HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR, INDIA

MBA PROGRAMME

For Academic Session (2024-25)

STUDY AND EVALUATION SCHEME

With

SYLLABUS

Department of Management Studies

School of Entrepreneurship & Management

HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR, INDIA

MBA PROGRAMME
STUDY AND EVALUATION SCHEME (w.e.f. 2024-25)

Year: I Semester: I

Course Code	Subject	Periods			Evaluation Scheme						Credit
					MSE				ESE	Subject Total	
		L	T	P	CT	TA*	Lab	Total			
NMBA 501	Principles & Practices of Management	3	0	0	30	20	-	50	50	100	3
NMBA 503	Marketing Management	3	0	0	30	20	-	50	50	100	3
NMBA 505	Managerial Economics	3	0	0	30	20	-	50	50	100	3
NMBA 507	Business Statistics & Analytics	3	1	0	30	20	-	50	50	100	4
NMBA 509	Financial Statements and Analysis	3	1	0	30	20	-	50	50	100	4
NMBA 511	Business Environment	3	0	0	30	20	-	50	50	100	3
NMBA 513	Computer Applications & Skills for Managers	2	0	2	15	20	15	50	50	100	3
NMBA 515	Business communication & Soft Skills Development	2	0	2	15	20	15	50	50	100	3
										Total	26

*TA = Assignement (10) + Quiz (05) + Participation in Lab / Classes (05)

Year: I Semester: II

Course Code	Subject	Periods			Evaluation Scheme						Credit
					MSE				ESE	Subject Total	
		L	T	P	CT	TA*	Lab	Total			
NMBA 502	Research Methodology	3	0	0	30	20	-	50	50	100	3
NMBA 504	Business Analytics & Data Science	2	0	2	30	20	-	50	50	100	3
NMA 508	Operations Research	3	1	0	30	20	-	50	50	100	4
NMBA 508	Legal Environment of Business	3	0	0	30	20	-	50	50	100	3
NMBA 510	Financial Management	3	1	0	30	20	-	50	50	100	4
NMBA 512	Production & Operations Management	3	0	0	30	20	-	50	50	100	3
NMBA 514	Human Resource Management	3	0	0	30	20	-	50	50	100	3
NMBA 516	Management Information Systems	3	0	0	30	20	-	50	50	100	3
										Total	26

*TA = Assignement (10) + Quiz (05) + Participation in Lab / Classes (05)

Year: II Semester: III

Course Code	Subject	Periods			Evaluation Scheme						Credit
					MSE				ESE	Subject Total	
		L	T	P	CT	TA*	Lab	Total			
MBA 201	Strategic Management	3	0	0	30	20	-	50	50	100	3
MBA203	Professional Communication	3	1	0	30	20	-	50	50	100	4
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective II	3	0	0	30	20	-	50	50	100	3
MBA	Elective II	3	0	0	30	20	-	50	50	100	3
MBA	Elective II	3	0	0	30	20	-	50	50	100	3
MBA 205	Summer Internship Project Report	-	-	08	50				50	100	4
										Total	29

*TA = Assignement (10) + Quiz (05) + Participation in Lab / Classes (05)

Note:

*Students will be offered **Dual specialization**. Each student shall take two specializations. The three elective courses must be from first and three elective courses from second specialization. Same combination of specialization should be opted in III and IV semester respectively.

Project evaluation shall be done internally (50 marks) as well as externally (50 marks) through open presentation / viva method.

Year : II Semester: IV

Course Code	Subject	Periods			Evaluation Scheme						Credit
					MSE				ESE	Subject Total	
		L	T	P	CT	TA*	Lab	Total			
MBA 202	Corporate Governance	3	0	0	30	20	-	50	50	100	3
MBA 204	Innovation & Entrepreneurship	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective II	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA	Elective I	3	0	0	30	20	-	50	50	100	3
MBA 206	Research Project Report	-	-	10	50				50#	100	5
										Total	29

*TA = Assignement (10) + Quiz (05) + Participation in Lab / Classes (05)

Note: *Students will be offered **Dual specialization**. Each student shall take two specializations. The three elective courses must be from first and three elective courses from second specialization. Same combination of specialization should be opted in III and IV semester respectively.

Project evaluation shall be done internally (50 marks) as well as externally (50 marks) through open presentation / viva method.

IMPORTANT: The Board of Studies also acknowledges credits from online courses (NPTEL/ SWAYAM etc.) completed in the final Semester, provided they match in title and credits with courses offered by DOMS, HBTU. In fourth semester, each student can chose one core course and/or one elective course from NPTEL/SWAYAM, etc., subject to prior written approval from HOD.

MBA: List of Specialization Courses offered in II Year

A) Marketing (MBA MKX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 221: Consumer Behavior	MBA 222: Retail Management
MBA 223: Digital Marketing	MBA 224: Product & Brand Management
MBA 225: Sales & Distribution Management	MBA 226: Marketing Analytics
B) Human Resource (MBA HRX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 231: Organizational Change & Interventions Strategies	MBA 232: Performance Appraisal & Management
MBA 233: Industrial Relations and Social Security	MBA 234: Leadership & Team Building
MBA 235: Human Resource Development	MBA 236: HR Analytics
C) Finance (MBA FMX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 241: Investment Analysis & Portfolio Management	MBA 242: Cost and Management Accounting
MBA 243: Working Capital Management	MBA 244: Financial Markets and Services
MBA 245: Project Finance	MBA 246: Financial Derivatives
D) Information Systems (MBA ISX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 251: Data Base Management Systems	MBA 252: ERP Implementation
MBA 253: Cyber & Information Security	MBA 254: AI and Machine Learning for Business
MBA 255: Data Warehousing and Mining	MBA 256: Cloud computing
E) Operations (MBA OPX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 261: Management of Manufacturing System	MBA 262: Operational Strategy
MBA 263: Logistics & Supply Chain Management	MBA 264: Quality management
MBA 265: Service Operations Management	MBA 266: Project management
F) Entrepreneurship & Agri-Business (MBA EAX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 271: Rural Marketing	MBA 272: Management of Agro Chemical Industry
MBA 273: Agricultural Input Marketing	MBA 274: Seed Production, Technology & Management
MBA 275: Rural Development	MBA 276: Agricultural Supply Chain Management

G) International Business (MBA IBX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 281: International Business Management	MBA 282 : Management of International Logistics
MBA 283: Export Import Documentation	MBA 284: International trade laws
MBA285: Cross Cultural Management	MBA 286: International Economics
H) Business Analytics (MBA BAX) L T P : 3 0 0	
III Semester	**IV Semester**
MBA 291: Data Analysis Using R	MBA 292: Data Analysis Using Python
MBA 293: Data Mining & Visualization	MBA 294: AI & Machine Learning
MBA 295: Social Media & Text Analytics	MBA 296: Deep Learning

IMPORTANT: The Board of Studies also acknowledges credits from online courses (NPTEL/ SWAYAM etc.) completed in the final Semester, provided they match in title and credits with courses offered by DOMS, HBTU. In fourth semester, each student can chose one core course and/or one elective course from NPTEL/SWAYAM, etc., subject to prior written approval from HOD.

MBA

FIRST YEAR SYLLABUS (2024-25)

NMBA 501: PRINCIPLES & PRACTICES OF MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To provide basic understandings of Management processes.
2. To familiarizing the students with the principles of Management.
3. To Develop managerial and leadership skills among students.
4. To Understand different Management Approaches.
5. Analyze different process in staffing and controlling.

UNIT I Management: Concept, Nature & Importance; Evolution of Management Thoughts & Theories; Principles of Management; Management Process & Levels of Management; Managerial Functions, Roles & Skills, Management practices, Case Studies

Unit II Planning- Objective of planning, planning process, Types of planning, Types of plans, planning premises, Decision-making- types process & models. Case Studies

UNIT III Organizing: - Concept of Organizing, Organization Process, Types of organization, Line and staff relationship, Span of management, Organization structure, Departmentation, Authority and responsibility, Centralization and Decentralization, approaches to Organization Design, formal and informal organization, Determinates of affective organization. Case Studies

UNIT IV Staffing Meaning, Concept, Nature and Scope. Importance, elements of Staffing. Directing: Concept, Nature, Scope, Principles of Direction, techniques of direction, Leadership approaches &Theories, Motivation Theories Case Studies

UNIT V Control: Nature, Process, Types & Techniques of control; Co-ordination: Concept, Types & Techniques of coordination, Principles of coordination. Case Studies

Suggested Readings

1. Koontz Harold & Weihrich Heinz – Essentials of management (Tata McGraw Hill, 5th Edition,2008)
2. L. M. Prasad- Principles and Practices of Management, Sultan Chand & Sons, 7th edition, 2007.
3. Stephen P. Robbins, ―Organizational Behaviour‖, 12th Edition, Prentice Hall
4. Dr. Premvir Kapoor, Principles and Practices of Management, Khanna Publishing House, Delhi
5. Robbins & Coulter - Management (Prentice Hall of India, 9th Edition)

Course Outcomes:

1. To develop basic understanding and concepts of management.
2. To apply the process of planning in decision making
3. To analyze organizational design & structure.
4. To create & develop directing and leadership skills
5. To evaluate the importance and uses of different aspects of control

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1.	3	2	1	1	2	1	2	1	2	3	3	2	2	3	2
CO2.	3	3	2	2	2	2	2	2	3	2	3	3	2	2	3
CO3.	3	3	2	2	2	2	3	2	2	2	3	3	2	3	2
CO4.	2	3	2	3	2	3	3	3	3	3	2	3	3	2	3
CO5.	3	2	3	2	3	2	3	2	2	2	3	3	2	3	2

NMBA 503 : MARKETING MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. Assess market opportunities by analyzing customers, competitors, collaborators, context, and the strengths and weaknesses of a company.
2. Understand consumers' requirements and their behaviors.
3. Develop effective marketing strategies to achieve organizational objectives.
4. Communicate and defend your recommendations and critically examine and build upon the recommendations of your classmates both quantitatively and qualitatively.
5. Develop the understanding the current global and digital aspect of marketing

Unit I :- Marketing: Concepts, Meaning, Scope, Nature, Importance, Recent Trends & Challenges, Marketing mix, Marketing Orientations, applications, functions, Marketing Environment-Micro and Macro Environment, customer value and the value delivery process. Case Studies

Unit II :- Marketing Plan and Strategy, Market Segmentation, Market Targeting, Positioning, Purpose& its role, Niche Market, Consumer Behaviour and Factors influencing consumer behaviour Branding: Concept & Types, Brand equity, Branding Positioning. Branding Decisions. Case Studies

Unit II :- Product Management-Concept, Levels & Classification, Product life cycle and strategies, New Product Development, Product Positioning, Product Line and Product Line decisions, Product Mix, Product Differentiation. Pricing: Concept, Objectives & Strategies, Pricing techniques & Decisions; Branding, Packaging, Labelling Decisions . Case Studies

Unit IV :-Distribution: Meaning, Purpose, Marketing Channels, levels & Design, Channel Conflict. Factors, Channel management decisions, Retailing & Types of Retailers. Promotion Mix- Advertising, Personal Selling, Publicity, Sales Promotion. Direct Marketing. Case Studies

Unit V :-Marketing Communication Mix, Integrated Marketing Communication, Customer Relationship Management: Meaning, roles, significance Relationship Marketing, Relationship Management Consumer Response, Models, Communication Channels, New Forms of Marketing Communication.GlobalMarketing: Global P's of Marketing, Green Marketing, Agile Marketing Recent trends and Innovation in Marketing. Case Studies

Suggested Readings:

1. Kotler, Philip: Marketing Management: PHI, New Delhi
2. Stanton, W J: Fundamentals of Marketing
3. Cunduff & Still: Fundamentals of Marketing
4. Rusenberg, L J: Marketing
5. Pillai R S N, Bhagwati : Modern Marketing Principles & Practices
6. Neelmegham and Namakumari : Marketing Management

Course Outcomes:

1. To understand basic marketing concepts & principles and its practical implications in the business environment.
2. To understand & evaluate different Market Segments and its applications.
3. To underlay concepts & strategies involved in the marketing of products and services.
4. To develop insights of basic fundamentals involved in value creation, delivery and promotion.
5. To acquaint students with latest forms of communication as well as strategies for better understanding of current global and emerging aspect of marketing.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1.	3	2	1	1	2	1	2	1	2	3	3	2	2	3	2
CO2.	3	3	2	2	2	2	2	2	3	2	3	3	2	2	3
CO3.	3	3	2	2	2	2	3	2	2	2	3	3	2	3	2
CO4.	2	3	2	3	2	3	3	3	3	3	2	3	3	2	3
CO5.	3	2	3	2	3	2	3	2	2	2	3	3	2	3	2

NMBA 505: MANAGERIAL ECONOMICS

L T P C 3 0 0 3

Course Objectives:

1. To apply the principles of managerial economics in achieving business objectives
2. To evaluate & analyse the concepts of demand & supply and apply them in various changing situations in industry
3. To understand the production concepts and its application in the changing economy.
4. To understand the different market structures and the application of price discrimination in market
5. Understand and analyze the macro environment affecting the business decision making.

UNIT I :-Basic Concepts and principles: Definition, Nature and Scope of Economics-Micro Economics and Macro Economics, Managerial Economics and its relevance in business decisions. Fundamental Principles of Managerial Economics - Incremental Principle, Marginal Principle, Opportunity Cost Principle, Discounting Principle, Concept of Time Perspective, Equi-Marginal Principle, Utility Analysis: Cardinal Utility and Ordinal Utility. Case Studies.

UNIT II :-Demand Analysis: Concept, Types, Determinants, Function, Demand Schedule, Demand curve, Law of Demand, Exceptions to the law of Demand, Movement & Shifts in demand curve, Elasticity of Demand and its measurement. Price Elasticity, Income Elasticity, Arc Elasticity. Cross Elasticity and Advertising Elasticity. Uses of Elasticity of Demand for managerial decision making, Supply Analysis: Law of Supply, Elasticity of Supply: Analysis and its uses for managerial decision making. Price of a Product under demand and supply forces. Case Studies.

UNIT III :-Production: Concepts & analysis, Production function, Types of production function, Laws of production: Law of diminishing returns, Law of returns to scale, Iso-quant curve, Economies and diseconomies of scale. Cost concept and analysis: Cost, Types of costs, Cost output relationship in the short-run & Long-run. Revenue: Total Revenue, Average Revenue, Marginal Revenue. Case Studies.

