM Systems - DM task primitives - Integration of a Data Mining system with a Database or a Data Warehouse - Issues in DM – KDD Process, Data cleaning: Missing Values, Noisy Data - Data Integration and transformation - Data Reduction: Data cube aggregation, Dimensionality reduction, Data Compression - Numerosity Reduction - Data Mining Primitives; Languages and System Architectures: Task relevant data - Kind of Knowledge to be mined; Discretization and Concept Hierarchy	10
	2.	Concept Description and Association Rule Mining What is concept description? - Data Generalization and summarization-based characterization - Attribute relevance - class comparisons Association Rule Mining: Market basket analysis - basic concepts - Finding frequent item sets: Apriori algorithm generating rules – Improved Apriori algorithm – Incremental ARM – Associative Classification – Rule Mining.	09
	3.	Classification and Prediction What is classification and prediction? – Issues regarding Classification and prediction: Classification methods: Decision tree, Bayesian Classification, Rule based Classification, CART, Association Rule Mining, k-Nearest Neighbor, Rough Sets, Clustering: Hierarchical Clustering, Non- hierarchical/ partitioned Clustering.	08
	4.	Data Mining for Business Intelligence Applications Data mining for business Applications like Balanced Scorecard, Fraud Detection, Clickstream Mining, Market Segmentation, retail industry, telecommunications industry, banking & finance.	09
	5.	Introduction to Generative AI Definition and scope of Generative AI Overview of generative models and their applications Importance of Generative AI in various domains Brief discussion on ethical considerations and challenges	09
		Total Hours	45
TEXT BOOKS	1. Han, J., Kamber, M., Pei, J.; <i>Data Mining Concepts and Techniques</i> ; Morgan Kaufmann		
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Kantardzic, M.; <i>Data mining: Concepts, Models, Methods & Algorithms</i>; John Wiley & Sons 2. Ponniah, Paulraj; <i>Data Warehousing Fundamentals</i>; Wiley- Blackwell. 3. Dunham, Margaret, H.; <i>Data Mining: Introductory and Advanced Topics</i>; Pearson Education 		

	4. Berson, Alex, Smith, Stephen. J, Thearling, Kurt; <i>Building Data Mining Applications for CRM</i> ; McGraw Hill.
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Course: BUSINESS INTELLIGENCE CONCEPTS, TOOLS, AND APPLICATIONS			Semester: III/IV
Course Code: BAN 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course is intended to impart fundamental knowledge on concepts and tools of business intelligence.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the importance of Business Intelligence tools in business. Understand the types and platforms of Business Intelligence Use Business Intelligence tools. Apply data manipulation and restructuring techniques. Apply data visualization in business. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Basics of Business Intelligence, Definition, History and Evolution, Business Intelligence Segments, Difference between Information and Intelligence, Defining Business Intelligence Value Chain, Factors of Business Intelligence System, Real time Business Intelligence, Business Intelligence Applications, Creating Business Intelligence Environment, Business Intelligence Landscape	09
	2.	Types and Platforms of Business Intelligence Introduction, Multiplicity of Business Intelligence Tools, Types of Business Intelligence Tools, Modern Business Intelligence, the Enterprise Business Intelligence, Information Workers, Business Intelligence Platform, Dynamic roles in Business Intelligence, Roles of Business Intelligence in Modern Business- Challenges of BI. Business Intelligence Platform Capability Matrix, BI Target Databases, Data Mart, BI Products and Vendor, The Big Four Business Intelligence vendors.	10
	3.	Business Intelligence Tool Platform Introduction, application, environment, identify data term, explore the workspace, Filter content using explore point. Data import, File handling, web-based reporting system.	09
	4.	Data Manipulation and Restructuring Objective, calculate data in a work place, customization data, Restructuring of data, Customized Import, construction of workspace, formatting of data, use of numeric and text data.	09
	5.	Data Visualization Objective, choose effective chart, features of charts, Area Charts; Column charts, Line charts, Pie charts, Point Chart, customize chart options.	08
		Total Hours	45
TEXT BOOKS	1. Gautam, Sangeeta, IBM Cognos; <i>Business Intelligence</i> ; IBM Press		
REFERENCE BOOKS	<ol style="list-style-type: none"> Wilfried, Grossmann, Rinderle-Ma, Stefanie; <i>Fundamentals of Business Intelligence</i>; Springer. Loshin, David; <i>Business Intelligence</i>; Elsevier. Volitich, Dan, Ruppert, Gerard; IBM Cognos; <i>Business Intelligence 10: The Official Guide</i>; McGraw-Hill, Turban, E, Sharda, R, Delen, Dursun, and King, David; <i>Business Intelligence: A Managerial Approach</i>; Pearson 		

Course: FINANCIAL ANALYTICS			Semester: III/IV
Course Code: BAN 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course aims to provide the students with the fundamental concepts, principles and approaches of corporate finance, enable the students to apply relevant principles and approaches in solving problems of corporate finance and help the students improve their overall capacities.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand Financial Data Analysis and Interpretation for Decision Making. 2. Apply various Statistical tools to be used for financial data analysis. 3. Analyse the risk and return of individual security and evaluation of portfolio performance. 4. Apply Statistical tools for predictive and forecasting Modelling with financial data using Ms-Excel. 5. Construct and optimize asset portfolios as well as evaluate and model Risk on various financial assets. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction A Brief History of the Evolution of Analytic. Why is Analytics Important to the Finance Field, Business Model and Changing Role of Financial Department and Uses of Financial analytics Work with variable, Data files from other Statistical Tools and access and use of various packages for financial analytics.	08
	2.	Dataset Analytics, Visualization and Presentation of Financial Data Understanding of Financial Datasets with descriptive statistics – univariate and bivariate analysis, using financial Datasets for creating Graphs, Making Histograms, Bar graphs, Line graphs etc. with base and other packages.	10
	3.	Risk & Return Measurement of individual security and Portfolio. Importing daily stock price data, checking and plotting of data, risk and return of individual security and portfolio, Sharpe Ratio and Markowitz mean – variance optimization, Black-Scholes Model.	07
	4.	Predictive Modelling and Forecasting Predictive Modelling with Single, Multiple and Logistic Regression model, Time series Modelling, Examining time series, trend analysis, stationary time series, auto regressive moving processes and data transformation, GARCH & ARIMA Modelling.	10
	5.	Analytics of Financial Statement using Excel Balance Sheet, Income Statement, Cash Flow Statement, Understanding the Financial Statements and their interlinking and financial statement forecasting.	10
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Mayes, Timothy R. <i>Financial Analysis with Microsoft Excel</i>; Cengage. 2. Mark J. Bennett, Dirk I. Hugen. <i>Financial Analytics with R</i>; Cambridge University Press. 		
REFERENCE BOOK/	<ol style="list-style-type: none"> 1. Khan, M.Y., & Jain, P.K, <i>Basic Financial Management</i>; McGraw Hill 2. Chandra, Prasanna; <i>Financial Management-Theory and Practice</i>, McGraw Hill. 		