UNIT IV :-Market structures: Perfect and Imperfect Market Structures, Perfect Competition, features, determination of price under perfect competition. Monopoly: Feature, pricing under monopoly, Price Discrimination. Monopolistic: Features, pricing under monopolistic competition, product differentiation. Oligopoly: Features, kinked demand curve, cartels, price leadership. Case Studies.

UNIT V :-National Income; Concepts and various methods of its measurement, Circular flows in 2 sector, 3 sector, 4 sector economies, Inflation: concept, types and causes, Business Cycle & its phases. Case Studies.

Suggested Readings:

1. Managerial Economics, D. N. Dwivedi, Vikas Publication, 7th Ed
2. Managerial Economics, Geetika, McGraw-Hill Education 2nd Ed.
3. Managerial Economics: Concepts and Applications (SIE), Thomas& Maurice, McGraw-Hill Education, 9th Ed
4. Managerial Economics, H.L Ahuja, S.Chand, 8th Ed
5. Managerial Economics – Theory and Applications, Dr.D.M.Mithani, Himalaya Publications, 7th Ed.
6. Managerial Economics, Mithani. D. M, Himalaya Publishing House, New Delhi.

Course Outcomes:

1. To acquaint the students with the concepts of micro economics and various economic principles that help to make effective economic decisions under conditions of risk and uncertainty.
2. To evaluate & analyse the concepts of demand & supply and apply them in various changing situations in industry
3. To develop understand about the production concepts and its application in the changing economy.
4. To understand the different market structures and the application of price discrimination in market
5. To able to understand and analyse the different macro environment factors affecting the business decision making.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	2	3	2	1	2	3	2	2	1	2
CO2	3	3	3	2	1	2	3	2	2	3	2	3	3	2	2
CO3	2	3	2	2	3	1	2	3	2	3	3	2	3	3	1
CO4	1	3	2	3	2	3	2	3	3	2	1	3	2	2	3
CO5	3	2	3	1	2	2	3	1	2	3	2	3	3	2	2

NMBA 507: BUSINESS STATISTICS & ANALYTICS

L T P C 3 1 0 4

Course Objectives:

1. Understand the different basic concept / fundamentals of business statistics.
2. Understand the importance of measures of Descriptive statistics which includes measures of central tendency, Measures of Dispersion.
3. Understand the concept of Probability and its usage in various business applications.
4. Understand the Hypothesis Testing concepts and use inferential statistics- t, F, Z Test and Chi Square Test
5. Understand the practical application of Descriptive and Inferential Statistics concepts and their uses for Business Analytics.

UNIT I - Descriptive Statistics

Measures of Central tendency – Mean, Median, Mode, Quartiles, Measures of Dispersion – Range, Inter quartile range, Mean deviation, Standard deviation, Variance, Coefficient of Variation, Skewness and Kurtosis

UNIT II - Probability Theory & Distribution

Probability: Theory of Probability, Addition and Multiplication Law, Baye's Theorem, Discrete and continuous random variables, Probability Theoretical Distributions: Concept and application of Binomial; Poisson and Normal distributions.

UNIT III – Sampling, Sampling Distribution & Estimation

Introduction to sampling, random & nonrandom sampling, design of experiments, sampling distribution, introduction to estimation, point and interval estimation, interval estimates & confidence intervals, interval estimate of the mean from large samples, interval estimate of proportion from large samples, determining the sample size in estimation.

UNIT IV - Hypothesis Testing

Hypothesis Testing: One Sample test or Two Sample test, Null and Alternative Hypotheses; Testing of Hypothesis: Large Sample Tests, Small Sample test, (t, F, Z Test and Chi Square Test), Analysis of variance.

UNIT V - Business Analytics

Correlation and Regression Analysis, Concept of Business Analytics- Meaning types and application of Business Analytics, Use of Spread Sheet to analyze data.

Suggested Reading:

1. Levin and Rubin – statistics for Management, 7th ed., Pearson
2. G C Beri – Business Statistics, 3rd ed, TATA McGrawHill.
3. Chandrasekaran & Umaparvathi-Statistics for Managers, 1st edition, PHI Learning
4. Davis , Pecar – Business Statistics using Excel, Oxford
5. Ken Black – Business Statistics, 5th ed., Wiley India
6. Lind, Marchal, Wathen – Staistical techniques in business and economics, 13th ed, McGrawHill
7. Newbold, Carlson, Thorne – Statistics for Business and Economics, 6th ed., Pearson
8. S. C. Gupta – Fundamentals of Statistics, Himalaya Publishing
9. Walpole – Probability and Statistics for Scientists and Engineers, 8th ed., Pearson
10. Berenson and Levine. Basic Business Statistics: Concepts and Applications. Pearson Education.

Course Outcomes:

1. To integrate the fundamental concepts, principles and techniques of accounting.
2. To develop the understanding of preparation and presentation of financial statements.
3. To apply knowledge of various financial tools to view the financial position of company.
4. To ascertain the correct analysis of cost per unit by different elements of cost.
5. To plan & control the procedure of financial aspect of accounting.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1	2	3	2	1	2	3	2	2	1	2
CO2	3	2	3	2	1	2	3	2	2	3	2	3	3	2	2
CO3	2	3	2	2	3	1	2	3	2	3	3	2	3	3	1
CO4	1	3	2	2	2	3	2	3	3	2	1	3	2	2	3
CO5	3	2	3	1	2	2	3	1	2	3	2	3	3	2	2

NMBA 509 : FINANCIAL STATEMENTS & ANALYSIS

L T P C 3 1 0 4

Course Objectives:

1. To understand the fundamentals, basic theory and concepts of financial accounting.
2. Understanding the various steps in the Accounting Process
3. To have an understanding of preparation and presentation of financial statements.
4. To acquire knowledge about various techniques used for analysing financial statements with its application.
5. To enable students get acquaint with current trends in accounting and to develop an understanding of corporate financial reporting system in the national and international context

UNIT I

Introduction to Financial Accounting Nature of Accounting, Branches of Accounting, Types of ownership, Evolution and Users of Accounting, Basic Accounting Terminologies, GAAP Concepts and Conventions, Accounting Standards, Double Entry System.

UNIT II

Accounting Equation, Accounting Cycle, Recording of Transactions: Journalizing, Ledger posting, Preparation of Trial Balance. Depreciation Accounting: Straight line Method, Written Down Value Method.

UNIT III

Preparation of Final accounts (Profit & Loss Account and Balance Sheet) with and without Adjustments. Use of Excel application for making Balance sheet, Preparation of Financial Statements as per Revised Schedule III of Companies Act 2013.

UNIT IV

Analysis of Financial Statements Comparative Financial Statement, Trend Analysis, Inter Firm Comparison Common Size, Ratio Analysis-Solvency ratios, Profitability ratios, Activity ratios, liquidity ratios, Market capitalization ratios, leverage Ratio and Cash Flow Statement as Per AS-3.

UNIT V

Introduction to Accounting Analysis with Excel, International Financial Reporting Standards (IFRS); Matching of Indian Accounting Standards with International Accounting Standards.

Suggested Readings:

1. Tulsian: Financial Accounting, Pearson Education
2. Narayana Swamy : Financial Accounting, PHI.
3. Ashok Banerjee: Financial Accounting: A Managerial Emphasis, Excel Books.
4. Paresh Shah: Financial Accounting for Management, Oxford Publication
5. HorngrenSunderm Elliott: Introduction to Financial Accounting, S. Chand
6. S.N. Maheshwari, S.K. Maheshwari & Sharad Maheshwari: Financial Accounting (Latest Edition), Vikas Publications
7. Srinivasan N. P. and Murugan S., Accounting for Management, S. Chand
8. Vinayakarm N. and Charumati B., Financial Accounting, S. Chand.

Course Outcomes:

1. Understand and apply accounting concepts & principles for routine monetary business transaction.
2. Record the various financial transactions and to understand Depreciation and its methods.
3. Create & Prepare Financial Statements as per Revised Schedule III Income Statement & Balance Sheet.
4. To understand the techniques and significance of Financial Statement Analysis & to evaluate financial performance.
5. Understanding IFRS & developing skills to interpret Financial Statements by using Excel

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	2	3	2	1	2	3	2	2	1	2
CO2	3	2	3	2	1	2	3	2	2	3	2	3	3	2	2
CO3	2	3	2	2	3	1	2	3	2	3	3	2	3	3	1
CO4	1	3	2	2	2	3	2	3	3	2	1	3	2	2	3
CO5	3	2	3	1	2	2	3	1	2	3	2	3	3	2	2

NMBA 511: BUSINESS ENVIRONMENT

L T P C 3 0 0 3

Course Objectives:

1. Understand business environment concepts.
2. Explore government and legal impacts on business.
3. Examine social, technological, and sustainability influences.
4. Analyze globalization's effects on business strategies.
5. Investigate emerging trends in business.

Unit I: Introduction to Business Environment

Definitions & Concepts, Micro and Macro Environmental Factors; Global Business Environment - Globalization, trade agreements (WTO, GATT), and international business; Corporate Social Responsibility (CSR), Business Structures: Public, private, partnerships, and multinational companies. Case Studies

Unit II: Economic Policies and Legal Environment

Government's Role in Business: Fiscal policies, monetary policies, and taxation structures; Regulatory Environment: Business laws, corporate governance, consumer protection laws, and competition policies; International Trade and Foreign Direct Investment; Emerging Economies – BRICS. SME/MSME Sector, Family Business & Self-Employment, Gig Economy: Freelancing, platform-based work, and its economic and business impact in India. Case Studies

Unit III: Social, Technological, and Sustainable Environment

Cultural and Social Environment: Cultural diversity, demographics, and consumer behavior; Technological Environment: Digital transformation; Sustainability and ESG: Environmental policies, renewable energy, green marketing, and the circular economy; Corporate Adaptation to Climate Change; Futuristic Trends - AI, automation, and the digital economy. Case Studies

Unit IV: Globalization and International Business Environment

Global Economic Environment: Trade blocs, global financial systems, and multinational enterprises; Foreign Exchange Market & Exchange Rate Mechanisms; Cultural Intelligence: Managing cross-cultural teams and international negotiations; Global Risk Management- pandemics, geopolitical risks, etc.; Digital Business Strategies: E-commerce, digital marketing, and global digital infrastructure; Global MSME & Family Business Trends. Case Studies

Unit V: Emerging Trends & Opportunities

Data-driven decision-making, Digital Transformation; Crisis Management in a VUCA World - Navigating volatile, uncertain, complex, and ambiguous environments; SME/MSME Growth in the Digital Era; Gig Economy & Future Work Models; Sustainability Management.Case Studies

Suggested Readings:

1. Business Environment ---Francis Cherunilam, Himalaya Publishing House
2. Business Environment: Test and Cases, PAUL, Mc Graw Hill Education, 3rd Ed.
3. Shaikh & Saleem - Business Environment (Pearson, 2nd Edition)

Course Outcomes:

1. Analyse micro and macro business factors.
2. Evaluate economic policies and legal frameworks.
3. Assess technology and sustainability impacts.
4. Develop strategies for international business challenges.
5. Implement data-driven decision-making and sustainability.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	2	3	2	1	2	3	2	2	1	2
CO2	3	2	3	2	1	2	3	2	2	3	2	3	3	2	2
CO3	2	3	2	2	3	1	2	3	2	3	3	2	3	3	1
CO4	1	3	2	2	2	3	2	3	3	2	1	3	2	2	3
CO5	3	2	3	1	2	2	3	1	2	3	2	3	3	2	2

NMBA 513 : COMPUTER APPLICATIONS & SKILLS FOR MANAGERS

L T P C 2 0 2 3

Course Objectives:

1. The course aims to provide basic knowledge about computer framework and their significance.
2. To provide knowledge about the functioning & tools of IT and its uses for managers
3. To provide hands on learning of applications of ICT in businesses and analyse various security and ethics related issues pertaining to the increasing use of Information Technology.
4. To provide hands on learning of applications on Spreadsheet software
5. To develop understanding of pivot table and understand the validating & auditing techniques; also to understand different formatting techniques in MS Excel

UNIT I :-Introduction and definition of computer; functional components of a computer system-(Input unit, CPU, Memory and output unit); Types of memory and memory hierarchy; Functioning inside a computer, Types of software and its application in business, Elements of GUI based operating systems

UNIT II :-Computer Networks: Overview of Computer Network, Classifications and Types of computer networks Network topologies, Components of computer networks (servers, workstations, network interface cards, hub, switches, cables, etc..) Internet: Netiquettes, Architecture & Functioning of Internet, Basic services over Internet like WWW, FTP, IP addresses, ISPs, URL, Domain names, Internet Protocols

UNIT III :-Information Security and its significance , Security and Ethical Challenges Of IT, Business Ethics, Technology Ethics; Cyber Security and its significance Cyber Crime and Privacy Issues, Cyber Laws, IT Act 2000. Case Study 1

UNIT IV :-Microsoft Excel Package Spreadsheet: Concept and Working Interface, Creating, and Editing a Workbook, Entering data in a cell / formula Copying and Moving from selected cells,. Sorting, filtering and applying Conditional formatting in cells. Functions in Spreadsheet: handling operators in Formula Using Function Wizard, Formatting a Worksheet and Cell, Printing function of worksheets, Charts and Graphs – Creating, Previewing, and Modifying Charts. (Lab work on spreadsheet)

UNIT V :-Developing Pivot Table, Analyzing data using goal seek and solver, Scenarios Create named scenarios. Show, edit, and delete scenarios, creating a scenario summary report. Validating and Auditing: Set, edit validation criteria for data entry in a cell range like: whole number, decimal, list, date, time, Trace precedent, dependent cells. Identify cells with missing dependents. Creating applications in Spreadsheet and Macros. (Lab work on spreadsheet)

Suggested Readings:

1. Nasib Singh Gill – Handbook of Computer Fundamentals, Khanna Publishing House, Delhi
2. Shrivastava-Fundamental of Computer& Information Systems (Wiley Dreamtech)
3. Leon A and Leon M - Introduction to Computers (Vikas, 1st Edition).
4. R.S. Salaria, Computer Fundamentals, Khanna Publishing House, Delhi.
5. Linda Foulkes- Learn Microsoft Office 2019: A comprehensive guide to getting started with Word, PowerPoint, Excel, Access, and Outlook (Packt Publishing Limited)
6. ITL ESL – Introduction to Information Technology (Pearson, 2nd Edition).
7. Excel Data Analysis: Modeling and Simulation, Hector Guerrero (Springer)

Course Outcomes:

1. To Gain knowledge about working of computer system and its framework for an IT enabled organizations
2. To Gain knowledge about use of various IT tools for solving Business Problems.
3. Learn and analyse various security and ethics related issues pertaining to the increasing use of Information Technology.
4. Learn applications on Spread sheet software
5. To gain knowledge about applications of pivot table and understand the validating & auditing techniques

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	3	2	2	2	1	2	3	2	2	1	3
CO2	2	3	3	2	3	2	3	2	2	3	2	3	3	2	3
CO3	2	3	2	2	3	1	2	3	2	3	3	2	3	3	1
CO4	1	3	2	3	2	3	2	3	3	2	1	3	2	2	3
CO5	3	2	3	1	3	2	3	1	2	3	2	3	3	2	2

NMBA 515 : BUSINESS COMMUNICATION & SOFT SKILLS DEVELOPMENT

L T P C 3 0 0 3

Course Objectives:

1. To understand business communication strategies and principles for effective communication in domestic and international business situations.
2. To understand various type of communication and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self-expressive, in written, visual, and oral communication.
3. To develop the ability to comprehend and draft formal and informal documents
4. To develop the ability to communicate via electronic mail, Internet, and other technologies for presenting business messages.
5. To understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument.

UNIT I:-Introduction: Definitions & Concept, Role of communication, Principles, Purpose, Process and Classification, Characteristics of effective communication, Importance of Communication, Communication structure in an organization: Types, Levels & Flow, Communication in Crisis, Barriers to Communication, Communication Ethics & Need for effective Communication. Case Studies

UNIT II:-Oral & Written Communication: Meaning &Principles of successful Oral Communication, Non-Verbal Communication. Written Communication: Purpose of writing, Clarity in writing, Principles of Effective Writing, 7C's of Oral &Written communication. The 3X3 writing process for business communication: Pre writing – Writing – Revising – Specific Writing Features – Coherence – electronic writing process. Listening & its types. Case Studies

UNIT III :-Business letters, Reports & Presentation Skills: Introduction to business letters, writing routine and persuasive letters, positive and negative messages, Report: Purpose, Kinds & Objectives of Report Writing, Essentials of report writing. Memo: Meaning, writing, advantages & disadvantages. Office note, letters to staff and Representation. Presentation skills: Elements of presentation – designing a presentation. Pictorial, Professional & e-presentation. Advanced visual support for business presentation types of visual aid.

UNIT IV

Employment communication & Technological Impact: Introduction, writing CVs & Resume and job application. Impact of Technological Advancement and Business Communication networks– Intranet – Internet – e mails – SMS – teleconferencing – video conferencing. New trends in business communication (netiquette & e-mail writing). Case Studies.

UNIT V:-Group Discussion, Interview& Media Management: Group discussions, Group Communication, Meetings & minutes writing. Interview skills, types of interviews, conducting interview. Media management: Press release, press conference, Media interviews, Media mix, public relations, Newsletter, direct marketing, advertisement and publicity. Seminars, workshop, conferences. Business etiquettes. Case Studies.

Suggested Readings:

1. Bovee&Thill – Business Communication Essentials A Skill – Based Approach to Vital Business English. Pearson.
2. Kulbhushan Kumar & R.S. Salaria, Effective Communication Skills, Khanna Publishing House, Delhi
3. Bisen&Priya – Business Communication (New Age International Publication)
4. Kalkar, Suryavanshi, Sengupta-Business Communication (Orient Blackswan)
5. Varinder Bhatia, Business Communications, Khanna Publishing House
6. Business Communication: Skill, Concepts and Applications – P D Chaturvedi, Mukesh Chaturvedi Pearson Education.
7. AshaKaul, Business Communication, Prentice Hall of India.

Course Outcomes:

1. Understand communication concepts, principles, and organizational roles. Recognize effective communication characteristics and the importance of ethical communication.
2. Develop skills in oral and written communication, including non-verbal cues. Apply clarity, coherence, and correctness principles. Understand active listening.
3. Learn to compose diverse business letters and reports. Understand memos, presentations, and effective visual aids for communication.
4. Master writing CVs, resumes, and job applications. Understand technological impact on communication, including netiquette and e-mail writing.
5. Acquire interview and group discussion skills. Learn media management strategies, public relations and business etiquette awareness.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	1	2	3	2	1	2	2	3	2	1
CO2	2	3	2	3	3	2	3	2	1	3	2	2	2	3	3
CO3	2	3	2	2	3	2	1	3	2	2	2	3	2	2	3
CO4	3	2	3	2	1	3	2	1	3	2	3	3	2	1	2
CO5	3	2	2	3	2	3	3	2	2	1	2	1	3	2	2

NMBA 502 : RESEARCH METHODOLOGY

L T P C 3 0 0 3

Course Objectives:

1. To understand the concept / fundamentals of research and their types.
2. To understand the practical application of various research techniques.
3. To understand the importance of scaling & measurement techniques and sampling techniques
4. To understand the importance of coding, editing, tabulation and analysis in doing research.
5. Understanding and applying the concept of statistical analysis and technique of report writing.

UNIT I :-Research: Definition, Meaning, Importance, Objectives and classification and Significance of Research, Research Process. Formulation of Research Problem Research applications in functional areas of Business, Emerging trends in Business research. Case Studies

UNIT II :-Research Design: Qualitative and Quantitative research approaches, Exploratory Research Design, Descriptive Research Designs- Cross-sectional & Longitudinal, Experimental Design & Causal relationship. Qualitative techniques – Projective Techniques, Depth Interview, Experience Survey, Focus Groups, Observation. Case Studies

UNIT III :-Sampling design: Sampling Design process, Probability and Non Probability Sampling Techniques, Scaling & Measurement Techniques: Concept & Level of Measurement- Nominal, Ordinal, Interval, Ratio, Questionnaire Design, Case Studies

UNIT IV :-Data Collection: Primary & Secondary Data; Survey Method of Data Collection, Classification of Observation Method; Fieldwork, Data Preparation: Editing, Coding, Tabular representation of data, frequency tables, Construction of frequency distributions, Graphical Representation of Data **Hypothesis**: Hypothesis Formulation; Type-I & Type-II Errors; Hypothesis Testing: Parametric and Non Parametric. Use of Statistical Software to Analysis the Data. Case Studies

UNIT V:-Research Proposal – Elements of a Research Proposal, Drafting a Research Proposal, evaluating a research proposal, Mechanism of Report Writing: Meaning, Types and Research Report layout, Steps in Report Writing, Essentials of a good report, Tabular & Graphical Presentation of Data, Citations, Bibliography and Annexure in Report. Case Studies

Suggesting Readings:

1. Statistics for Management, Levin & Rubin
2. Business Research Methods, Cooper and Schindlier, TMH Publication
3. Business Research Methodology, Srivastava and Rego
4. Marketing Research: An Applied Orientation, by Satyabhushan Dash, Naresh K. Malhotra, Pearson publisher.
5. Business Research Methods: Naval Bajpai, Pearson publisher

Course Outcomes:

1. To understand the fundaments of research and basic tools & techniques.
2. To analyse and understand the research design and its application in various research project.
3. To acquire adequate knowledge on sampling and its techniques.
4. To acquaint students with various data analysis-and hypothesis testing procedures
5. To demonstrate and apply the concept of statistical analysis and technique of report writing.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	2	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMBA 504 : BUSINESS ANALYTICS & DATA SCIENCE

L T P C 3 0 0 3

Course Objectives:

1. Understanding the Role of Business Analyst and Data Science in business.
2. Understanding the basic concept of data management and data mining techniques
3. To understand the basic concept of machine learning
4. To understand the application of business analysis.
5. Understanding the basic concept of Data Science Project Life Cycle.

UNIT I :-Introduction: Historical Overview of data analysis, Data Scientist vs. Data Engineer vs. Business Analyst, Career in Business Analytics, What is data science, Why Data Science, Applications for data science, Data Scientists Roles and Responsibility

UNIT II :-Data: Data Collection, Data Management, Organization/sources of data,Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification
Data Science Project Life Cycle: Business Requirement, Data Acquisition, Data Preparation, Hypothesis and Modeling, Evaluation and Interpretation, Deployment, Operations, Optimization.

UNIT III :-Introduction to Data Mining, The origins of Data Mining, Data Mining Tasks, OLAP and Multidimensional data analysis, Basic concept of Association Analysis and Cluster Analysis.

UNIT IV :-Introduction to Machine Learning: History and Evolution, AI Evolution, Statistics Vs Data Mining Vs, Data Analytics Vs, Data Science, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Frameworks for building Machine Learning Systems.

UNIT V :-Application of Business Analysis: Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics.

Suggested Readings:

1. Business Analytics : the science of data driven decision making by U, Dinesh Kumar Willy Publications
2. Essentials of Business Analytics: An Introduction to the methodology and its application, Bhimasankaram Pochiraju, Sridhar Seshadri, Springer
3. Introduction to Machine Learning with Python: A Guide for Data Scientists 1st Edition,by Andreas C. Müller, Sarah Guido, O'Reilly
4. Introduction to Data Science, Laura Igual Santi Seguí, Springer
5. Introduction to Data Mining, Pang-Ning Tan, Michael Steinbach, Vipin Kumar, PearsonEducation India
6. An Introduction to Business Analytics, Ger Koole, Lulu.com, 2019

Course Outcomes:

1. Understand the basics of business analysis and Data Science
2. Understand data management and handling and Data Science Project Life Cycle
3. Understand the data mining concept and its techniques
4. Understand and Analyzing machine learning concept
5. Understand the application of business analysis in different domain

Os	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMA 508 : OPERATIONS RESEARCH

L T P C 3 1 0 4

Course Objectives:

1. To understand the importance of the use of OR application in decision Making environment
2. To formulate LPP and Acquire General idea of the Simplex method.
3. To understand and solve transportation & assignment models.
4. To know optimal sequence model and understand concepts of queuing theory.
5. To identify right time for replacement of equipment and understand project management techniques

UNIT I - Operations Research & Decision Making Environments

Operations Research: Uses, Scope and Applications of Operation Research in managerial decision making. Decision-making environments: Decision-making under certainty, uncertainty and risk situations; Decision tree approach and its applications.

UNIT II - Linear Programming Problem & Transportation Problem

Linear programming: Mathematical formulations of LP Models for product-mix problems; graphical and simplex method of solving LP problems and duality. Transportation problem: Various methods of finding Initial basic feasible solution-North West Corner Method, Least Cost Method & VAM Method and optimal solution-Stepping Stone & MODI Method

UNIT III - Assignment model & Game Theory

Assignment model: Hungarian Algorithm and its applications, Maximization Assignment Problem. Game Theory: Concept of game; Two-person zero-sum game; Pure and Mixed Strategy Games; Saddle Point; Odds Method; Dominance Method and Graphical Method for solving Mixed Strategy Game.

UNIT IV - Sequencing & Queuing Theory

Sequencing Problem: Johnsons Algorithm for n Jobs and Two machines, n Jobs and Three Machines, Two jobs and m - Machines Problems. Queuing Theory: Characteristics of M/M/I Queue model; Application of Poisson and Exponential distribution in estimating arrival rate and service rate

UNIT V - Replacement Problem & Project Management

Replacement Problem: Replacement of assets that deteriorate with time, replacement of assets which fail suddenly.

Project Management: Rules for drawing the network diagram, Applications of CPM and PERT techniques in Project planning and control; crashing of operations.

Suggested Readings:

1. R. Panneerselvam - Operations Research (PHI, 2nd Edition)
2. Sharma J K - Operations Research (Pearson, 3rd Edition
3. Apte-Operation Research and Quantitative Techniques (Excel Books)
4. S Kalawathy-Operation Research (Vikas IVth Edition)
5. Natarajan- Operation Research(Pearson)
6. Singh & Kumar—Operation Research(UDH Publisher edition 2013)
7. Taha Hamdy - Operations Research - An Introduction (Prentice-Hall, 9th edition)
8. Vohra - Quantitative Techniques in Management (Tata McGraw-Hill, 2nd)

Course Outcomes

1. Be able to understand the characteristics of different types of decision-making environments and the appropriate decision making approaches and tools to be used in each type.
2. To formulate linear programming problem and to find optimal solution by graphical simplex method.
3. Be able to build and solve Transportation Models and Assignment Models also to solve game theory problems by understanding pure and mix strategies.
4. To assign optimal sequence of difference jobs on different machines and develop understanding of queuing theory concepts.
5. To implement replacement of equipments at right time and able to implement project management concepts like CPM, PERT to reduce cost and time.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMBA 508 : LEGAL ENVIRONMENT OF BUSINESS

L T P C 3 0 0 3

Course Objectives

1. To provide basic understanding of law of contract.
2. To be able to understand the practical application of Sales & Negotiable Instruments.
3. To impart basic understanding of provisions of Companies Act concerning incorporation and regulation of business organizations.
4. To provide better understanding of modern acts like Consumer Protection Act and IT Act.
5. To appraise the students on the leading practical application-oriented case studies–relevant and updated and analyzing case laws in arriving at conclusions facilitating business decisions.

UNIT I :- Law of Contract: Definition, essentials, Indian Contract Act, 1872 Offer & Acceptance, Contractual Capacity, FreeConsent, Consideration, Void Agreements, Quasi Contracts, e-contract,legality of object, performance of contract, terminationofcontract,remediesforbreachofcontract. Special Contract. Law of Agency. Case Laws

UNIT II: - The Sale of Goods Act, 1930: Introduction, definitions, formalities of contract of sale: Essentials, sale v/s agreement to sell. Conditions and Warranties, Doctrine of Caveat Emptor. Transfer of property in goods- meaning and rules governing the same, transfer of risk, Unpaid Seller and Rights.

UNIT III:-The Negotiable InstrumentsAct,1881: Meaning, characteristics, Classification. Promissory Note and bill of exchange and cheque, Difference between Promissory note, bill of exchange and cheque. Miscellaneous provisions, Holder and Holder in due course: Rights and Privileges, Payment, maturity of an instrument, Noting and Protest, Bills in sets.

UNIT IV:-The Indian Companies Act, 2013, Companies: Definition, characteristics, formation& types. Memorandum of Association, Articles of Association, prospectus and incorporation, Prospectus. Directors: appointment, power, duties and liabilities & Auditor, meeting and resolutions: types of meetings, modes of winding up of a company,

UNIT V:-The Information Technology Act 2000: Definition, Digital Signature, Electronic Governance, Attribution, Acknowledgment and Dispatch of Electronic Records, Sense Electronic Records and Sense Digital Signatures, Regulation of Certifying Authorities, Digital Signature Certificates, Duties of Subscribers, Penalties and Offences.