SUGGESTED READING	<p>3. Rustagi, R. P.; <i>Fundamentals of Financial Management</i>; Taxmann publication (Pvt) Ltd.</p> <p>4. Pandey, I.M. <i>Financial Management</i>; Vikas Publishing House Pvt. Ltd.</p> <p>5. Van Horne, J.C. <i>Financial Management and Policy</i>, Prentice Hall of India.</p> <p>6. Levy, H. and Sarnat, M. <i>Principles of Financial Management</i>, Prentice Hall.</p> <p>7. Brealey, Richard, A., Myers, Stewart, C.& Allen, Franklin; <i>Principles of Corporate Finance</i>; McGraw Hill.</p>
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Course: BIG DATA ANALYTICS			Semester: III/IV
Course Code: BAN 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course offers an introduction to Big Data and the data analytics to address business challenges that leverage big data and aims to provides basic understanding in use of Big Data tools and techniques.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand big data features and classification of analytics. 2. Understand the big data and big data stack. 3. Understand the Hadoop ecosystem for big data analytics. 4. Understand the security related aspects in big data 5. Analyse various application areas of big data 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction: Introduction to Big Data: What is Analytics- Descriptive Analytics, Diagnostic Analytics, Predictive Analytics, Prescriptive Analytics. What is Big Data- Characteristics of Big Data- Volume, Velocity, Variety, Veracity, Value	08
	2.	Analytics flow and big data stack: Analytics Flow for Big Data- Data Collection, Data Preparation, Analysis Types, Analysis Modes, Visualizations, Big Data Stack- Raw Data Sources, Data Access Connectors, Data Storage, Batch Analytics, Real-time Analytics, Interactive Querying, Serving Databases, Web & Visualization Frameworks	10
	3.	Big Data -Hadoop: NoSQL, Comparison of SQL and NoSQL, Hadoop -RDBMS Versus Hadoop - Distributed Computing Challenges – Hadoop Overview - Hadoop Distributed File System - Processing Data with Hadoop - Managing Resources and Applications with HadoopYARN - Interacting with Hadoop Ecosystem.	10
	4.	Security in Big Data: Security, Compliance, auditing, and protection pragmatic steps to securing/ big data - classifying data- protecting big data analytics- big data and compliance-the intellectual property challenge	10
	5.	Big Data Applications: Business Specification Examples of Big Data- Financial, Web, Healthcare, Internet of Things, Environment, Logistics & Transportation, Industry, Retail.	07
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Anand Rajaraman and Jeffrey David Ullman, "Mining of Massive Datasets", Cambridge University Press. 2. David Loshin, "Big Data Analytics: From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph", Morgan Kaufmann/Elsevier Publishers. 3. Frank J. Ohlhorst, "Big data analytics Training Big Data in to big money", wiley publishing house 4. Raj Kamal, Preeti Saxena, "Big Data analytics", Tata McGraw hill publishing house 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. DT Editorial Services, Big Data, Black Book: Covers Hadoop 2, Map Reduce, Hive, YARN, Pig, R and Data Visualization, Dreamtech Press. 2. Sathi, Arvind; <i>Big Data Analytics: Disruptive Technologies for Changing the Game</i>; Mc Press. 3. Rao, Prakasa, B. L. S., Rao, S. B.; <i>Big Data Analytics: Methods and Applications</i>; Springer, India, Private Ltd, 4. Erl, Thomas, Khattak, Wajid, Buhler, Paul; <i>Big Data Fundamentals</i>; Pearson. 		

Course: MARKETING ANALYTICS			Semester: III/IV
Course Code: BAN 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To acquaint the students with concepts of data analysis in the field of marketing and enable them to take decisions based on data.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand of tools of marketing analytics in decision making. Develop analytical skills in the field of marketing based on data. Understand the different marketing metrics to measure performance. Apply data analysis in segmenting the markets. Evaluate the models of customer relationship management. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Marketing Analytics Defining Marketing Analytics, Need of Marketing Analytics, The Marketing Revolution, Role of Data in Marketing. Differences and similarities between Marketing Research and Analytics, Marketing Analytics Planning.	08
	2.	Segmentation, Targeting and Positioning Analytics Applications of tools for segmentation of the market, Cluster Analysis: Meaning, Application and methods of cluster analysis including k-means clustering and Agglomerative methods. Targeting and precision Marketing. Positioning: Application of the concepts of perceptual mapping. Multidimensional scaling.	10
	3.	Managing Marketing Mix New Product Development: Concept development and testing using conjoint analysis and attribution models. Discrete Choice Analysis, pricing strategies, Estimating demand curves, Price building, Non-Linear Pricing, Price skimming & Sales Revenue Management.	10
	4.	Customer Lifetime Value (CLV) Sales Forecasting: Linear Regression & Multiple Regression, Logistic Regression, calculating customer lifetime value using CLV to value a business.	08
	5.	Retailing & Advertising Retailing: Market basket analysis and Lift, RFM Analysis and optimizing direct mail campaigns, Scan*Pro Model, Advertising effectiveness, Media selection models, Pay Per Click, Principal Component Analysis.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Winston, Wayne L.; <i>Marketing Analytics: Data driven techniques with Microsoft Excel</i>, Wiley Venkatesan, Rajkumar Paul Farris and Roanld T. Wilcox; <i>Cutting edge Marketing Analytics: Real world cases and data sets for hands on learning</i>, Pearson Education 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Ryan, D. and Jones, C.; <i>Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation</i>; Kogan Page Stokes, R. Blake, S. and Education, Q.; <i>eMarketing: The Essential Guide to Marketing in Digital World</i>; Quirk eMarketing 		

Course: HR ANALYTICS			Semester: III/IV
Course Code: BAN 08 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To develop the ability to apply HR analytics and predictive Modelling techniques for data-driven decision-making across core human resource functions.		
COURSE OUTCOMES	Upon completion of the course students should be able to: 1. Explain the role, frameworks, and implementation steps of HR Analytics to enhance organizational decision-making 2. Apply predictive Modelling techniques and regression analysis to forecast HR outcomes and improve performance. 3. Analyze HR research data using statistical tools and interpret HR metrics for strategic decision-making. 4. Develop predictive models for recruitment by preparing, splitting, and analyzing HR datasets. 5. Evaluate turnover data using predictive models to recommend retention strategies		
COURSE DETAILS	Module No.	Topic	Hours
	1.	HR Analytics in Perspective Role of Analytics, Defining HR Analytics, Significance of HR Analytics, Steps to implement HR Analytics. HR Analytics Frameworks: LAMP framework, HCM framework, Talent ship framework, overarching components of effective analytics framework.	10
	2.	HR Analytics and Predictive Modelling Steps involved in predictive analytics: Determine key performance indicator, analyze and report data, interpreting the results and predicting the future, Metrics and Regression analysis and Causation, Multiple Regression to Predict employee Performance.	09
	3.	HR Business Process and HR Metrics Statistics and Statistical Modelling for HR Research and HR Decision making, HR Research Tools and Techniques, Data Analysis for Human Resources, Parametric and Non-Parametric Tests, HRIS for Decision making, HR Metrics, Recruitment Metrics, Metrics for Training and Development Function, Ethics of measurement and evaluation, HR Dashboards: Statistical software used for HR Analytics	09
	4.	Predictive HR Analytics in Recruitment and Selection Installation of packages and import datasets, normalizing a dataset, Splitting data into training and test data. Areas of application of analytics to recruitment, Reliability & Validity of Selection Methods.	09
	5.	Predictive HR Analytics in Turnover and Separation Turnover intent and job attitudes, KNN model performance, Model performance from accuracy to ROC, Exit interview analysis and Retirement analysis.	08
		Total Hours	45
TEXT BOOKS	1. Bhattacharya, D. K.; <i>HR Analytics</i> ; Sage Publishing House.		
REFERENCE BOOKS	5. Fitz-Enz, J.; <i>The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investment</i> ; AMACOM Div American Mgmt Assn.		

	<p>6. Edwards, M. R., & Edwards, K. Predictive HR Analytics: Mastering the HR Metric. Kogan Page Publishers.</p> <p>7. Fitz-Enz, J., & John Mattox, I. I. Predictive analytics for human resources. John Wiley & Sons.</p> <p>8. Isson, J. P., & Harriott, J. S. People analytics in the era of big data: Changing the way you attract, acquire, develop, and retain talent. John Wiley & Sons.</p>
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LOGISTICS AND SUPPLY CHAIN MANAGEMENT (LSC)