Suggesting Readings:

1. Kushal MC, Corporate Laws, Shri Mahaveer Book Depot, New Delhi.
2. Sharma,J.P.,An Easy Approach to Corporate Laws, Ane Books Pvt. Ltd.,
3. Companies Act and Corporate Laws, Bharat Law House Pvt Ltd, New Delhi
4. Mercantile Law by N.D. Kanpur.

Course Outcomes:

1. To understand the fundamental legal rules regarding contractual agreements pertaining to the business world.
2. To demonstrate and apply the law relating to the sale of goods as a legal advisor in the organization.
3. To create understanding of legal aspects of the negotiable instruments.
4. To understand the basic frame work regarding the Companies Act.
5. To assess and analyze the law relating to the, information technology

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMBA 510 : FINANCIAL MANAGEMENT

L T P C 3 1 0 4

Course Objectives:

The course objectives are outlined below:

1. To help the students gain an understanding of the fundamental process and system of financial management in an organization.
2. To acquire knowledge about various techniques used for analysing various long-term projects and cost associated with each source of financing.
3. To make students aware about concept and approaches of capital structure, leverages and EBIT-EPS analysis.
4. To make students aware of the concepts and approaches of dividend decision and management of earning.
5. To develop required skills for using concepts, methods and estimation of working capital management.

UNIT I:-Financial Management – An Overview: Evolution of Finance, The Basic Goal : Creating Shareholder Value, Finance Function, Agency Issues, Time Value of Money concept.

UNIT II:-Investment Decisions - Capital Budgeting Decisions, Techniques - Payback period, NPV, IRR, Profitability Index, Estimation of Cash Flows, Risk analysis in Capital Budgeting - Sensitivity Analysis, Certainty Equivalent Approach. Cost of Capital -Meaning and Concept, Cost of Debt, Cost of Internal Equity, Cost of Equity, CAPM Approach, Calculation of WACC.

UNIT III:-Financing Decisions - Capital Structure, Theories and Value of the firm – Net Income Approach, Net Operating Income Approach, Traditional Approach, Modigliani Miller Model, Determining the optimal Capital Structure, Costs of Bankruptcy and Financial Distress. EBIT-EPS Analysis - Concept of Leverage, Types of Leverage: Operating Leverage, Financial Leverage, Combined Leverage.

UNIT IV:-Dividend Decisions- Factors determining Dividend Policy, Theories of Dividend Gordon Model, Walter Model, MM Hypothesis, Forms of Dividend- Cash Dividend, Bonus Shares, Stock Split, Stock Repurchase, Dividend Policies in practice.

UNIT V:-Working Capital Management - Working Capital Policies, Risk-Return trade-off, Inventory Management, Cash management, Receivables management.

Suggesting Readings:

1. Khan and Jain - Financial Management (Tata McGraw Hill, 7th Ed.)
2. Pandey I M - Financial Management (Vikas, 11th Ed.)
3. William HakkaBettnerCarcello- Financial and Management Accounting (TMH-16th Ed.)
4. Sheebakapil-Fundamental of financial management (Wiley,2015)
5. Prasanna Chandra - Fundamentals of Financial Management (TMH, 9th Ed.)
6. Bark DemazoThampy- Financial Management (Pearson,2nd Ed.)

Course Outcomes:

1. Understanding of the fundamental process, structure, goals and scope
2. Understand the practical application of time value of money and evaluating long term investment decisions& cost of capital
3. Develop analytical skills to select the best source of capital, structure, leverage and EBIT-EPS analysis
4. Understand the use and application of different models for firm's optimum dividend pay-out.
5. Estimate working capital requirements.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMBA 512 : PRODUCTION & OPERATIONS MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To understand the role of Operations in overall Business Strategy of the firm.
2. To understand the application of operations management policies and techniques to the service sector as well as manufacturing firms.
3. To identify and evaluate the key factors and their interdependence of these factors in the design of effective operating systems.

UNIT I :- Production Concepts: Introduction, meaning, nature and scope of production and operation management, Difference between Production and Operations management, Productivity, Factors affecting productivity, Work study, Method study and work measurement. Production Technology – Types of manufacturing processes. Plant location and types of plant layout.

UNIT II :- Operations Concepts: Services scenario in India, difference between product and service, recent trends; Designing products; services and processes; factors affecting service design, service designing process, service capacity planning, Dimensions of quality in services, understanding service quality gap, measuring service quality using SERVQUAL model. Case Studies

UNIT III: - Material and Inventory Management: Types of production planning, process of production planning and control (PPC) –Routing, scheduling and loading. Master production schedule, aggregate production planning. Types of inventories, inventory control techniques- EOQ, ABC, VED, FSN, HML and SDE (Simple numerical problems on Inventory control techniques).Just-in-time (JIT) and KANBAN System.

UNIT IV :- Supply Chain Management: Overview of supply chain management, conceptual model of SCM, supply chain drivers, measuring supply chain performance, core and reverse supply chain, global supply chain, inbound and outbound logistics, Bullwhip effect in SCM, push and pull systems, lean manufacturing, agile manufacturing, role of IT in SCM. Demand forecasting in supply chain—Simple moving average method, weighted moving average method, linear regression and exponential smoothing method. Case Studies

UNIT V :-Productivity and Quality: TQM, Deming's 14 principles, Jurans quality trilogy, PDCA cycle, KAIZEN, Quality circles, 7QC tools and its 7 new management tools, ISO 9000-2000 clauses, six sigma, Total Productive Maintenance (TPM), 5S. Case Studies

Suggested Reading:

1. Aswathappa, K. & Bhat, K.S.-- Production and Operations Management (Himalaya Publishing House, 2nd Edition)
2. Chase, R.B., Shankar, R. & Jacobs, F.R. -- Operations & Supply Chain Management (Tata McGraw Hill, 14th Edition)
3. Chunawalla, S.A. & Patel, D.R. – Production & Operations Management (Himalaya Publishing House, 9th Edition)
4. Chary, S.N. -- Production and Operations Management (Tata McGraw Hill, 6th Edition)
5. Charantimath, P.M. – Total Quality Management (Pearson Education, 3rd Edition)

Course Outcomes:

1. Understand the role of Operations in overall Business Strategy of the firm – course will insights into optimizing manufacturing processes, improving productivity, making informed decisions about plant decisions and plant layout,
2. Identify and evaluate the key factors and their Interdependence of these factors in the design of effective operating systems.
3. Apply the concepts of Material Management, Assessing EOQ, ABC analysis, and design basic JIT-KANBAN system. Evaluate ethical and sustainable aspects
4. Understand the concept of Supply Chain Management, conceptual model and drivers. Evaluate and measure supply chain performance
5. Apply techniques for effective utilization of operational resources and managing the processes to produce good quality products and services at Competitive prices

COs\ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1.	3	2	1	1	2	1	2	1	2	3	3	2	2	3	2
CO2.	3	3	2	2	2	2	2	2	3	2	3	3	2	2	3
CO3.	3	3	2	2	2	2	3	2	2	2	3	3	2	3	2
CO4.	2	3	2	3	2	3	3	3	3	3	2	3	3	2	3
CO5.	3	2	3	2	3	2	3	2	2	2	3	3	2	3	2

NMBA 514 : HUMAN RESOURCE MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

In this course the students will learn the basic concepts and frameworks of Human Resource Management (HRM) and understand the role that HRM has to play in effective business administration. It will provide an insight as to how to use Human Resource as a tool to implement strategies.

UNIT I :-HRM: Introduction, Nature, Scope, Objectives and Functions of HRM, HRM vs.HRD, Strategic HRM: Meaning and Techniques. Case Studies

UNIT II :-Human Resource Planning and Employee Hiring : Meaning of job Analysis, job design, Human Resource Planning, methods demand forecasting for manpower planning, factors influencing HRP, Employee hiring- methods of Recruitment, Employee selection, process of employee selection, recent trends in recruitment. Case Studies

UNIT III :-Employee Training & Development: Meaning, importance of Training, methods and types of training, career planning, promotion, transfer, demotion and separation, Performance Appraisal: Meaning and types of appraisal, Potential appraisal, Job Evaluation: Meaning and methods of job evaluation. Case Studies

UNIT IV :-Compensation Management: Introduction to compensation management, Components and structure of employee compensation, Factors affecting employee compensation, Employee incentive schemes. Case Studies

UNIT V :-Introduction to employee relation and industrial relations, Employee Safety / Health and Needs and legal provision of employee health and safety, International Human Resource Management. Case Studies

Suggested Reading:

1. V.S.P.Rao, Human Resource Management (Text and Cases) Himalaya Publications, Thirteenth Edition.
2. Durai Praveen, Human Resource Management Pearson Publication, 2nd Edition.
3. Gary Dessler and BijuVarkkey Human Resource Management, Person Publication, 2013, 14th Edition.
4. SeemaSanghi, Human Resource Management, Vikas Publlications, 2014, 5th Edition.
5. K. Aswathappa, Human Resource Management, McGraw Hill Education, 2013, 7th Edition.

Course Outcomes

1. To understand the basic concepts and frameworks of Human Resource Management (HRM) and its role in effective business decision making.
2. To learn function such as recruitment, selection and employee placement and orientation.
3. To analyze different training & development modules and techniques for appraising the performance of employees.
4. To describe the role of employee benefits and compensation as a critical component of employee performance, productivity and effectiveness.
5. To demonstrate the knowledge of human resource in different legal aspects and impacts of HR practices at international level

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

NMBA 516 : MANAGEMENT INFORMATION SYSTEMS

L T P C 2 0 2 4

Course Objectives:

1. The course aims to provide knowledge about basics of data, information and information systems.
2. To provide an orientation about the increasing role of information systems in managerial decision making to gain Competitive edge in all aspects of Business.
3. To provide hands on learning about different types of information systems in business and its applications in business.
4. The course also aims to provide knowledge about Developing MIS Systems.
5. To provide an insight to students about E-commerce and IT applications in business.

UNIT I :-Concept of Information System (IS) - Information & its Types , System and its types, Information Systems - Need, Purpose and Objectives, Information as a strategic resource, Use of information for competitive advantage, IS as an instrument for the organizational change. Information Technology – Characteristics and emerging trends, IT Capabilities and their organizational impact, IT enabled services.

UNIT II :-Types of IS-Operations Support System (OSS), Management Support System(MSS), Transaction Processing System(TPS), Process Control System (PCS), Enterprise Collaboration System(ECS), Management Information System(MIS), Decision Support System (DSS), Executive Information System(EIS). Group Decision Support Systems, and Executive Information Systems, Expert System (ES).

UNIT III:-Decision making – Data driven decision-making, its relevance to business, Models of Decision Making - Classical, Administrative and Herbert Simon's Models. Artificial Intelligence (AI), Applications of Artificial Intelligence: Neural Networks, Fuzzy Logical Control System, Virtual Reality.

UNIT IV:-Developing MIS Systems: System Development Life Cycle. , Investigation Phase, Prototyping, Feasibility Analysis, System Analysis (DFD and ER Diagram), System Design, Implementing Business Systems, Testing, Documenting, Training and Maintenance.

UNIT V :-E-commerce: Introduction, Comparison between Traditional commerce and E-commerce; Advantages & disadvantages of e-commerce, Buying & Selling on Internet, Issues in Implementing Electronic Commerce. Applications of Information Technology as Business.

Suggested Reading:

1. Management Information System – James 'O' Brian
2. Management Information Systems, Laudon and Laudon, 7th Edition, Pearson Education Asia
3. Management Information Systems, Jawadekar, Tata McGraw Hill
4. Analysis and Design of Information Systems, Rajaraman, Prentice Hall
5. Database Management Systems: A Business-Oriented Approach Using ORACLE, My SQL and MS Access, by Sotirios Zygiari
6. Alex Berson, Stephen J. Smith "Data Warehousing, Data-Mining & OLAP", TMH

Course Outcomes:

1. Be able to understand the importance of information management in business and management.
2. Be able to understand and analysis the importance of information management in business Decision making.
3. To understand the different types of information systems in business.
4. To understand and Learn MIS development processes.
5. To understand and analysis the application of IT in business.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5

CO1	3	2	2	1	2	3	2	1	2	3	3	2	1	2	3
CO2	2	3	3	2	2	1	3	2	3	2	2	3	3	1	2
CO3	2	2	3	1	3	2	2	3	2	3	3	2	2	3	1
CO4	3	3	2	3	2	3	2	2	3	2	1	3	2	3	3
CO5	2	3	3	2	3	2	3	1	2	3	2	3	3	2	2

MBA

SECOND YEAR SYLLABUS (2024-25)

MBA 201 : STRATEGIC MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. A clear understanding of the key concepts and principles of strategic management
2. A set of useful analytical skills, tools and techniques for analyzing a company strategically
3. To provide a basic understanding of the nature and dynamics of the strategy formulation and implementation processes.
4. To encourage students to think critically and strategically.
5. The ability to identify strategic issues and design appropriate courses of action.

Unit I: Introduction: meaning nature, scope, and importance of strategy; and strategic management, Introduction to Business policy, Strategic decision-making , Process of strategic management and levels at which strategy operates , strategic intent: Vision, Mission, Business definition, Goals and Objectives.

Unit II: Environmental Scanning : Factors considered, approaches, External environment analysis: PESTEL Analysis, EFE matrix (External Factor Evaluation): Porter's Five Forces Model methods and techniques used , Internal Appraisal – The internal environment, Organizational Capability Factors, organizational appraisal-factors affecting, approaches, methods & techniques Resource Based View (RBW) Analysis, VRIO Framework, Value Chain Analysis, IFE matrix (Internal Factor Evaluation).

Unit III: Strategy Formulation: Corporate, Business, Functional strategy Corporate Level Strategies: -- Stability, Expansion, Retrenchment and Combination strategies. Concentration Strategies, Integration Strategies: Horizontal & Vertical, Diversification: Related & Unrelated, Internationalization , Porters Model of competitive advantage of nations, Cooperative: Mergers & acquisition Strategies, Joint Venture, Strategic Alliance , Digitalization Strategies.

Unit IV: Strategy Analysis: Process, Analysing Strategic alternative, Evaluating and Choosing Among Strategic Alternative, Tools & Techniques of strategic Analysis, Strategic Choice. BCG Matrix, Ansoff Grid, GE Nine Cell Planning Grid, Hofer's Product market evolution. McKinsey's 7'S framework

Unit V: Strategy implementation: Resource allocation, Projects and Procedural issues. Values, Ethics and Social responsibility. Operational and derived functional plans to implement strategy. Integration of functional plans. Strategy Evaluation & Control.

Suggested Reading:

1. Kazmi, Azhar; Business Policy and Strategic Management; McGraw-Hill Education
2. David, Fred; Strategic Management: Concepts and Cases;PHI Learning
3. Thomson, Arthur A. and Strickland, A. J.; Strategic Management: Concept and Cases; McGraw Hill Education
4. Jauch, L.F., and Glueck, W.F.; Business Policy and Strategic Management; McGraw-Hill Education
5. Wheelen, L. Thomas and Hunger, David J.; Strategic Management and Business Policy, Crafting and Executing Strategy; Pearson Education

Course Outcomes: Upon completion of this course, students will be able to complete the following key tasks-

1. Formulate organizational vision, mission, goals, and values.
2. Develop strategies and action plans to achieve an organization's vision, mission, and goals
3. Develop powers of managerial judgment, how to assess business risk, and improve ability to make sound decisions and achieve effective outcomes.
4. Evaluate and revise programs and procedures in order to achieve organizational goals;
5. Consider the ethical and control dimensions of the strategic management process;

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	3	2	2	3	3	2	1	3	2	1	3	2
CO2	3	3	2	3	3	2	3	3	2	2	3	2	2	3	3
CO3	2	3	3	2	3	2	2	2	3	2	2	3	3	2	3
CO4	3	3	2	2	3	2	3	3	2	1	2	3	2	3	3
CO5	2	2	3	2	3	1	2	2	3	2	2	2	1	2	3

MBA 203: PROFESSIONAL COMMUNICATION

Course Objective

1. To equip the students with necessary professional skills.
2. To enable students, explore their career opportunities through necessary training.
3. To impart skills of understanding and practicing Etiquettes.

Unit-I

Effective Resume Building and Interview Techniques-Focus on creating impactful resumes and mastering interview skills, including preparation, body language, and answering common interview questions

Unit-2

Group Discussion and Public Speaking Skills-Techniques for performing well in group discussions, with an emphasis on clear communication, confidence, and handling differing viewpoints.

Unit-III

Exploring Career Opportunities and Professional Networking-Strategies for identifying career paths, leveraging online platforms like LinkedIn, and building professional networks

Unit-IV

Collaborative Teamwork and Presentation Skills-Developing teamwork through trust, collaboration, and communication, while mastering the art of delivering effective presentations in a team environment. Brainstorming and its importance in generating new ideas path breaking ideas.

Unit-V

Social and Cultural Etiquettes in Professional Settings-Understanding professional social norms and cultural etiquettes, along with effective internal communication and listening skills for better team dynamics.

Course Outcomes:

1. Gain ability to match skills and interests with a chosen career path & Draft a Resume
2. Develop Interview & Group Discussion skills.
3. Develop a planned approach towards job searching &Career.
4. Developing Team skills & promote Collaboration.
5. Develop Social & Cultural & Professional etiquettes.

Suggested Reading:

1. Mc Grath E.H., Basic Management Skills for All, Prentice Hall of India Pvt. Ltd.
2. Barun K.Mitra, Personality Development and Soft Skills, Oxford University Press
3. Sherfield, R.M., Montgomery, R.J., Moody, P.G., Developing Soft Skills, Pearson
4. Bhardwaj, Professional Communication, Wiley
5. UGC-Jeevan Kaushaln

MBA 205 : SUMMER INTERNSHIP PROJECT REPORT

L T P C 0 0 8 4

1. At the end of the second semester examination, it is mandatory for every student of MBA to undergo on-the-job practical training in any manufacturing, service or financial organization. The training will be of 6 weeks duration. The college/institute will facilitate this compulsory training for students.
2. During the training, the student is expected to learn about the organization and analyze and suggest solutions to a live problem. The objective is to equip the students with the knowledge of actual functioning of an organization //and problems faced by them for exploring feasible solutions.
3. During the course of training, the organization (where the student is undergoing training) will assign a problem/project to the student.
4. The student, after the completion of training will present the work to his / her faculty guide / mentor. Guide will assess student's contribution and will award internal marks out of 50. Thereafter students will submit a report to the College/Institute which will form part of the third semester examination. However, the report must be submitted by the end of October 30.
5. The report (based on training and the problem/project studied) prepared by the student will be known as Summer Training Project Report. The report should ordinarily be based on primary data. It should reflect in depth study of a micro problem, ordinarily assigned by the organization where the student undergoes training. Relevant tables and bibliography should support it. One comprehensive chapter must be included about the organization where the student has undergone training. This should deal with brief history of the organization, its structure, performance products/services and problem faced. This chapter will form part 1 of the report. Part 2 of the report will contain the study of micro research problem. The average size of report ordinarily will be of minimum 100 pages in standard font size (12) and double spacing. Two neatly typed (one sided only) and soft bound copies of the report will be submitted to the College/Institute. The report will be typed on A-4 size paper.
6. The report will have three certificates, one by the Head of the Department, another by the Faculty guide and third one from reporting officer of the organization where the student has undergone training. These three certificates should be attached in the beginning of the report.
7. The Summer Training Project Report will carry 100 marks and will be evaluated by two examiners (external and internal). The evaluation will consist of (1) Project Report evaluation (2) Project Presentation and Viva Voce.
8. The Project Report evaluation will comprise of 50 seasonal marks and would be evaluated by internal project guide. The Presentation and Viva Voce would comprise of 50 marks and would be evaluated by two examiners (1 external and 1 internal).. Only such person will evaluate the project report who has minimum three years of experience of teaching MBA classes in a College/University. Experience of teaching MBA classes as guest faculty shall not be counted.
9. The parameters on which external evaluation would be carried out are as under:

   Project Report Evaluation:

Evaluation Criteria & Marks	Understanding of Objectives with topic (10)	Understanding of Relevance of topic (10)	Interpretation & Analysis (10)	Presentation (10)	Query handling (10)

10. It is mandatory that the student will make presentation in the presence of teachers and students. The student is expected to answer to the queries and questions raised in such a meeting.
11. The student shall prepare the Summer Training Project Report as per the format given in the Summer Training Manual as prescribed by the University.
12. In the beginning of III semester and before commencement of regular classes each student has to choose dual specialization of his/her choice or interest. University offers dual specialization in area Human Resource Management (HR), Marketing Management (MM), Financial Management (FM), International Business (IB) Information Technology (IT), Operations Management (OM), Business Analytics (BA), Entrepreneurship & Agri-Business(EAB). Institute shall help students to choose specialization by conducting workshop, Industry Interaction etc.
13. Institute has a right to close the date of choosing area of specialization in order to smooth functioning of classes and department and effective utilization of resources. However, this process shall complete before commencement of regular classes.

L T P C 3 0 0 3

Course Objectives:

1. To introduce the concept and importance of corporate governance.
2. To develop the importance of global corporate governance practices.
3. To impart knowledge on governance which ensure ethics in corporate management.
4. To provide an understanding on legal enforcement for management of corporate health in the interest of shareholder & public.

Unit I: Introduction to the Corporate Governance; corporate citizenship; Owners and stakeholders: Types of owners, Rights and privileges of shareholders, Ownership structures and corporate governance

Unit II: Global Corporate Governance Practices: Anglo-American Model, German Model, Japanese Model, Landmarks in Emergence of Corporate Governance, Corporate Social Responsibility (CSR) and Business Ethics, Meaning and evolution of CSR in India, Need for CSR, Social Responsibility of Business.

Unit III: Corporate Misconduct & Mis-governance: Reasons for Corporate Misconduct, Whistleblower's Protection, Factors Responsible for Obstructing Effective Corporate Governance Practices. Corporate Governance Rating: Standard & Poor's Corporate Governance Scores, Corporate Governance Rating Methodology.

Unit IV: Corporate social responsibility: Meaning, Evolution of corporate social responsibility, Limits of corporate social responsibility, Voluntary responsibility Vs. Legal requirements, Profit maximization vs. social responsibility, Relationship between CSR and Business Ethics.

Unit V: Global issues of governance, accounting and regulatory framework, corporate scams, committees in India and abroad, Global reporting initiatives, Global compact, Millennium development goals, etc.

Suggested Reading:

1. Mathur, U.C., Corporate Governance and Business Ethics:Text and Cases. New Delhi: Macmillan Publishers India Ltd.
2. Principles of Contemporary Corporate Governance by Jean Jacques Du Plessis Anil Hargovan & Mirko Bagaric, Cambridge University Press.

Course Outcomes:

1. To introduce conceptual and theoretical foundations of corporate governance
2. To develop an awareness of the practical problems associated with the interaction of the board, CEO and other layers of management, shareholders and various stakeholders of a corporation
3. To develop the technical skills required to evaluate the governance of a company from the perspective of an investor
4. To prepare course participants for leadership positions in organizations such as entrepreneurs, senior managers, future directors and CEOs.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	3	2	2	3	3	2	1	3	2	1	3	2
CO2	3	3	2	3	3	2	3	3	2	2	3	2	2	3	3
CO3	2	3	3	2	3	2	2	2	3	2	2	3	3	2	3
CO4	3	3	2	2	3	2	3	3	2	1	2	3	2	3	3
CO5	2	2	3	2	3	1	2	2	3	2	2	2	1	2	3

L T P C 3 0 0 3

Course Objectives:

1. The purpose of this course is to expose the student to the basic concepts of entrepreneurship, functions of entrepreneurs and problems faced by them in the real world
2. To provide insights to students in converting an Idea to an opportunity and develop understanding of various funding sources for a startup
3. Familiarizing the students with SME sector activities, venture capital financing and international entrepreneurial opportunities.
4. To understand the role of innovation and technical change in enterprise and global level economic performance
5. To understand the technological, human, economic, organizational, social and other dimensions of innovation

Unit 1 (7 Hours)

Innovation: Meaning, difference between innovation and creativity, Innovation types & Platforms, Business Model Innovation, Service Innovation, Design-led innovation, Improvisation, Large firm Vs. Start-up innovation, Co-creation and open innovation, developing an innovation strategy, Sources of innovation, Innovation Environment, Creative Destruction

Unit 2 (6 Hours)

Entrepreneurship: Meaning, definition and concept, Factors affecting entrepreneurship, characteristics and skills of an entrepreneur, entrepreneur v/s manager. Concept of intrapreneurship, types of entrepreneurs, functions of entrepreneur, entrepreneurial decision- process, challenges faced by entrepreneurs and changing role of entrepreneur. Women enterprises, social, and rural entrepreneurship

Unit 3 (9 Hours)

Entrepreneurial Finance, Assistance and Entrepreneurial Development Agencies: Estimating financial funds requirement; Sources of finance – banks, & financial institutions, financing of small-scale industries in developing countries.

Role of central government and state government in promoting entrepreneurship with various incentives, subsidies, grants, export oriented units – fiscal & tax concessions, other government initiatives and inclusive entrepreneurial growth. Overview of MSME policy of government in India,

Role of agencies assisting entrepreneurship: DICs, SSIs, NSICs, EDIINIESBUD, NEDB, Entrepreneurship Development Institute (EDI). New initiatives taken by government to promote entrepreneurship

Unit 4 (9 Hours)

From Idea to opportunity: Idea generation- sources and methods, identification and classification of ideas. Individual creativity: idea to business opportunity, Opportunity assessment, Process of New Venture and its Challenges, Venture capital, Angel investing, Crowd funding.

Developing a Business Plan: Business Planning Process: elements of business planning, preparation of project plan, components of an ideal business plan – market plan, financial plan, operational plan, and, Feasibility Analysis – aspects and methods: Economic analysis, financial analysis, market-, and technological feasibility.

Unit 5 (5 Hours)

Launching a New Venture: Steps involved in launching a business (Process charts), Various Forms of business ownership, Registration of business units; start-up to going IPO; revival, exitand end to a venture.

Course Outcomes:

1. Remember and comprehend basic concepts of entrepreneurship.
2. Develop knowledge on Entrepreneurial Finance, Assistance and role of Entrepreneurial Development Agencies
3. Develop understanding of converting an Idea to an opportunity and develop understanding of various funding sources.
4. Gain in depth knowledge of innovation and its various sources
5. Develop understanding of various dimensions of innovation along with current trends and general awareness of innovation and startup

Suggested Readings

1. Roy: Entrepreneurship, OUP
2. Ahmad, Ali and Bhatt, Punita.: Entrepreneurship in Developing and Emerging Economies,SAGE Publishing India
3. Mitra, Jay: The Business of Innovation, 2017, SAGE Publishing
4. Entrepreneurship 10th Ed (Indian Edition) 2016 by Robert Hirsch Michael Peters Dean Shepherd, McGraw Hill
5. Khanka, S.S.; Entrepreneurial Development; S. Chand and Co.
6. Kumar, Arya; Entrepreneurship; Pearson Education.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	1	2	1	1	2	2	1	1	1	3	2	2	1	1
CO2	2	2	2	2	1	2	2	2	1	1	2	3	2	2	2
CO3	3	2	2	2	2	3	2	3	2	2	3	3	3	2	2
CO4	2	3	2	2	3	3	3	2	2	2	3	3	2	3	3
CO5	2	2	1	1	2	3	3	2	2	2	2	2	3	2	3

MBA 206 : RESEARCH PROJECT REPORT

L T P C 0 0 10 5

1. In fourth semester, the candidates will have to submit a Research Project Report on a problem/topic (from the specialization areas) to be assigned by the MBA department under the supervision of a core faculty member of the department.
2. The Research Project Report will carry 100 marks.
3. The evaluation of the project report will be done by two examiners (external & internal). The evaluation will consist of (1) Evaluation of Project Report (2) Presentation and Viva Voce.
4. The evaluation of Project Report will comprise of 50 marks and would be evaluated by the internal guide.
5. The evaluation of Viva Voce of Project would comprise of 50 marks and would be evaluated by two examiners (1 external and 1 internal).
6. The report will contain the objectives and scope of the study. Research Methodology, use and importance of the study, analysis of data collected, conclusions and recommendations. It will contain relevant charts, diagrams and bibliography. A certificate of the supervisor and the Head of the MBA program certifying the authenticity of the report shall be attached therewith. The student will submit two copies of the report to the Head of MBA program. The number of pages in the report will be minimum 75 or more. The report should be typed in A-4 size paper. The parameter on which both evaluation (1 & 2) would be carried on would be on the basis of:

   The scheme of evaluation for Project Report:

Criteria & Marks	Relevance of Objectives with topic (10)	Relevance of Research Methodology(20)	Interpretation & Analysis (20)	Total (50)

Evaluation Criteria and Marks	Understanding of Objectives with topic (10)	Understanding of the relevance of Research (10)	Interpretation & Analysis (10)	Presentation & Communication skills (10)	Query Handling (10)	Total (50)

MBA 221 : CONSUMER BEHAVIOUR

L T P C 3 0 0 3

Course Objectives:

1. To provide an overview and understanding of Consumer Behavior.
2. To introduce students the theories and models of consumer behavior while illustrating the unique challenges faced by marketers.
3. To assist students to integrate into their thinking the important individual and social dimensions that shape up decision making of consumers.
4. To develop an approach to handle post purchase consumer behaviour.