Course: SUPPLY CHAIN MANAGEMENT			Semester: III
Course Code: LSC 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the mechanism of Supply Chain Planning, design, and operations. This will help to manage facilities, inventory, transport, and information about the key drivers of Supply Chain Management.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand and identify goals of supply chain and its processes. Design distribution network after understanding the importance of its influencing factors. Understand supply chain strategy and competitive strategy and achieve strategic fit. Understand the role of Logistics in Supply chain and identify different modes of transportation. Apply Information Technology in the supply chain drivers. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Supply Chain Management: Supply Chain, Objectives, Importance, Decision Phases, Process View, Competitive and Supply Chain Strategies, Achieving Strategic Fit, Supply Chain Drivers – Obstacles, Framework, Facilities, Inventory, Transportation, Information, Sourcing, Pricing.	08
	2.	Designing the Supply Chain Network: Designing the Distribution Network, Role of Distribution, Factors influencing Distribution, Design Options, E-Business and its impact, Distribution Networks in Practice, Network Design in the Supply Chain, Role of Network, Factors Affecting the Network Design Decisions, Modelling for Supply Chain.	09
	3.	Planning Demand and Supply in a SCM: Demand forecasting in a supply chain; Aggregate Planning in a Supply Chain, Planning Supply and Demand in a Supply Chain, Managing Predictable Variability.	11
	4.	Transportation Networks and Sourcing: Role of Transportation, Modes and their Performance, Transportation Infrastructure and Policies, Design Options and their Trade-offs, Tailored Transportation. Sourcing: In-house or outsource, 3rd and 4th PLs, Supplier Scoring and Assessment.	09
	5.	Coordination in a Supply Chain: Lack of Supply Chain Coordination and the Bullwhip effect, Obstacle to coordination, Managerial levels, Building Partnerships and Trust, Continuous Replenishment and Vendor-Managed Inventories – Collaborative Planning, Forecasting and Replenishment.	08
		Total Hours	45
TEXT BOOK	1. David, Simchi-Levi, Philip, Kaminsky and Edith, Simchi-Levi; Designing and Managing the Supply Chain; McGraw Hill.		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Chopra, Sunil, Meindl, Peter and Kalra, D. V.; Supply Chain Management– Strategy, Planning and Operation; Pearson Education. Altekar, R.; Supply Chain Management: Concepts and Cases; PHI Learning. Raghuram, G.; Logistics and Supply Chain Management; Macmillan. Sahay, B.S.; Supply Chain Management; Macmillan. Balou, R. H.; Supply Chain Management; Pearson Education. 		

Course: LOGISTICS MANAGEMENT			Semester: IV
Course Code: LSC 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The objective of this course is to develop the understanding of various components of logistics management. The learning is focused on developing the logistics systems to suit not only the domestic supply chain but also the global supply chain.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the process and functions of logistics system. 2. Understand the different logistics strategies and their advantages. 3. Apply different modes of transportation, different design options of transportation network and their processes. 4. Understand the importance of reverse logistics in both manufacturing and e-commerce firms. 5. Evaluate the importance of quality in customer service and integrated logistics their applications. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Logistics Management- Definition, Scope, Functions, Objectives - Integrated Logistics Management, Role of Logistics in the Supply Chain - Logistics & Customer Service, Role of Logistics in Competitive Strategy, Logistics Organization & Performance Measurement, ERP –SAP – ORACLE.	09
	2.	Logistics Strategy- Strategic Role of Logistics, Definition, Role of Logistics Managers in Strategic Decisions, Strategy Options, Lean Strategy, Agile Strategies & Other Strategies, Designing & Implementing Logistical Strategy.	08
	3.	Transportation- Role of Transportation in Logistics, Transportation Selection Decision, Basic Modes of Transportation- Rail, Road, Water, Air, Pipeline, Characteristics of Different Modes; Inter Modal Operations; Air Freights for Exports and Imports. E-Way Bills. Economic Impacts of Rail and Road Networks.	10
	4.	Reverse Logistics- Scope, Design, E-Logistics- Logistics Information System-Application of IT in Logistics- Automatic Identification Technologies- Bar Coding, RFID, Role of Logistics Providers, Logistics Outsourcing- 3PL & 4PL, Global Logistics- Operational & Strategic Issues.	10
	5.	Quality Customer Service & Integrated Logistics- Customer Service, Importance Elements, The Order Cycle System, Distribution Channels, Functions Performed, Types, Designing.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. David J. Bloomberg, Stephen LeMay & Logistics, Prentice-Hall of India Pvt Joe B. Hanna Ltd.,New Delhi. 2. Donald J. Bowersox & David J. Closs: Logistical Management, Tata McGraw Hill Publishing Co. Ltd, New Delhi, 2004. 3. Agrawal D K, Logistics & Supply Chain Management, <i>Macmillan India Ltd</i>, 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Donald Waters: Logistics. Palgrave Macmillan, New York. 2. Coyle et al., The Management of Business Logistics, Thomson. 3. Bowersox Donald J, Logistical Management- The Integrated Supply Chain Process, Tata McGraw Hill. 		

Course: MODELLING FOR DECISION MAKING IN SUPPLY CHAIN			Semester: IV
Course Code: LSC 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the foundational knowledge associated with the supply chain analytics and learn various tools and techniques for implementation of analytics based on the supply chain drivers.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the importance of data and analytics in SCM. 2. Understand various tools and techniques used in Supply Chain Analytics. 3. Design the type of analytics for modelling and simulation in supply chain. 4. Analyse tools and models for supply chain forecasting. 5. Apply advance modelling of Supply Chain Analytics. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Supply Chains Analytics: Understanding the Supply Chain Analytics (SCA), Revisions of Basic of Supply Chain Management, Important of Analytics in Supply Chain, Relating Operations Management with Supply Chain Concepts with SC Analytics, The Importance of Supply Chain Analytics in the Flows Involving Material, Money, Information and Ownership.	08
	2.	Framework of SCA: Supply Chain Analytics Tools, Key Issues in Supply Chain Analytics, What Involves in Supply Chain Analytics, Concept of Descriptive Analytics in a Supply Chain, Bullwhip Effect in SCM, Decision Domains in Supply Chain Analytics, Overview of SAP Supply Chain Analytics modules and its Functionalities. Uses of Spreadsheet / Tableau in Supply chain Analytic.	08
	3.	Modelling and Simulations for SCA: Introduction to Modelling, Approaches for Optimization and Simulation, Modelling Software, Supply Chain Decisions that Requires Mathematical or Interpretative Modelling. Understanding of Data and its Role in Analytics of a Transportation Problem in a Supply Chain. Managerial Implications of the Results of Analytics. Spreadsheet Modelling for Supply Chain.	09
	4.	Predictive Modelling in Supply Chain: Forecasting for Supply Chain Planning and Management, Review of Multiple Regression and Stepwise Selection of Predictive Variables, Identification of Variables in a Forecasting Model, Exponential Smoothing Forecasting Models, Introduction to ARIMA Modelling, Data Driven Inventory Optimization.	12
	5.	Foundation of Prescriptive Analytics in SCM: Network Planning in a Supply Chain, Importance of Network Planning, Design of Logistics Network using Heuristics/optimization, Concept of 3PL/4PL in a Supply Chain. Performance Optimisation in SCM, Information Technology in SCM.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Sunil Chopra and Peter Meindle, Supply Chain Management (Pearson). 2. D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi, and Ravi Shankar, Designing and Managing the Supply Chain concepts, Strategies and Case studies, Third Edition, Tata McGraw Hill, New Delhi. 3. Kusum Deep & Madhu Jain & Said Salhi, Logistics, Supply Chain and Financial Predictive Analytics (Springer). 		
REFERENCE BOOK/	<ol style="list-style-type: none"> 1. Jeremy F. Shapiro. Modelling the Supply Chain. Duxbury Thomson Learning. 2. Rahul Saxena & Anand Srinivasan, Business Analytics. 3. Lora M. Cecere, Supply Chain Metrics that Matter (Wiley). 		

SUGGESTED READING	
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Course: GLOBAL SUPPLY CHAIN & LOGISTICS			Semester: III/IV
Course Code: LSC 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To gain knowledge in global logistics and supply chain management and to do logistics management globally with understand the requirements and regulations involved in doing logistics globally.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the factors influencing global market forces and technological forces. Understand International Logistics and models of Forecasting in Supply Chain Management. Analyse Sales Contract in International Logistics. Evaluate the challenges in Global Supply Chain and Logistics and elaborate the requirements of global strategy. Analyse the regional and cultural differences and find Performance Expectation and Evaluation. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Global Logistics: Meaning and Definition, Global Market Forces, Factors Affecting Global Market Forces, Factors Affecting Technological Forces, Global Cost Forces, Political and Economic Forces, Requirements for Global Strategy, Global Strategy Implementation.	08
	2.	Integrating International Logistics with Supply Chain: Trade-Offs in International Logistics, Multi-Modalism, Key Factors in a Transport Mode(s) & Trade-Off. Considerations of Speed, Frequency, Packing and Insurance in International Transportation. Warehousing & Benchmarking in Global Supply Chain Management, Supply Chain Cycle Time Reduction, Demand-Driven Supply Network in International Logistics.	10
	3.	Export Sales Contract in International Logistics: Constituents of the Export Sales Contract, Contract of Affreightment: Terms of Delivery & Incoterms standards. International Purchasing Systems, Constituents/Strategy and its Interface with the Management of the Global Supply Chain, Negotiating the Contract, Selecting the International Logistics Operator, Criteria of Selecting the Third-Party Logistics Operator, Contract Logistics.	10
	4.	Challenges of Global Supply Chain & Logistics: International Versus Regional Product, Local autonomy versus control logistics –Importing & Exporting, Main forces, Barriers, Speculative Strategies, Hedge Strategies, Flexible Strategies Requirements for Global Strategy implementation, Advantages of Global Supply Chain. Supply Chain security.	09
	5.	Performance Expectation and Evaluation: Regional differences in Logistics, Cultural differences in different places, Geographic information Systems, Infrastructure; Performance Cycle length, operations, system integration, Alliances, Views of Global Logistics – Importing & Exporting.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Mangan,J., Lalwani, C., Butcher, T., Javadpour, R. Global Logistics and Supply Chain Management. John Wiley & Sons Ltd. U.K. Latest Edition. Christiansen, B. Handbook of Research on Global Supply Chain Management (Advances in Logistics, Operations, and Management Science). Business 		