Unit I: Introduction to Consumer Behaviour : Nature and Importance of CB, application of CB in Marketing. Contributing disciplines and area like psychology, social psychology, economics, anthropology etc.

Consumer Behavior in the Contemporary Environment: Changing face of consumer behavior under the scenario of globalization and technological changes.

Unit II: Individual Determinants of CB: Perception: Process, perceived risk. Learning: principles, theories. Personality: nature, theories, self-concept, psychographic and life style. Attitude: Structural model of attitude, attitude formation & change. Motivation: needs/motives & goals, dynamic nature of motivation, Arousal of motives, theories of motivation.

Unit III: Group Determinants of CB: Reference group influence: types of consumer relevant groups, factors affecting group influence, application of reference group concept. Family: functions of family, family decision making, family life cycle (FLC). Opinion Leadership and Personal influence. Diffusion of Innovation: Adoption process. Diffusion process.

Unit IV: Social class and consumer behavior: Social class, component and its impact on consumer behavior. India's socio economic classification. Influence of social mobility on CB, Life style Profile of Social class.

Unit V: Consumer Decision making Process: Problem recognition. Information Search Process and Evaluation, Purchasing process, Post purchase behavior and post purchase dissonance. Types of decision making and involvement. Types of choice models-multi attribute, Conjunctive, disjunctive, lexicographic and illumination by aspects. Models of consumer decision making.

Suggested Reading:

1. Schiffman, L. G., &Kanuk, L. L., Consumer Behavior, Ninth Edition, Pearson
2. Hawkins, D. I., Mothersbaugh, D. L., & Mookerjee, A., Consumer Behavior – Building Marketing Strategy, Eleventh Edition, McGraw Hill
3. Solomon, M. R., Consumer Behavior – Buying, Having & Being, Ninth Edition, Prentice Hall India

Course Outcomes:

1. The students will be able to define and explain key theories and concepts underlying consumer behaviour.
2. The students will be able to describe and identify the Consumer Decision Making Process.
3. The students will be able to illustrate and assess individual factors that shape consumer behaviour along with their marketing implications.
4. The students will be able to recognize and examine group and social influences that guide consumer behaviour and their marketing implications.
5. Remembering the individual and social dimensions that shape up decision making.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1	1	2	2	1	1	1	3	2	1	1
CO2	3	3	2	1	1	2	2	2	1	1	3	2	1	1
CO3	3	3	3	1	2	3	2	2	1	1	3	2	1	1
CO4	2	3	2	1	1	2	3	2	1	1	2	2	1	1

MBA 222 : RETAIL MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To impart to the students an in-depth understanding of Retail Marketing concepts.
2. To make students aware of Retailers strategy to attain competitive advantage by quick organizational response to changing consumer demands and marketing environment.
3. To help the students understand the challenges of modern-day Retail Marketing.

Unit I: Overview of Retailing Environment and Management: Retailing, Definition and Concept, Functions of Retailing. Theories of Retailing, Classification of Retail Outlets, Retail Planning. The Customer and Retail Business: Knowing and understanding retail Consumers.

Unit II: Situational Analysis: Retail Institutions by Ownership. Retail Institutions by Store-based Strategy-Mix, Non store-based Strategy-Mix and other Forms of Non Traditional Retailing. Promotional Strategies used in retailing. Choosing a Store Location: Trading Area Analysis, Site Selection, Store Design and Layout, The Store and its Image, The External Store, Internal Store, Display, Visual Merchandising and Atmospherics.

Unit III: Managing Retail Business: Retail Organization and HRM, Retail Organization and functional management-Introduction, classification of retail organization, Human resource management in retail.Managing Retail Services. Service Characteristics.

Unit IV: Delivering the Product: Retail Information Systems, Merchandise Management, Retail Pricing, People in Retailing. Logistics issues in Retailing, Modes of Transportation, Selection of Transport Mode, Transportation Network and Decision. Retail supply chain. CaseStudy

Unit V: Customer Relationship management: CRM process, Collecting customer data and its analysis. e-retailing, Introduction, types of technology in retailing, role of IT in retail business.

Suggested Reading:

1. Berman , Barry and Joel Evans Retail Management(Pearson Education, 9th Ed.)
2. Newman A.J. and Cullen P - Retailing : Environment and Operations (Vikas, 1st Ed.)
3. Michael Levi M and Weitz BW - Retailing Management (Tata McGraw Hill, 5th Ed.)
4. Dunne Patrick M., Lusch Robert F. and Griffith David A - Retailing (Cengage Learning, 4th Ed.)
5. Cox Roger and Brittain Paul - Retailing: An Introduction (Pearson Education, 5th Ed.)

Course Outcomes:

1. The student will be able to identify and understand Retailing concepts.
2. The student will be able to interpret situational analysis in retailing.
3. To understand distribution and supply chain concepts in retail.
4. The student will be able to identify human resource in retail business.
5. To understand CRM in retail.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	2	2	2	1	1	1	3	2	1	1
CO2	2	3	2	1	2	2	2	2	1	1	3	2	1	1
CO3	2	2	3	1	2	2	3	2	1	1	3	2	1	1
CO4	1	2	2	3	1	1	2	2	1	1	2	2	1	1
CO5	2	2	1	3	1	2	3	3	1	1	2	2	1	1

MBA 223 : DIGITAL MARKETING

L T P C 3 0 0 3

Course Objectives

1. Understand core concepts and evolution of digital marketing vs traditional marketing.
2. Analyze digital channels and platforms to craft audience-specific strategies.
3. Evaluate advertising techniques and campaign management for maximizing ROI.
4. Apply analytics to measure performance and customer behavior insights.
5. Assess emerging trends and ethics to adapt strategies in a dynamic market.

Unit I: Introduction

Definition, Importance, Origin & development, Digital vs. Traditional; Role and Growth of Digital Marketing in India, Challenges associated with digital marketing; Strategies, Funnel, Customer Journey and Omni-channel Marketing; Concept and practices for Buyer's Persona, Digital Age Consumer Behaviour

Unit II: Digital Marketing Channels & Platforms

SEO -On-Page and Off-Page SEO Techniques, Algorithm Updates & Keyword Research; SEM & Pay-Per-Click (PPC); Overview of Google Ads, Creating &Optimizing PPC Campaigns

Social Media Marketing - Platform-Specific Strategies (Instagram, LinkedIn, TikTok, Twitter), Social Media Advertising; Content Marketing Strategy - Blogging, Vlogging, Podcasts, and UGC; Influencer and Affiliate Marketing, Mobile Marketing

Unit III: Digital Advertising and Campaign Management

Digital Advertising Ecosystem - Types of Ads: Display, Search, Video, and Native, Retargeting and Remarketing Strategies, A/B Testing and Conversion Rate Optimization (CRO)

Budgeting and Ad Spend Optimization, Maximizing ROI: Tools and Techniques; E-commerce and Digital Storefronts

Unit IV: Data Analytics and Measurement

Introduction to Digital Marketing Analytics - Overview of Key Metrics: Traffic, Engagement, Conversions; Google Analytics - Setting Up, Tracking, and Reporting in GA; Social Media Analytics - Tracking Performance (Facebook, Instagram); SEO Analytics and SEM Reporting – Moz &SEMrush; Customer Lifetime Value (CLV), Data Visualization for Marketers - Creating Dashboards

Unit V: Emerging Trends, Strategy, and Ethics in Digital Marketing

Web 3.0 and Decentralized Technologies, AI-powered marketing, AR, VR, Metaverse, Quantum Computing Impact, Voice Search and Voice Commerce, Neuromarketing, Sustainability practices and Green Marketing, IoT (Internet of Things) in Digital Marketing;

Data Privacy and Ethical Data Use - Data Privacy, GDPR Compliance, and Responsible Marketing; Career in Digital Marketing

Suggested Reading:

1. Gupta Seema, Digital Marketing, India, McGraw Hill
2. Bhatia Puneet, Fundamentals of Digital Marketing, India, Pearson Education
3. Kotler, Kartajya, Setiawan; Marketing 4.0: Moving from Traditional to Digital, John Wiley &Sons,Inc.
4. Havaldar,K. Industrial Marketing, New Delhi, India: Tata McGraw Hill.

Course Outcomes

1. Articulate key digital marketing concepts and differentiate them from traditional marketing.
2. Select and implement effective digital marketing channels based on audience needs.
3. Design and manage digital advertising campaigns to optimize budgets and effectiveness.
4. Utilize data analytics tools to evaluate marketing performance and inform decisions.
5. Evaluate emerging technologies and ethical issues in digital marketing to create responsible strategies.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	1	2	2	1	1	1	3	2	1	1
CO2	3	3	2	2	1	2	2	2	1	1	3	2	1	1
CO3	3	3	3	2	2	3	2	2	1	1	3	2	1	1
CO4	2	2	3	3	2	2	3	3	1	1	3	2	1	1
CO5	3	2	2	3	2	3	3	2	1	1	3	2	1	1

MBA 224 : PRODUCT AND BRAND MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. This course will attempt to understand various types of products in the product portfolio of an organization.
2. Developing new products and eliminating exiting products from the portfolio will be examined. Why a marketer needs brand names and what is the need to maintain brands equity.

Unit I: Product Management: Product Mix concepts, Product Classification, Product Development
Marketing Organization: Product focused organization; Market focused organization, Factors influencing design of the product, Changes affecting product management.

Unit II: Product Market Strategies: Product Life Cycle Stages and corresponding Strategies, Product Evaluation
Product Positioning: Concept, Product Differentiation, Positioning Strategies, Preference Analysis, Benefit Segmentation

Unit III: Brand Management: Brand types and consumer value spaces- functional, emotional, experiential brands Brand Equity concept, Brand Equity Models – Brand Asset Valuation, Aaker Model, BRANDZ, Brand Resonance.
Brand Building: Brand building blocks and implications, Measuring Brand equity: Brand Value Chain and Brand Tracking, Brand Equity Management System

Unit IV: Brand Positioning & Values: Brand Knowledge, Identifying and establishing Brand Positioning, Positioning Guidelines, Brand Values and Brand mantras. Brand life cycle- challenges and strategies

Unit V: Designing & Sustaining Branding Strategies: Brand hierarchy, Branding strategy, Brand extension and brand transfer, Managing brand over time- Reinforcing Brands, Revitalizing Brands, Co-Branding Celebrity endorsement, Brand Crisis.

Suggested Reading:

1. Keller, K. L. Strategic Brand Management: Delhi: Pearson Education. 2004
2. Kotler, P., Keller, K. L., Koshy, A., & Jha, M. Marketing Management. New Delhi: Pearson Education 2007
3. Verma HV (2010). Branding Demystified: From Plans to Payoffs. New Delhi:Sage Publications
4. Travis, D (2000). Emotional Branding. California: Random House
5. Aaker, D. and Joachimsthaler E. (2000). Brand Leadership: The Next Level of the Brand Revolution. NY: The Free Press.
6. Majumdar, R. Product Management in India. Delhi: Prentice Hall of India, 2007
7. Kazmi, S. H. H. & Batra, S. K Advertising and Sales Promotion. New Delhi: Excel Books. 2008

Course Outcomes:

1. Explain the concepts of Product management including product mix, classification and product development.
2. Understand the strategies adopted by marketers during the different phases of PLC
3. Understand the branding attributes, theories of Brand equity and its development.
4. Understand the process of developing appropriate product positioning for a brand.
5. Able to explain the strategies adopted by marketers for Designing & Sustaining Branding

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	2	3	2	2	1	1	1	3	2	1	1
CO2	2	3	2	1	2	2	2	2	1	1	3	2	1	1
CO3	2	3	3	2	3	3	2	2	1	1	3	2	1	1
CO4	3	2	2	3	2	2	3	3	1	1	3	2	1	1
CO5	3	2	2	3	2	3	3	2	1	1	3	2	1	1

MBA 225 : SALES AND DISTRIBUTION MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To build knowledge, understanding, and skills in Sales and Distribution management.
2. Enable development and implementation of Sales and Channel management strategies.
3. Help analyze decision alternatives and criteria in the context of realistic problem situations in Sales and Channel management.

Unit I: Introduction to Sales Management

Sales Management - Introduction, Objectives, Role of Sales Management in Marketing, Nature and Responsibilities of Sales Management, Careers in Sales Management, Modern Roles and Required Skills for Sales Managers Understanding Personal Selling - Introduction, Objectives, Approaches to Personal Selling, Process of Personal Selling.

Unit II: Sales Territories and Quotas

Designing Sales Territories, Sales quotas and sales organisation structures, Sales Forecasting and Developing Sales Budgets .Sales Promotion, sales technology.

Unit III: Sales Force Management

Sales job analysis,Recruitment and selection of sales force, reinforcing a Sales Training Program, Motivating a Sales Force and Sales Force Compensation, Controlling the sales force.

Unit IV: Channel Management Marketing Channels,Designing Channels, Selection and Recruitment of Channel Partners, Channel Relationships Management, Channel Evaluation, Information Systems for Channels. Wholesaling- Introduction, Functions of Wholesalers, Types of Wholesalers.

Unit V: Distribution Management and New Trends

Indian Distribution Scenario at Present, Vertical Marketing System, Horizontal and Multi-Channel Marketing Systems, Understanding Distribution of services. Sales Management Information System, Relationship Marketing, Role of E-commerce in Selling.