	Science Reference, USA. Latest Edition.
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Voortman, C. Global Logistics Management. Juta Academic. South Africa. Latest Edition. 2. Branch, A.E. Global Logistics Management and Supply Chain Management. Routledge, U.K, Latest Edition.

Course: SHIPPING & WAREHOUSING MANAGEMENT			Semester: III/IV
Course Code: LSC 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the significance of Warehousing and shipping techniques to minimize the total physical effort and minimize the cost of moving goods.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the warehousing decisions and various warehouse operations. Analyse inventory management and its techniques. Apply warehouse management systems to manage warehouse efficiencies. Analyse the unitization, shipping and packaging process. Evaluate the distribution facilities management techniques. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Warehousing: Introduction, Warehousing Decisions, Warehouse Operations, WMS, Types of Warehouses, Warehouse Layout, Functions, Equipment and Components, Centralized & Decentralized, Warehouse Operations and Storage Systems, Warehousing Cost Analysis.	08
	2.	Inventory Management: Role in Supply Chain; Independent Demand Systems, Dependent Demand Systems, Inventory Items with Time-Varying Demand; Inventory Items with Probabilistic Demand; Replenishment Systems for Inventory; Push Vs. Pull system, Just in Time Inventory Control, ABC Inventory Control, Bull Whip Effect.	10
	3.	Managing Warehouse Efficiency: Order Picking, Picking Methods, Pick Path, Measuring Warehouse Efficiency, Warehouse Workforce Design and Development, Cross Docking.	08
	4.	Unitization, Shipping and Packaging: Container Optimization, Container Loading and Void Fill, Weigh Checking, Automated Loading, Dock Management-Packaging, Types, Cost; Labelling Functions and Design.	09
	5.	Distribution Facilities Management: Material Handling Systems, Types of Material Handling Equipment, Modern Warehousing, ASRS & their operations, Bar Coding, Technology & Applications in Logistics Industry, RFID Technology & Applications, Types of Conveyors, Refrigerated Warehouses.	10
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Frazelle, World Class Warehousing & Material Handling, Tata McGraw Hill. Vinod.V.Sople, Logistics Management, Pearson Education. Arnold, Introduction Materials Management, Pearson Education. Robert A. Davis, Demand-Driven Inventory Optimization and Replenishment (Wiley-Wiley & SAS Business Series). 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Frazelle, World Class Warehousing & Material Handling, Tata McGraw-Hill. Satish K. Kapoor and Purva Kansal, Basics of Distribution Management - A Logistical Approach, Prentice Hall. Satish K. Kapoor and Purva Kansal Marketing, Logistics - A Supply Chain Approach, Pearson Education. 		

Course: LOGISTICS AND SUPPLY CHAIN INFORMATION SYSTEM			Semester: III/IV
Course Code: LSC 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with the various technological aspects and real time description updated technologies in the logistics sector and supply chain industry.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand eSCM, benefits and communication networks. Understand enterprise information systems and their benefits. Analyse various information systems development methodologies. Apply the framework for managing supply chain information various enterprise architectures. Evaluate various processes and Technologies in E-Logistics 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Electronic SCM, Communication Networks: Introduction eSCM, eSCM Framework; Key Success Factors for eSCM; Benefits of eSCM Positioning Information in Logistics; Strategic Information Linkage; Supply Chain Communication Networks - Role of Communication Networks in Supply Chains, Overview of Telecommunication Networks, EDI - Data Security in Supply Chain Networks, Overview of Internet Able Models.	10
	2.	Enterprise Information Systems: Overview of Enterprise Information Systems, Information Functionality and Principles; Introduction Enterprise Information Systems, Classification of Enterprise Information Systems; Information Architecture; Framework for Managing Supply Chain Information; Popular Enterprise Application Packages, Benefits of Enterprise Information Systems.	10
	3.	SCM Systems Development: Stakeholders in Supply Chain Information Systems, Stakeholders in SCM, Information Systems Development, Logistics Information Systems Design, Defining Enterprise Architecture, Choosing Appropriate System Development Methodologies, Adopting relevant Systems Development Model.	07
	4.	Information Integration: Enterprise Application Integration and Supply Chain Visibility, Enterprise Application Integration, Supply Chain Visibility, Supply Chain Event Management, Supply Chain Performance, Planning and Design Methodology, Problem Definition and Planning, Data Collection and Analysis, Recommendations and Implementation, Decision Support Systems.	08
	5.	Procurement and e-Logistics: Understanding the Procurement Process, Participants in different types of e-Procurement, Drivers of e-Procurement, Benefits of e-Procurement, Estimating e-Procurement Costs, Barriers and Risks of e-Procurement Adoption. Push and Pull Supply Chain, E- Logistics Technologies- Advance Ship Notice (ASN), Tracking Systems, Satellite Global Positioning Systems (GPS) and Geographic Information Systems (GIS), Bar-Coding and Scanning, Digital Signature Technology, Wireless Technology – Radio Frequency Identification and Detection (RFID).	10
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> Donald Bowersox, David Closs, & Bixby cooper, Supply chain Logistical Management. R.H. Ballou, and Samir Business Logistics Management. 		

	3. Dave Chaffy, Digital Business and E commerce Management – Strategy, Implementation and Practices (Pearson).
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Strauss, Alexa & Frost E-Marketing, Routledge. 2. David B. Grant & Chee Yew Wong, Sustainable Logistics and Supply Chain Management: Principles and Practices for Sustainable Operations and Management Kogan Page. 3. Gerhard Oswald & Michael Kleinemeier, Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation (Springer) 4. Elias. M. Awad, " Electronic Commerce", Prentice-Hall of India Pvt Ltd. 5. Ravi Kalakota, Andrew B. Whinston, "Electronic Commerce-A Manager's guide", Addison-Wesley.

ENTREPRENEURSHIP (EFB)

Course: ENTREPRENEURSHIP DEVELOPMENT			Semester: III
Course Code: ENT 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To familiarize the students with Entrepreneurship Development, process of establishing an enterprise and the type of support available from various government and non-government institutions.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the nature of entrepreneurship and develop the ability to recognize business opportunity as a career. 2. Demonstrate the ability to do a self-analysis in the context of an entrepreneurial career. 3. Develop the capability to find an attractive market that can be reached economically. 4. Create an appropriate business model. 5. Develop a well-presented business plan that is technically and economically feasible. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Foundation of Entrepreneurship: Concept and Need of Entrepreneurship, Characteristics and Types of Entrepreneurships, Entrepreneurship as a career, changing role of the Entrepreneur, Entrepreneurial Traits, Factors Affecting Entrepreneurship.	06
	2.	Entrepreneurial Success and Challenges: Influences on Entrepreneurship Development, Personal Entrepreneurial Success and Failure, Reasons and Remedies, Women Entrepreneurs, Challenges and Achievements of Women Entrepreneurs.	06
	3.	Entrepreneurial Motivation and Competencies: Meaning of Entrepreneurial Motivation, Motivation Cycle or Process, Entrepreneurial Motivating Factors, Changes in Entrepreneurial Motivation, Entrepreneurial Motivation Behavior, Meaning of Entrepreneurial Competencies, Major Entrepreneurial Competencies, Developing Entrepreneurial Competencies.	09
	4.	Opportunities Identification and Selection: Need for Opportunities Identification and Selection, Environmental Dynamics and Changes, Business Opportunities in Various Sectors, Identification of Business Opportunities, Opportunity Selection.	06
	5.	Business Planning Process: The business plan as an entrepreneurial tool, Elements of business planning, Objectives, Market analysis, Development of product/idea, Marketing, Finance, Organization and management, Ownership, Critical risk contingencies of the proposal, Scheduling and milestones	09
	6.	Social Entrepreneurship: Introduction to Social Entrepreneurship; Characteristics and Role of Social Entrepreneurs; Innovation and Entrepreneurship in a Social Context.	09
		Total Hours	45
TEXT BOOK	1. Kuratko, D. F. and Rao, T. V.; Entrepreneurship: A South Asian Perspective; Cengage Learning		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Hisrich, R. D., Peters. M.P. and Shepherd, D.A.; <i>Entrepreneurship</i>; McGraw Hill 2. Dollinger, M.J.; <i>Entrepreneurship: New venture creation</i>; Pearson Education 3. Zimmerer, W.T. and Norman M.S; <i>Essentials of Entrepreneurship and Small Business Management</i>; Pearson Education 		