Suggested Reading:

1. Krishna K. Havaldar, Vasant M. Cavale(2017), Sales and Distribution Management, 3rd edition, McGraw Hill.
2. Richard R. Still, Edward W. Cundiff , Norman A. P. Govoni, Sandeep Puri, (2017), Sales and Distribution Management, 6th edition, Pearson Education,
3. Tapan K. Panda, Sunil Sahadev (2011), Sales and distribution Management, 2nd edition, Oxford University Press
4. Pingali Venugopal(2008), Sales and Distribution Management: An Indian Man Perspective, 1st edition, Sage Texts.
5. Ramendra Singh(2016), Sales and Distribution Management, Vikas Publishing.
6. Nag(2017), Sales and Distribution Management, 1st edition, McGraw

Course Outcomes:

1. Understand the basic Principles of selling and distribution management.
2. Design and forecast sales and sales budget.
3. Formulate strategies to manage the sales force team.
4. Understand the different distribution channels.
5. Gain knowledge in designing channel systems and channel management.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1	2	3	2	2	1	1	3	2	1	1
CO2	2	3	2	2	3	3	2	1	1	1	3	2	1	1
CO3	3	3	3	2	2	3	3	2	1	1	3	2	1	1
CO4	2	2	2	3	2	2	3	3	1	1	3	2	1	1
CO5	3	2	2	3	2	3	3	2	1	1	3	2	1	1

MBA 226 : MARKETING ANALYTICS

L T P C 3 0 0 3

Course Objectives:

1. To learn the power and methodology behind marketing analytics
2. To Identify market trends and metrics to measure marketing success

Unit I: Introduction to Marketing analytics, advantages and disadvantages of marketing analytics, Market data sources, Slicing & dicing of marketing data, Market Basket Analysis

Unit II: Product-Market Fit: Gap Analysis, Comparing customer needs and extent of need satisfaction, Carrying out/steps in gap analysis, Performance Index, Competitor Analysis

Unit III: Purchasing Behaviour: Factor Analysis, Studying factors or characteristics influencing purchasing decisions, Carrying out Principal Component Analysis, Understanding Communalities and Rotation of Factors.

Unit IV: Measurement Model: Customer analytics, survival analysis, Analyzing customer life time value, Predicting customer retention and profit, Choice modelling; Data driven decisions.

Unit V: Digital Analytics: Digital analytics planning search engine marketing and mobile, marketing resource allocation planning and modelling resource allocation in the organization.

Suggested Reading:

1. Winston, Wayne L. Marketing analytics: Data-driven techniques with Microsoft Excel. John Wiley & Sons, 2014.
2. Sorger, Stephan. Marketing Analytics: Strategic Models and Metrics. Admiral Press, 2013.
3. Grigsby, Mike. Marketing analytics: A practical guide to real marketing science. Kogan Page Publishers, 2015.
4. Business Research Methods by Bajpai, N., Pearson, New Delhi
5. Marketing Research by Malhotra & Dash, Pearsons Education, New Delhi.

Course Outcomes:

1. Understand the importance of marketing analytics and data management in measuring, managing and analyzing marketing performance to maximize its effectiveness.
2. Carrying and Comparing customer needs and extent of need satisfaction through Gap analysis.
3. Understand and Applying factor analysis to extract factors for solving various marketing related issues
4. Understand measurement model and how to establish them to enhance digital marketing analytics effectiveness.
5. Understand marketing resource allocation planning and modelling resource allocation in the organization

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	3	3	2	3	2	1	1	3	2	1	1
CO2	2	3	2	2	2	2	2	3	1	1	3	2	1	1
CO3	2	3	3	2	3	2	3	2	1	1	3	2	1	1
CO4	3	3	2	3	3	3	3	2	1	1	3	2	1	1
CO5	3	2	2	2	3	3	3	3	1	1	3	2	1	1

MBA 231 : ORGANIZATIONAL CHANGE & INTERVENTIONS STRATEGIES

L T P C 3 0 0 3

Course Objectives: The course will impart competency in managing in change in the organization through various organization development interventions strategies to become a leader of change in the organization.

Unit I: Organizational Change: Necessity for change, Creating readiness for organizational change, Meaning of change Agent, Characteristics of successful change agents, Role of Change Agents ,Levels of Change, Leadership skills, Advantages and disadvantages of internal and external Change agents, meaning of change , Stimulating forces for change, Internal Forces , Individual level, Group level, organizational level Change

Unit II: Organizational Goals &Planning for Change -: Concept, Features, Approaches of Setting Organizational Goals. Planning for Change - Integrated Strategic change model; Managing Strategic Change; Transformational Change & its characteristics; Continuous Learning & change, Cultural & climatic factors affected by change. The Change Process and Organizational Growth, Resistance to Change and Overcoming Resistance to Change, Change Models

Unit III: Organizational Development: Nature and scope of OD, Characteristics of OD, Objectives of OD Assumption, Values and belief in OD Significance, Process/Steps, Pre-requisites for OD, Interventions of OD.

Unit IV: Organizational Effectiveness: Concept, Approaches to Measure Effectiveness (goal approach, behavioral, approach, system- resource approach, strategic constituencies approach) Criteria for Organizational Effectiveness.

Unit V: Organizational culture& Climate – meaning, concept and dimension, culture vs climate, creating organization culture, factors influencing culture, cross cultural dynamics, Concept, Work stress and managing stress , Sources of stress , coping strategy : individual and organizational. Concept of Organizational Climate, Characteristics of Organizational climate, dimensions of Organizational climate, Factors influencing organizational climate, improving organizational climate, Job satisfaction.

Suggested Reading:

1. Wendell L. French, Cecil H. Bell, Jr., Robert A. Zawacki; (2012);Organization Development & Transformation – Managing Effective Change;4th Edition; Tata McGraw –Hill Publishing Company Ltd, New Delhi.
2. Cummings & Worley: (2011); Organization Development & Change; 7th Edition; Thomson; South Western Publication.
3. Donald Anderson (2012), Cases and exercises in organizational change and development, Sage.
4. William Ruthwell (2015), Organisational development changes, ATD Press VSP RAO-Managing Organization (EXCEL 1 EDITION)
5. Chaturvedi & Chatterjee-Managing Organization (Himalaya Publication)

Course Outcomes:

1. To Know about organizational change, its components and models.
2. To know about organizational goals, planning for change and its implementation.
3. To understand the organizational culture and organizational climate.
4. To learn about organizational development, its various models, interventions, implications and empowerment.
5. To attain knowledge and conceptual framework of organization and organizational effectiveness.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	3	2	3	2	1	1	1	3	2	1	1
CO2	2	3	2	2	3	2	3	1	1	1	3	2	1	1
CO3	3	3	3	2	2	3	3	1	1	1	3	2	1	1
CO4	3	3	2	3	3	3	3	1	1	1	3	2	1	1
CO5	2	3	2	3	2	3	3	1	1	1	3	2	1	1

MBA 232 : PERFORMANCE APPRAISAL & MANAGEMENT

L T P C 3 0 0 3

Course Objectives: To create an understanding of the key concepts of performance management and contemporary methods for administering compensation and rewards in practices.

Unit I: Overview
Performance Management: Nature, scope, principles, objectives, process of performance management system, elements and key factors to effective performance system.

Unit II: Performance Appraisal (PA) Vs Performance Management (PM)
Performance appraisal: Concept, need and process, Methods of performance appraisal (Graphic Rating Scale, Alternative Ranking, Paired Comparison, Forced Distribution, Critical Incident etc) and Modern Techniques, 360 & 720 degree feedback, Problems in effective appraisal system, Performance management vs appraisal.

Unit III: Evaluating Performance management
Performance planning and challenges of PM in modern context, PMS and HR practices Linkage. PM as a System and Process, Criteria for developing effective performance assessment (KRA, KSA VS KPI)

Unit IV: Performance Management Measures
Potential appraisal, Identifying potential for development, Competency mapping, Career Development and Succession planning, Balance score card perspective, introduction, and limitations, approaches and process criteria, Benchmarking.

Unit V: Performance management (PM) issues
Performance management Styles and its organizational implications, legal and ethical perspectives in performance management, e-PMS technology and emerging trends.

Suggested Reading:

1. Robert B., Performance management, McGraw-Hill Education India.
2. Armstrong, M., Performance management, Key strategies and practical guidelines, Kogan Page, London.
3. Rao, T.V., Performance management and appraisal systems, HR tools for global competitiveness,
4. Response Books, A division of Sage Publications.
5. Paul R. Niven, Balance Scorecard, John Wiley & Sons, Inc.
6. Bhattacharyya, D.K., Performance management systems and strategies, Pearson Education

Course Outcomes:

1. Impart an understanding of concept and issues relating to performance management
2. Compare performance appraisal and performance management
3. Evaluate the terminologies and indicators of performance management
4. Design balance scorecard and different measures to performance management.
5. Assess legal and ethical perspective on performance management

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	3	2	3	2	1	1	1	3	2	1	1
CO2	2	3	2	2	3	2	3	1	1	1	3	2	1	1
CO3	3	3	3	2	2	3	3	1	1	1	3	2	1	1
CO4	3	3	2	3	3	3	3	1	1	1	3	2	1	1
CO5	2	3	2	3	2	3	3	1	1	1	3	2	1	1

MBA 233 : INDUSTRIAL RELATIONS AND SOCIAL SECURITY

L T P C 3 0 0 3

Course Objectives:

1. To Provide conceptual framework of Industrial Relation
2. To help the students to understand the existing framework of Industrial Relation and Labor legislation.

Unit I: Overview of Industrial Relations Management

Industrial Relation: Concept, Nature, significance, aspects of IR theoretical approaches - Unitary, Pluralistic, Gandhian, Marxist & Dunlop 's, Requirements and changing dimensions of IR Industrial relation policy in India. Trends Of Industrial Relations in India, factors leading the present state of industrial relations, Impact of Globalization on the Liberalized Economy Emerging challenges of IR in India, Industrial Relations with economic growth of a country.

Unit II: Trade Union

Trade Union: Introduction, Definition and objective, development and forms of unions, Trade Unions Act, 1926: introduction, objective, framework, membership, provisions relating to registration & recognition of unions, rights and liabilities, dissolution, penalties & procedures.

Unit III: Industrial Peace and Workers Participation

Employee' Participation and Empowerment: Objectives Employee participation ,Advantages of employee Participation, Employee Participation in India, shop floor, plant Level, board Level, workers' welfare, Collective bargaining concepts & essentials, types and industrial peace.

Unit IV: Industrial Disputes

Industrial disputes: Meaning, nature, concept, Cases and Consequences, prevention and settlement of industrial disputes. The Industrial Disputes Act 1947, Employee Grievances, Settlement Machinery for Industrial Disputes: Conciliation, Arbitration & Adjudication, Code of Discipline.

Unit V: Legal Framework of Industrial Relations

Overview in brief of Regulatory, Welfare, Social Security Legislation: The Factory's Act 1948, Industrial Disputes Act, 1947 Legislation: Maternity Benefit Act, 1961; Employees' Compensation Act, 1923; Employee State Insurance Act, 1948.The Contract Labour Act 1970, The Payment of Bonus Act, 1965, The Industrial Employment (Standing Orders) Act 1972, The Minimum Wages Act 1948, The Payment of Wages Act 1936, The Employees' Provident Fund and Miscellaneous Provisions Act 1952. The Gratuity Act 1942.

Suggested Reading:

1. Mamoria C. B., Dynamics of Industrial Relations, Himalaya Publication
2. Monappa A., Industrial Relations and Labour Laws, McGraw Hill Publication
3. Ghosh P. & Nandan S., Industrial relations and labour Laws, McGraw Hill Publication
4. CS Venkataratnam: Industrial Relations, Oxford University Press, New Delhi
5. PRN Sinha, Indubala Sinha, Seema and P. Shekhar: Industrial Relations, Trade Unions, and Labour Legislation, Pearson Education India.

Course Outcomes:

1. To understand the evolution and development of Industrial Relations.
2. To familiarize the students with various changing dimensions of Trade union.
3. To identify the significance of cordial industrial relation to promote industrial peace and workers participation.
4. To ascertain the knowledge of handling industrial dispute and employee grievance
5. To acquaint with the provisions of selected labour laws and their relevance in business organizations.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	2	3	2	3	1	1	1	3	2	1	1
CO2	3	2	3	2	2	3	2	1	1	1	3	2	1	1
CO3	3	2	3	2	2	3	3	1	1	1	3	2	1	1
CO4	3	3	2	3	2	3	3	1	1	1	3	2	1	1
CO5	3	3	2	3	2	3	3	1	1	1	3	2	1	1

MBA 234 : LEADERSHIP AND TEAM BUILDING

L T P C 3 0 0 3

Course Objectives: To develop an understanding of Leadership and determine team norms and making team effective

Unit I: Introduction of Leadership: Definition, Nature, Characteristics of leadership, Leadership vs Managership, Types of Leadership, Styles of Leadership, Importance of Leadership. Qualities of Leader.

Unit II: Theories of Leadership: Likert Management System and Leadership. Great man theory of Leadership, Trait theory of Leadership Managerial Grid, Michigan Studies of Leadership.

Unit III: Introduction to Team
Teams: description, Types of Teams, Team building process ,5 Ps in Teams (purpose, place, power, plan and people), Team Role, Goal Setting, Team Problem Solving, Team vs Group. Team Effectiveness and strategies, Team Member motivation, Interpersonal Competence, Team Member Roles, Size and Diversity.

Unit IV: Team Norms and Communication in teams
Team norms, Team Cohesiveness, Cross Cultural Team Building. Team Communication and Team Creativity, Team decision making Delphi Technique; Nominal Group Technique; Brain Storming, Team Values and Team Ethics. Conflict resolution.

Unit V: Team Leadership
Team Support, Team Players, Teams Resource Management, Team member selection, Team Values and Team Ethics. Team Leader, Role of Leaders, Leaders as Facilitators and Mentors. Conflict resolution.

Suggested Reading:

1. Maginn, M. (2004), Making Teams Work : 24 Lessons for Working Together Successfully, Mc Graw Hill, Delhi.
2. Dyer et al (2013), Team Building: Proven Strategies for Improving Team Performance, Jossey-Bass.
3. Frontiera, J., & Leidl, D. (2012), Team Turnarounds: A Playbook for Transforming Underperforming Teams, Jossey-Bass – A Wiley Imprint, USA.
4. HBR's 10 Must Reads on Teams (2013), Harvard Business Review Press.
5. Barner, R.W. & Barner, C.P. (2012), Building Better Teams: 70 Tools and Techniques for Strengthening Performance Within and Across Teams, John Wiley & sons.
6. Hughes, Ginnett, Curphy - Leadership, Enhancing the Lessons of Experience (Tata Mc Graw Hill, 5th Ed.)
7. Yukl G - Leadership in Organizations (Pearson, 6th Ed).