	4. Charantimath, Poornima, <i>Entrepreneurship Development & Small Business Enterprises</i> , Pearson Education.
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Course: FAMILY BUSINESS MANAGEMENT			Semester: IV
Course Code: ENT 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To acquaint the students with the basic knowledge and understanding of the dynamic issues and problems facing family businesses as well as how these issues and problems can be dealt strategically to improve family business performance.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the family business dynamics and the relationships with external stakeholders. Identify the distinctive advantages of a family business and unique challenges facing such entities. Evaluate professionally managed firms from family businesses Apply professionalism in family business 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Family Business: Definition of family business, Uniqueness of family business-special strengths, Family culture, beliefs & values and their impact on business, family business dynamics, Nonfamily employees, Managing conflict in family firms, family business systems, Family Business Lifecycle	08
	2.	Family's Relationship with Business: Articulating values and shared vision, Effective business families, Ingredients of successful planning, unifying plans, processes and structures: Designing family governance, family council, family retreats and family constitution, Human Resource Management and Leadership Perspectives: The importance of outside experience, Systems overlap and Human Resource Management issues, working in the business	12
	3.	Role of Outsiders and Professionalizing Boardrooms: Non-family managers and their relationship with family, non-executive directors, professional advisers and consultants. Professionalising the board room: the rubber-stamp board, making the transition, effective working boards, two-tier boards	07
	4.	multigenerational firms: The succession paradox, Resistance to succession planning - The founder, The family, Employee and environmental factors. Leading the transition. Preparing next generation managers and leader, succession in older family business. Cousin companies: evolution of family business ownership, complexity in cousin companies, setting up and structuring family governance.	08
	5.	Building financial security and wealth management: Building financial security, selling the business, passing down the business, Wealth Management: Setting family office, Single family office and multiple family office structures, Family business philanthropy, Case Studies on Kumar Mangalam Birla – Aditya Birla Group, Dheeru Bhai Ambani – Reliance Industries, Lakshmi Niwas Mittal- Arcelor Mittal, Jamnalal Bajaj-Bajaj Group, Jamsetji Nusserwanji Tata-Tata Group	10
		Total Hours	45
TEXT BOOK	1. Leach, P.; <i>Family Businesses: The Essentials</i> ; Kogan Page		
REFERENCE BOOK/	1. D. Sampath, <i>Inheriting the Mantle: Management of Succession and Transition in Indian Family Business</i> , Sage Publications		

SUGGESTED READING	2. Loss, M. and Bascunan, F. L.; <i>Entrepreneurship Development</i> ; Global Vision Publishing House
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Course: FEASIBILITY STUDY & BUSINESS PLAN			Semester: IV
Course Code: ENT 03 C	L T P	3 0 0	Credits: 3

OBJECTIVE	This course focuses on new venture initiation and the preparation of a feasibility study that can be used to begin operations in a new business enterprise.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the principles of feasibility studies. 2. Prepare and analyse feasibility studies. 3. Understand the factors both internal and external that impact on the feasibility of a project. 4. Analyse the components of a feasibility study. 5. Analyse the commercial viability of any project. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Environmental Screening and Idea Generation: <ol style="list-style-type: none"> i. Analysis of economic, socio-cultural, technological and politico-legal environment. Sources of business ideas. Role of personal observation, creativity and business research. Collection of data – primary and secondary. Situational analysis ii. Entrepreneurship opportunities in contemporary business environment, like opportunities in network – marketing, social media, franchising, business process outsourcing. Small business as the seedbed of entrepreneurship iii. Pre-feasibility study 	16
	2.	Feasibility Study: <ol style="list-style-type: none"> i. Preliminary study of business ideas. Aspects of the technical and economic feasibility: Commercial, financial and administrative feasibility, Preparation of feasibility report ii. Technical feasibility, estimation of cost, demand analysis and commercial viability, risk analysis, collaboration arrangements; financial planning; Estimation of funds requirements, sources of funds. Loan syndication for the projects. Tax consideration in project preparation and legal aspects 	16
	3.	Business Plan: <ol style="list-style-type: none"> i. Meaning and uses and business plan. Elements (major headings and brief discussion) and presentation Implementation – prototype development and test marketing.	07
	4.	Presentation of Feasibility Study: Students will form teams to work on the feasibility study. Thus, a central component of this course is the opportunity for the students to develop a venture feasibility plan which will be presented for evaluation.	06
		Total Hours	45
TEXT BOOK	1. Chandra, Prasanna. <i>Project Preparation Appraisal and Implementation</i> , Tata McGraw-Hill Publishing Company.		
REFERENCE BOOK/ SUGGESTED READING	1. Holt, David H., <i>Entrepreneurship: New Venture Creation</i> , Prentice-Hall of India, New Delhi. 2. Brandt, Steven C.; <i>The 10 Commandments for Building a Growth Company</i> , Macmillan Business Books, Delhi.		

Course: START-UP ECOSYSTEM IN INDIA			Semester: III/IV
Course Code: ENT 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To acquaint the students with Startup Ecosystem and initiatives of Government and other institutional support for growth and development of. Entrepreneurship		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Identify and understand the interdependent network of complex start-up ecosystems. 2. Describe the opportunities available for startups within the ecosystems. 3. Describe the support provided by government & other agencies for startups within the ecosystems. 4. Understand the formulation of institutions promoting policy. 5. Understand the business incubation mechanism. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Startup Ecosystem: The New Industrial Revolution, The Rise of The Start-up Economy, The Forces of Change-Startup Ecosystem in India – Issues, Challenges & Opportunities.	08
	2.	Business Incubation: Business Incubation Definition and Principles, Incubator Models and Success Factors, Incubator Operation, planning an Incubator, Business Incubation Marketing and Stakeholder Management, Financing a Business Incubator, Managing the Business Incubator, Monitoring, Evaluation and Benchmarking, Implementing a Mentoring Program, Deals and Financing for Incubator Clients, Technology Commercialization, Virtual Business Incubation, Concept of Accelerator	11
	3.	Support Ecosystem: Start-up policies of Central Government and some leading State Governments Technology Business Incubator (TBI), Role of National Science and Technology Entrepreneurship Development Board, (NSTEDB), DST guidelines for Seed Support System (SSS) for Start-ups in Incubators. Make in India, Stand-Up India, Start-up India and Recent Initiatives from MUDRA, National INNOVATION and STARTUP Policy, Case study on Start-ups.	14
	4.	Institutions Promoting Entrepreneur ship: Agencies for Policy Formulation and Implementation: District Industries Centers (DIC), Small Industries Service Institute (SISI), Entrepreneurship Development Institute of India (EDII), National Institute of Entrepreneurship & Small Business Development (NIESBUD), National Entrepreneurship Development Board (NEDB) (Emphasis on their Objectives, Activities & Schemes)	12
		Total Hours	45
TEXT BOOK	1. Pruthi. S., Mitra. J., Global Entrepreneurship & Innovation, Sage Publication.		
REFERENCE BOOK/ SUGGESTED READING	2. Charanthimath, Poornima M. <i>Entrepreneurship Development Small Business Enterprises</i> , Pearson 3. Burns, Paul & Hunt, Jim Dew; <i>Small Business Entrepreneurship</i> , Palgrave Macmillan publisher		

Course: ENTREPRENEURIAL MARKETING			Semester: III/IV
Course Code: ENT 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	This course clarifies key marketing concepts, methods, and strategic issues relevant for start-up and early-stage entrepreneurs.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Discuss the processes of market identification and market creation in entrepreneurial situations. 2. Critically assess and apply marketing theories and models to new ventures. 3. Design and build an operational marketing strategy for a start-up business or new product. 4. Evaluate strategies to overcome challenges encountered in the planning process for new products and businesses. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Entrepreneurial Marketing: Using marketing to create a new business with radically new ideas, Entrepreneurship and radically new ideas: the need for effectuation. Developing your business model, Defining marketing and sales, Beyond stereotypes, Identifying an application and market: Entrepreneurship as opportunity seeking, Evaluation criteria of the experienced entrepreneur, The role of marketing knowledge, Developing bowling alley model	10
	2.	Segmentation Targeting and Positioning: Conceptualising the market: Customer segmentation, Understanding customer value for the initial target segment, Targeting using effectuation, Developing a positioning statement, Validation: initial customer feedback, Different customer roles and co-creation.	09
	3.	Customer Adoption and Competitive Market Considerations: The adoption life cycle, Penetration and diffusion, understanding lead customers, Anticipating and preventing chasms, Effectively addressing chasms. Reasons why customers postpone or resist adoption. Different levels of competition. Anticipating competitor reactions,	09
	4.	Role of research and customer development process: Need for research in entrepreneurial marketing, need for creating customer buy-in, New product development versus customer development, Steps of the customer development process, its relationship with the business model	08
	5.	Marketing and Sales Development Program: Marketing and sales plan, Marketing instruments, Product, Price, Place and Promotion, The sales learning curve, Sales as the motivated knowledge broker for innovation, Initial solution selling activities, Developing the sales roadmap, Developing new firm's sales and marketing capabilities	09
		Total Hours	45
TEXT BOOK	1. Edwin J. Nijssen, <i>Entrepreneurial marketing An Effectual Approach</i> , Routledge,		
REFERENCE BOOK/	<ol style="list-style-type: none"> 1. Leonard Lodish, Howard Lee Morgan, Amy Kallianpur, <i>Entrepreneurial Marketing</i>, Wiley 2. Luca Cacciolatti and Soo Hee Lee, <i>Entrepreneurial Marketing for SMEs</i>, Plgrave Macmillan 		

SUGGESTED READING	<p>3. Zubin Sethna, Paul Harrigan, Rosalind Jones, <i>Entrepreneurial Marketing: Global Perspectives</i>, Emerald Group Publishing</p> <p>4. Bruce D. Buskirk, Molly Lavik, <i>Entrepreneurial Marketing: Real Stories and Survival Strategies</i>, Thomson</p> <p>5. Ian Chaston, <i>Entrepreneurial Marketing: Sustaining Growth in All Organisations</i>, Palgrave Macmillan</p>
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Course: ENTREPRENEURIAL FINANCE			Semester: III/IV
Course Code: ENT 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	The goal of Entrepreneurial Finance is to help managers make better investment and financing decisions in entrepreneurial settings.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Describe the various sources of funding for new ventures. Understand how to determine the amount of money an entrepreneur requires to successfully start and operate a business. Calculate the value of a venture and appreciate the many roles valuation plays in the creation and development of a venture. Construct, read and draw practical insights from the financial statements of a venture, Evaluate company in financial distress and understand the options for the company. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Finance for Entrepreneurs: Principles of Entrepreneurial Finance- Role of Entrepreneurial Finance- The successful venture life cycle- Financing through venture lifecycle, Entrepreneurial finance. Developing Business Idea, Business Model. Screening venture, opportunities: Pricing / Profitability considerations, Financial, / harvest Considerations. Financial, Plans and Projections.	11
	2.	Organizing and Operating the Venture: Financing a New venture, Seed Capital, Startup and First Round Financing Sources- Financial Boot Strapping, Angel Funding. Preparing Financial Statements: Obtaining and recording the resources to start and Build a new venture, Asset and Liabilities and Owners Equity in Business, Sale expenses and profits Internal Operating Schedules, Statement of cash flows, Operating Break even Analysis. Evaluating operating and financial performance using ratio analysis.	12
	3.	Financial Planning: Financial Planning throughout the Venture's life cycle, Short Term cash planning tools, projected financial statements. Types and costs of Financial Capital: Implicit and Explicit costs, Financial Markets, Investment Risk, Weighted average cost of capital.	12
	4.	Venture Valuation: Valuing Early stage Ventures, Venture Worth, Basic Mechanics of valuation, developing the projected financial statements for a discounted Cash Flow Valuation, Accounting Vs Equity Valuation. Venture Capital Valuation Methods: Basic Venture Capital Valuation Method, Earnings Multiplier, and Discounted Dividends Methods.	10
		Total Hours	45
TEXT BOOK	1. Steven Rogers, Entrepreneurial Finance, Tata Mc Graw Hill		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> Douglas Cumming, <i>Entrepreneurial Finance</i>, Oxford University Press M J Alhabeeb, <i>Entrepreneurial Finance: Fundamentals of Financial Planning and Management for Small Business</i>, Wiley Philip J. Adelman, Alan M. Marks, <i>Entrepreneurial Finance</i>, Pearson,. 		

INFORMATION TECHNOLOGY (IT)

Course: DATABASE MANAGEMENT SYSTEM			Semester: III
Course Code: IT 01 C	L T P	3 0 0	Credits: 3

OBJECTIVE	The objective of the course is to present an introduction to database management systems, with an emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a DBMS		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Develop skills and understanding in database design and make use of database management systems for application. 2. Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra, and SQL. 3. Design ER-models to represent simple database application scenarios. 4. Develop understanding about relational models and SQL for implementing and maintaining databases. 5. Develop understanding about the different issues involved in the design and implementation of a database system. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Database Concepts and Modelling: Introduction – Data, Database, DBMS, Database Users and Administrators, History of Database Systems, Overview of Client/Server Technology: 3Tier Architecture, Data Modelling, Hierarchical, Network, Object Oriented, Introduction to Distributed Databases.	08
	2.	Entity-Relationship Model: Introduction, Conceptual Data model for Database Design, ER Model Concept with an example: Components of an ER Model, Relationships, Roles and Structural Constraints, Constraints on Relationship Types.	07
	3.	SQL: History of SQL, Basic structure, DDL commands, Create, Alter and Drop Table, DML commands, Select Statement, Insert, update, and delete data, Top, Distinct, Null keywords, String and Arithmetic Expressions, Where Clause with Operators, Simple queries, Aggregate functions, Count, Sum, Min, Max, Avg Group by and Having Clause, Group by, order by.	10
	4.	SQL Advance: Introduction to Joins, Inner Join, Outer Join, Self-Join, Cross Join, Co-related Sub Queries, Set Operations using Unions, Intersect and Except, Entity integrity, Domain integrity, Referential integrity, Types of constraints, Unique, Not NULL, Primary Key, Default, Check, Foreign Key, Introduction & Advantages of Views, Creating, Altering, Dropping Views, Introduction Clustered and Non-Clustered Index, Creating and Dropping Indexes.	14
	5.	Security and Integrity: Introduction, Security and Integrity Violations, Authorization, Granting of Privileges, Security Specification in SQL.	06
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Sql, Pl/Sql: The programming language of oracle by Ivan Bayross, BPB publications 2. Ramez Elmasri and Shamkant B. Navathe, Fundamentals of Database Systems, Pearson Education. 		
REFERENCE BOOK/	<ol style="list-style-type: none"> 1. Leon, Alexis and Leon, Mathews, Database Management Systems. 2. A Silberschatz, H Korth, S Sudarshan, "Database System and Concepts", McGraw-Hill. 		

SUGGESTED READING	
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Course: DIGITAL BUSINESS MANAGEMENT			Semester: IV
Course Code: IT 02 C	L T P	3 0 0	Credits: 3

OBJECTIVE	To understand the digital transformation of brick-and-mortar type of traditional business and how to convert it into its digital equivalent in all the management aspects.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the concept of digital transformation. Understand the role of e-business and e-commerce environment. Analyse Digital marketing environment. Evaluate digital business strategy and applications. Apply digital business strategy. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction to Digital Business Introduction, importance of digital Communication, traditional business, digital business opportunity, Barriers to adoption of technology, digital business stakeholder barriers to consumer digital adaption.	06
	2.	Analysis for Digital Business and E-Commerce Digital Marketplace analysis, process of digital marketplace. Location of trading in marketplace, Business models of e-commerce.	12
	3.	Managing Digital Infrastructure Digital Business Infrastructure Components, Digital Technologies, Management Issues, Managing Internal Digital Communication. Technology Standards, Development of Customer Experience And Digital Service. Internal And External Governance Factors.	11
	4.	Key issues in Digital Environment Social factor, legal and ethical factor, economic factor, political factor, technology factor, cultural factor. Factors affecting e-commerce, Environment and green issues.	10
	5.	Case Studies and Success Stories of E-Business E-Business and E-Commerce Case Studies	06
		Total Hours	45
TEXT BOOK	1. Kamat and Kamat, Digital Business Management, Himalya publishing house.		
REFERENCE BOOK/ SUGGESTED READING	1. Chaffey Dave, Hemphill Tanya and Edmundson-Bird David, Digital business and E-Commerce Management, Pearson 2. Busulwa Richard, Navigating Digital Transformation in Management, Routledge		

Course: BUSINESS INTELLIGENCE AND APPLICATIONS			Semester: IV
Course Code: IT 03 C	L T P	3 0 0	Credits: 3
OBJECTIVE	This course is intended to impart fundamental knowledge on concepts and tools business intelligence. After completing the course, the student is expected to be able to use BI tools in decision making.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand the meaning and importance of Business Intelligence in business. 2. Understand the types and platforms of Business Intelligence 3. Apply Business Intelligence tools. 4. Evaluate the technologies and tools that make up BI (e.g. Data warehousing, Data reporting and use of Online analytical processing (OLAP)). 5. Plan the implement BI system. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Basics of Business Intelligence, Definition, History and Evolution, Business Intelligence Segments, Difference between Information and Intelligence, Defining Business Intelligence Value Chain, Factors of Business Intelligence System, Real time Business Intelligence, Business Intelligence Applications, Creating Business Intelligence Environment, Business Intelligence Landscape.	08
	2.	Types and Platforms of Business Intelligence Introduction, Multiplicity of Business Intelligence Tools, Types of Business Intelligence Tools, Modern Business Intelligence, the Enterprise Business Intelligence, Information Workers, Business Intelligence Platform, Dynamic roles in Business Intelligence, Roles of Business Intelligence in Modern Business- Challenges of BI. Business Intelligence Platform Capability Matrix, BI Target Databases, Data Mart, BI Products and Vendor, The Big Four Business Intelligence vendors.	11
	3.	Business Intelligence Platform Introduction, application, environment, identify data term, explore the workspace, Filter content using explore point. Data import, File handling, web-based reporting system.	09
	4.	Data Manipulation and Restructuring Objective, calculate data in a workplace, customization data, Restructuring of data, Customized Import, construction of workspace, formatting of data, use of numeric and text data.	09
	5.	Data Visualization Objective, choose effective chart, features of charts, Area Charts; Column charts, Line charts, Pie charts, Point Chart, customize chart options.	08
		Total Hours	45
TEXT BOOK	1. Gautam, Sangeeta, IBM Cognos; Business Intelligence; IBM Press		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Wilfried, Grossmann, Rinderle-Ma, Stefanie; Fundamentals of Business Intelligence; Springer. 2. Loshin, David; Business Intelligence; Elsevier. 3. Volitich, Dan, Ruppert, Gerard; IBM Cognos; Business Intelligence 10: The Official Guide; McGraw-Hill. 4. Turban, E, Sharda, R, Delen, Dursun, and King, David; Business Intelligence: A Managerial Approach; Pearson. 		

Course: WEB TECHNOLOGIES			Semester: III/IV
Course Code: IT 04 E	L T P	3 0 0	Credits: 3

OBJECTIVE	Web Technologies go hand in hand for developing flexible, attractively and user-friendly websites. Web Technologies describes the structure of a website semantically along with presentation and can be used to create interactive forms.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> Understand the working of the internet and organization of web pages. Understand the role of different protocols in the working of WWW. Develop a static webpage using HTML. Apply Search Engines. Apply and optimize search engine results. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction Networking Protocols and Internet: Introduction, Protocols in Computer Communications, the OSI Model, OSI Layer Functions. Why Internet Working? Problems in Internet Working, Dealing with Incompatibility Issues, A Virtual Network, Internet Working Devices, Repeaters, Bridges, Routers, Gateways, A Brief History of the Internet, Growth of the Internet.	08
	2.	Internet Protocols Introduction to Internet, World Wide Web, Web Browser types of web browsers and their features, Web Server, Protocols governing the Web: HTTP and HTTPS, SMTP, POP, MIME and SMTP, Web development strategies, Web applications, Web Projects, Web team.	10
	3.	Web Page Designing Tools Introduction to HTML: History of HTML, first HTML page, HTML Tags and Attributes, HTML Tag vs. Element, HTML Basic Tags, HTML Formatting Tags, HTML Color Coding, Div and Span Tags for Grouping, Unordered Lists, Ordered Lists, Definition list, Image and Image Mapping, URL - Uniform Resource Locator, URL Encoding, Table tag and their attributes.	10
	4.	Search Engine Optimization Understanding domain/website & how they work, Types of websites & their importance, Basics of world wide web (www) / Internet, Introduction to Search Engines & their importance, Economical & Social Impact of Major Search Engines, How Search Engines Work? Search Engines Algorithms & Architecture.	10
	5.	Google Engine Search Introduction to Google Search Engine, Understanding Search Engine Result Pages (SERPs), Basic & Advance Search Commands/Operators, Google Search Algorithm & its Capabilities/Functions, Page Rank Technology & its impact in Ranking Calculation, Introduction to Google Algorithm Updates.	07
		Total Hours	45
TEXT BOOK	1. Deitel & Deitel; Internet and World Wide Web – How to Program; Pearson Education 2. Bayross Ivan; Teach Yourself Web Technologies Part II; BPB		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none">1. Eric Ladd, Jim O'Donnel; Using HTML 4, XML and JAVA; PHI Learning2. Aferganatel; Web Programming: Desktop Management; PHI Learning3. Rajkamal; Internet and Web Technology; McGraw-Hill
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Course: CYBER SECURITY AND RISK MANAGEMENT			Semester: III/IV
Course Code: IT 05 E	L T P	3 0 0	Credits: 3

OBJECTIVE	Cybersecurity risk management guides a growing number of IT decisions. Cybersecurity risks continue to have critical impacts on overall IT risk Modelling, assessment and mitigation. The goal of this course is to teach students the risk management framework with both qualitative and quantitative assessment methods that concentrate on the information security (IS) aspect of IT risks. The relationship between the IT risk and business value will be discussed through several industry case studies.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Understand information security 2. Analyse the components of information security. 3. Understand the process for implementing an information security policy. 4. Evaluate popular security controls. 5. Assess the actions of government and industry that influence information security. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Introduction History of information systems and its importance, Basics, changing nature of information systems, Need of distributed information systems, Role of Internet and web services, Information system threats and attacks, Classification of threats and assessing damages, security in mobile and wireless computing, Authentication service security, Security implication for organizations.	09
	2.	Principles of Information Security Basic principles of information security, Confidentiality, Integrity availability and other terms in information security, Information classification and their roles, Security threats to E-commerce, Virtual organization, Business transactions on web.	09
	3.	Physical Security and Disaster Control Physical security-Needs, Disaster and controls, Biometrics, Factors in biometrics systems, Benefits, Criteria for selection of biometrics, Design issues in biometric systems, Interoperability issues, ISO 27001, SEE-CMM, Information security Vs privacy.	09
	4.	Document Security and Cryptography Model of cryptographic systems, Issues in documents security, System keys, public key cryptography, Digital signature, Requirement of digital signature system, Firewalls, Design and implementation issues of firewall, Perimeter for network protection, Network attacks, Need of intrusion monitoring and detection, Intrusion Detection.	10
	5.	Cyber Crime and Cyber Law Laws, Investigation and ethics, Cybercrime, Information security and law, Types and overview of cybercrimes, Cyber law issues in E-business management overview of Indian IT Act, Ethical issues in intellectual property rights, Copy right, Patents, Data privacy and protection, Domain name, Software piracy, Plagiarism, Issues in ethical hacking.	08
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Godbole; Information Systems Security; Willey 2. Sood; Cyber Laws Simplified; McGraw-Hill 		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Merkov, Breithaupt; Information Security; Pearson Education 2. Schou, Shoemaker; Information Assurance for the Enterprise; Tata McGraw-Hill 3. Furnell; Computer Insecurity; Springer 4. IT Act 2000 5. N. Godbole, <i>Sunit</i> Belapure; Cyber security: understanding cybercrimes, computer forensics <i>and</i> legal perspectives; <i>Wiley India</i>
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Course: KNOWLEDGE MANAGEMENT AND INFORMATION SYSTEM			Semester: III/IV
Course Code: IT 06 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To explain how Management Information System concepts and theories facilitate prudent business decisions.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Evaluate the role of information systems in today's competitive business environment. 2. Analyze the role played by the six major types of information systems in organizations and their relationship to each other. 3. Describe the types of information systems supporting the major functional areas of the business. 4. Demonstrate a good understanding of basic issues in Enterprise Systems 5. Describe the selection, acquisition and implementation of enterprise systems. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Information Systems Evolution of IS, Stages theory of IS growth, Definition of IS, Role of Information System, Management theory and IS, Organization structures and IS, Types of information systems: TPS, MIS, DSS and EIS, Components of IS: Hardware, Software, Database, Telecommunications, Decision Making with IS, MIS Life Cycle.	09
	2.	Business Intelligence and Analytics Business Intelligence: Concepts, environments and tools Importance of Business intelligence and analytics, decision Support, KPIs identification, Ad Hoc report, Dashboard, Business forecasting, Concepts of Predictive and Prescriptive Analytics, dashboard Design using excel.	09
	3.	Feasibility and Cost-Benefit Analysis Feasibility considerations, Steps in feasibility analysis, Feasibility report, Cost-benefit analysis, Categories, Data analysis, Procedure for cost benefit determination, System proposal.	06
	4.	Knowledge Management and ERP Enterprise-wide information system, Custom built and packaged approaches, Needs and evolution of ERP systems, Common myths and evolving realities, ERP and related technologies, Business process re-engineering and information technology, Supply chain management, Relevance to data warehousing, Data mining and OLAP, ERP drivers, Decision support system.	09
	5.	ERP Marketplace and ERP Implementation Issues ERP domain, ERP benefits, Classification, Present global and Indian market scenario, Milestones, and pitfalls, Forecast, Market players and profiles, Evaluation criterion for ERP product, ERP life cycle, Adoption decision, Acquisition, Implementation, Use and maintenance, Evolution and retirement phases, ERP modules. Critical success and failure factors for implementation, ERP success inhibitors and accelerators, Management concern for ERP success, Strategic grid, Useful guidelines for ERP implementation.	12
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. K.C. Laudon and J.P. Laudon, Management Information Systems: Managing the Digital Firm, Pearson/Prentice Hall. 2. Leon. A; Enterprise Resource Planning; Tata Mc Graw Hill. 		

REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none">1. R V. Altekari; Enterprisewide. Resource Planning. Theory and Practice; PHI2. G.B. Davis; Management Information Systems: Conceptual Foundations, Structure and Development; McGraw-Hill.
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Course: DATA MINING AND DATA WAREHOUSING			Semester: III/IV
Course Code: IT 07 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To enable the students to learn how data mining and data warehousing provide techniques for collecting information from distributed databases and then performing data analysis.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Design a Data warehouse system and perform business analysis with OLAP tools. 2. Apply suitable pre-processing and visualization techniques for data analysis. 3. Analyse pattern and association rule mining techniques for data analysis. 4. Apply appropriate classification and clustering techniques for data analysis. 5. Compare different approaches of data warehousing and data mining with various technologies. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	DATA WAREHOUSING, BUSINESS ANALYSIS AND ON-LINE ANALYTICAL PROCESSING (OLAP): Basic Concepts - Data Warehousing Components – Building a Data Warehouse – Database Architectures for Parallel Processing – Parallel DBMS Vendors - Multidimensional Data Model – Data Warehouse Schemas for Decision Support, Concept Hierarchies -Characteristics of OLAP Systems – Typical OLAP Operations, OLAP and OLTP.	10
	2.	DATA MINING – INTRODUCTION: Introduction to Data Mining Systems – Knowledge Discovery Process – Data Mining Techniques – Issues – applications- Data Objects and attribute types, Statistical description of data, Data Preprocessing – Cleaning, Integration, Reduction, Transformation and discretization, Data Visualization, Data similarity and dissimilarity measures.	09
	3.	DATA MINING - FREQUENT PATTERN ANALYSIS Mining Frequent Patterns, Associations and Correlations – Mining Methods- Pattern Evaluation Method – Pattern Mining in Multilevel, Multi-Dimensional Space – Constraint Based Frequent Pattern Mining, Classification using Frequent Patterns.	08
	4.	CLASSIFICATION AND CLUSTERING Decision Tree Induction - Bayesian Classification – Rule Based Classification – Classification by Back Propagation – Support Vector Machines — Lazy Learners – Model Evaluation and Selection-Techniques to improve Classification Accuracy. Clustering Techniques – Cluster analysis-Partitioning Methods - Hierarchical Methods – Density Based Methods - Grid Based Methods – Evaluation of clustering – Clustering high dimensional data- Clustering with constraints, Outlier analysis-outlier detection methods.	12
	5.	WEKA TOOL Datasets – Introduction, Auto imports database - Introduction to WEKA, The Explorer – Getting started, Exploring the explorer, Learning algorithms, Clustering algorithms, Association–rule learners.	06
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Jiawei Han and Micheline Kamber, Data Mining Concepts and Techniques, Elsevier. 2. H. Kargupta, A.Joshi, K. Sivakumar, Y. Yesha; Data Mining: Next Generation Challenges and Future Directions; PHI 		
REFERENCE BOOK/	1. Alex Berson and Stephen J.Smith, Data Warehousing, Data Mining & OLAP, Tata McGraw Hill.		

SUGGESTED READING	<ol style="list-style-type: none">2. K.P. Soman, Shyam Diwakar and V. Ajay, Insight into Data Mining Theory and Practice, Eastern Economy Edition, Prentice Hall of India.3. Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques, Elsevier.
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Course: PYTHON FOR MANAGERS			Semester: III/IV
Course Code: IT 08 E	L T P	3 0 0	Credits: 3

OBJECTIVE	To introduce the concept of programming and to apply programming concept in business perspective.		
COURSE OUTCOMES	Upon completion of the course students should be able to: <ol style="list-style-type: none"> 1. Demonstrate a clear understanding of the concepts related to programming for analytics. 2. Understand the concept and structure of analytics programming. 3. Apply and integrate conceptual understanding to solving issues pertaining to analytics in real-world business situations. 4. Apply Python with hands-on exercises 5. Analyse how Python can help employees in decision making. 		
COURSE DETAILS	Module No.	Topic	Hours
	1.	Python Fundamentals Review Evolution and Purpose of Python, Understanding Development Environment, variables and data types, and Operators in Python.	07
	2.	Conditional Statement, Loop and Function in Python Understanding Conditional Statements, if Statements, else and elif Statements, Logic Structures, For Loops and functions in Python	10
	3.	Different types of Data Structure in Python A brief introduction to data structure, Different types of data structure, Lists in Python, Concept of Dictionaries, Data frame in python.	09
	4.	Library and Packages in Python Understanding the concept of Standard Libraries, using different types of packages in python, Using numpy package in python, Using pandas package in python, Using matplotlib package in python.	10
	5.	Data Analysis using Python. Import excel file and analyse its data, Import csv file and analyse its data, Import html table and analyse its data, Correlation and regression in python, Text mining using python.	09
		Total Hours	45
TEXT BOOK	<ol style="list-style-type: none"> 1. Python: The complete Reference Paperback by Martin C. Brown 2. P. Deitel, H. Deitel; Intro to Python for Computer Science and Data Science; Pearson. 		
REFERENCE BOOK/ SUGGESTED READING	<ol style="list-style-type: none"> 1. Python for MBAs by Mattan Griffel (Author), Daniel Guetta, Columbia Business School Publishing 2. Python for Business Managers, Prithwis Mukerjee, Praxis Press. 		