Course Outcomes:

1. To develop an understanding of Leadership
2. To determine team norms and making team effective.
3. To elaborate the team decision making and different means of resolving team conflict
4. To demonstrate team leadership and role of team leader.
5. To learn the management of a team and define its success in organization.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	2	2	3	2	1	1	1	3	2	1	1
CO2	3	2	2	3	2	3	3	1	1	1	3	2	1	1
CO3	3	2	3	3	2	3	3	1	1	1	3	2	1	1
CO4	3	3	3	3	2	3	3	1	1	1	3	2	1	1
CO5	3	3	2	3	2	3	3	1	1	1	3	2	1	1

MBA 235 : HUMAN RESOURCE DEVELOPMENT

L T P C 3 0 0 3

Course Objectives: The objective of the course is to make student aware of the concepts, techniques and practices of human resource development. This course is intended to make students capable of applying the principles and techniques as professionals for developing human resources in an organization

Unit I: Introduction to Human Resource Development

HRD: Introduction of HRM , definition, nature and scope of HRM ,Concept, Features, Importance, Objectives, Functions, Evolution of HRD in India ; difference between HRM and HRD; Approaches to HRD, Strategic HR.

Unit II: Human Resource Development Mechanism:

HRD Process, assumptions; HRD instrument: Performance and Potential Appraisal, HRD Sub systems: Training & Development; Competency Mapping, Talent Management, Career Planning, Succession Planning, Feedback and Performance Coaching, Rewards

Unit III: Human Resource Development Strategies:

Quality Circles, Quality of Work Life, Work life Balance, PCMM, Total Quality Management, Kaizen, Employee Empowerment, Benchmarking, HRD in India

Unit IV: Human Resource Development Issues:

Human Resource Retention Strategies: Monitoring and Counseling, HRD Practices, HRD Matrix. HRD professionals: Role and competencies, Challenges to HRD professionals.

Unit V: Human Resource Development Culture and Climate

HRD Culture building; HRD climate, elements: OCTAPACE; Effective HRD systems designing, development and Implementation, HRD Interventions; HRD practices, Issues, Challenges and Emerging trends, Introduction to HRD Audit & HR Analytics.

Suggested Reading:

1. Pareek & Rao: Designing & Managing Human Resource System, IBH, New Delhi
2. Arthur, M. Career Theory Handbook, Englewood Cliff, Prentice Hall Inc.
3. Nadler, Leonard, Corporate Human Resource Development, Van No strand Reinhold/ASTD, New York.
4. T.V.Rao, Human Resource Development, Sage Publications, New Delhi.
5. Beardwell & Holden: Human Resource Management, McMillan India Ltd.

Course Outcomes:

1. To provide an overview of Human resource development fundamentals.
2. To explain the process and subsystem of Human resource development.
3. To learn quality aspect and quality related issues as strategic HRD.
4. To understand the importance of HRD practices and identify the role of HRD professionals.
5. To discuss issues like HRD culture and interventions for developing organization.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1	2	3	2	1	1	1	3	2	1	1
CO2	3	3	2	2	2	3	2	1	1	1	3	2	1	1
CO3	3	3	3	2	2	3	3	1	1	1	3	2	1	1
CO4	3	3	3	3	2	3	3	1	1	1	3	2	1	1
CO5	3	3	3	3	2	3	3	1	1	1	3	2	1	1

MBA 236 : HR ANALYTICS

L T P C 3 0 0 3

Course Objectives:

1. This course introduces the student to the theory, concepts, and business application of HR analytics, and the ability to track, store, retrieve, analyze and interpret HR data to support decision making.
2. The student will use applicable benchmarks/metrics to conduct research and statistical analyses related to Human Resource Planning and Recruitment and Selection.
3. Employ appropriate software to record, maintain, retrieve and analyze Performance and training effectiveness.
4. Apply quantitative and qualitative analysis to understand and design compensation system.
5. Demonstrate how to connect HR results to business results.

Unit I: Introduction to HR Analytics: Evolution of HR Analytics, HR information systems and data sources, Evolution of HR Analytics; HR Metrics and HR Analytics; Intuition versus analytical thinking; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HR Scorecard & Workforce Scorecard.

Unit II: Human Resource Planning and forecasting:
Quantitative and Qualitative Dimensions of HR Planning, Methods and Techniques of HR Demand Forecasting, Data Base for Manpower Forecasting.
Recruitment and Selection Analytics: Evaluating Reliability and validity of selection models, Finding out selection bias, Predicting the performance and turnover.

Unit III: Performance Analysis: Predicting employee performance, Training requirements, evaluating training and development, Optimizing selection and promotion decisions, Analyzing and Classifying training needs, Measuring training effectiveness, Predicting training effectiveness and performance.
Designing a Compensation System: Understanding compensation Analytics, quantifiable data, Factors affecting Compensation & Benefits, Analytic for compensation planning, Competency Scorecard.

Unit IV: Monitoring impact of Interventions: Tracking impact interventions, Evaluating stress levels and value-change. Formulating evidence based practices and responsible investment, Evaluation mediation process, moderation and interaction analysis.

Unit V: Applications of HR Metrics and Creating HR Dashboards: HR Metrics, Types of HR Metrics, Staffing Metrics, Training and Development Metrics, Application-oriented Exercises : Dashboards: : Few Key Excel Add-ins/Functions to Help Create Dashboards, Name Range, The Developer Tab, Form Controls. Creating HR Dashboards, Storyboarding: Connecting the Dots and Integrating the Findings.

Suggested Reading:

1. Bhattacharya Kumar Dipak, HR Analytics Understanding Theories and Applications, SAGE Publishing
2. Banerjee Pratyush, Pandey Jatin and Gupta Manish (2019), Practical Applications of HR Analytics, SAGE Publishing
3. Sesil. J, Applying advanced analytics to HR management decisions: Methods for recruitment, managing performance and improving knowledge management. Prentice Hall.
4. Barnett K, Berk J, Human Capital Analytics. Word Association Publication. Fitz-Enz J.
5. The HR Analytics: Predicting the Economic Value of your Company's Human Capital Investments, AMACOM.

Course Outcomes:

1. Apply HR Analytical techniques in the areas of HRP, recruitment and selection, Compensation and Benefits and Training etc.
2. Demonstrate HR function in adding value in business terms.
3. Utilize soft factors in a people management context and convert them into measurable variables.
4. Design a Metrics and Analysis index for recruitment, performance and or a training and development context.
5. Predict the issues using the available HR data and formulate the best strategies.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	2	2	3	2	1	1	1	3	2	1	1
CO2	3	3	2	3	2	3	2	1	1	1	3	2	1	1
CO3	3	2	3	2	2	3	2	1	1	1	3	2	1	1
CO4	3	3	3	3	2	3	3	1	1	1	3	2	1	1
CO5	3	3	3	3	2	3	3	1	1	1	3	2	1	1

MBA 241 : INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To understand the economic forces that influences the pricing of financial assets.
2. To expose the students to the concepts, tools and techniques applicable in the field of security analysis and portfolio management.
3. To provide a theoretical and practical background in the field of investments.

Unit I: Investment Overview of Capital Market: Market of securities, Stock Exchange and New Issue Markets - their nature, structure, functioning and limitations; Trading of securities: equity and debentures/ bonds. Securities trading - Types of orders, margin trading, clearing and settlement procedures. Regularity systems for equity markets, Type of investors, Aim & Approaches of Security analysis.

Unit II: Portfolio Theory Risk & Return: Concept of Risk, Component & Measurement of risk, covariance and correlation, Fundamental coefficient, Measurement of systematic Analysis: Economic, Industry, Company Analysis, Portfolio risk and return, Beta as a measure of risk, calculation of beta, Selection of Portfolio: Markowitz's Theory, Single Index Model, Case Studies.

Unit III: Capital Market & Asset Pricing Technical Analysis: Dow Theory, Support and Resistance level, Type of charts & its interpretations, Trend line, Gap Wave Theory, Relative strength analysis, Technical Versus Fundamental analysis. Nature of Stock Markets: EMH (Efficient Market Hypothesis) and its implications for investment decision. Capital market theorem, CAPM (Capital Asset Pricing Model) and Arbitrage Pricing Theory. Case Studies.

Unit IV: Bond and Equity Analysis: Valuation of Equity Discounted Cash flow techniques: Balance sheet valuation, Dividend discount models, Intrinsic value and market price, earnings multiplier approach, P/E ratio, Price/Book value, Price/sales ratio, Economic value added (EVA). Valuation of Debentures/Bonds: nature of bonds, valuation, Bond theorem.

Unit V: Active Portfolio Management Portfolio Management and Performance Evaluation: Performance Evaluation of existing portfolio, Sharpe, Trey nor and Jensen measures; Finding alternatives and revision of portfolio; Portfolio Management and Mutual Fund Industry.

Suggested Reading:

1. Pandian P - Security Analysis and Portfolio Management (Vikas)
2. Chandra P - Investment Analysis and Portfolio Management Ranganatham - Security Analysis and Portfolio Management (Pearson Education) (Tata McGraw Hill, 3rd Ed)
3. Bhatt- Security Analysis and Portfolio Management (Wiley)
4. Bodie, Kane, Marcus &Mohanti - Investment and Indian Perspective (TMH)
5. William F. Sharpe, Gordon J.Alexander and Jeffery V.Bailey: Investments, (Prentice Hall).

Course Outcomes:

1. Understand about various investment avenues
2. Understand the value of assets and manage investment portfolio.
3. Understand various Models of Investment and its application
4. Understand and create various investment strategies on the basis of various market conditions.
5. Measure riskiness of a stock or a portfolio position.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	2	3	3	2	1	1	1	3	2	1	1	2
CO2	3	3	2	3	3	3	2	1	1	1	3	2	1	1	3
CO3	3	3	3	3	2	3	2	1	1	1	3	2	1	1	3
CO4	3	3	3	3	2	3	3	1	1	1	3	2	1	1	3
CO5	3	3	3	3	3	3	3	1	1	1	3	2	1	1	3

MBA 242 : COST & MANAGEMENT ACCOUNTING

L T P C 3 0 0 3

Course Objectives:

1. To have a basic understanding of various types of costs and their relevance in decision making.
2. To have an understanding of Marginal Costing Technique and its application in decision making.
3. To gain an insight into the concept of breakeven point and its applications.
4. To understand the concept of Variance and calculate various types of variances.
5. To apply the technique of budgeting in preparation of various types of budgets.

Unit I: Introduction: Meaning of Cost Accounting, cost concepts, types of cost, Elements of cost - Materials, Labour and overheads and their Allocation and Apportionment, Role of Cost in decision making, Accounting for Management, Comparison of Management Accounting and Cost Accounting, preparation of Cost Sheet, Methods of Costing, Reconciliation of Cost and Financial Accounting.

Unit II: Marginal Costing: Marginal Costing versus Absorption Costing, Cost-Volume-Profit Analysis and P/V Ratio Analysis and their implications, Concept and uses of Contribution & Breakeven Point and their analysis for various types of decision-making like single product pricing, multi product pricing, replacement, sales etc.

Unit III: Budgeting: Concept of Budget, Budgeting and Budgetary Control, Types of Budget, Static and Flexible Budgeting, Preparation of Cash Budget, Sales Budget, Production Budget, Materials Budget, Capital Expenditure Budget and Master Budget, Advantages and Limitations of Budgetary Control.

Unit IV: Standard Costing: Concept of standard costs, establishing various cost standards, calculation of Material Variance, Labour Variance, and Overhead Variance, and its applications and implications.

Unit V: Responsibility Accounting & Transfer Pricing: Concept and various approaches to Responsibility Accounting and Transfer Pricing, concept of investment center, cost center, profit center and responsibility center and its managerial implications.

Suggested Reading:

1. Pandey I M - Management Accounting (Vikas, 2004, 3rd Ed.)
2. Vij-Management Accounting (Excel Books)
3. Balakrishnan _ Managerial Accounting (Wiley Dreamtech)
4. Alex –Cost Accounting (Pearson)
5. Khan and Jain - Management Accounting (Tata McGraw-Hill, 2000)
6. Sinha- Accounting and Costing for Management (Excel Books)
7. Horngren et al - Introduction to Management Accounting (Prentice hall, 2002, 12th edition)

Course Outcomes:

1. Demonstrate an understanding of the context within which Management Accounting is used for planning and control purposes.
2. Understand the use of various Marginal costing systems
3. Appreciate how budgets and variances are used to control and measure performance.
4. Understand the use of various Standard costing systems
5. Understand the impact on management information of using different costing systems and techniques.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	3	2	1	1	1	1	3	2	1	1	2
CO2	3	3	3	3	2	2	2	1	1	1	3	2	1	1	3
CO3	3	3	3	3	2	3	2	1	1	1	3	2	1	1	3
CO4	3	3	3	3	2	3	2	1	1	1	3	2	1	1	3
CO5	3	3	3	3	3	3	3	1	1	1	3	2	1	1	3

MBA 243 : WORKING CAPITAL MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To understand the nature and scope of working capital management.
2. To access the working capital requirements and understand the Inventory management techniques
3. To create an understanding of various attributes of receivables management.
4. To provide comprehensive knowledge of cash management system.
5. To learn about the various working capital financing sources

Unit I: Concept and meaning of working capital – Liquidity and profitability – identification of factors affecting working capital requirements – theories of working capital.

Unit II: Approaches to estimation of working capital – operating cycle approach. Management of inventories – determination of optimum inventory – lead time – Safety stock – EOQ approach

Unit III: Management of receivables – credit and Collection policy – Credit standards – Credit terms – Credit analysis – management of payables – Maturity matching.

Unit IV: Management of cash – Accelerating cash inflows – Managing collections – Concentration banking – lockbox system – Control of disbursements – models for determining optimum level of cash – inventory model, stochastic – Cash budgeting – Investment of surplus cash.

Unit V: Sources of working capital finance – Approaches to optimum mix of funds – trade credit, accrual accounts– money market instruments, commercial paper, Certificate of deposits – Bill discounting and factoring –Inter corporate loans – short term bank loans.

Suggested Reading:

1. Working Capital Management by Hrishikes Bhattacharya, PHI publication.
2. Financial Management by I.M. Pandey, 12e, 2021 Pearson Education India
3. Working Capital Management by R.P. Rustagi, Taxman Publication.
4. Financial Management by Prasanna Chandra, McGraw Publications.

Course Outcomes:

1. Grasp working capital essentials, liquidity, profitability, influencing factors etc.
2. Learn diverse methodologies for estimating and managing working capital & inventory optimization.
3. Develop practical expertise in receivables and payables management
4. Understand cash flow management, optimizing inflows, collections, disbursements, and optimum cash level.
5. Understand Sources of working capital finance

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	3	2	3	1	1	1	1	3	2	1	1	2
CO2	3	3	3	2	3	3	2	1	1	1	3	2	1	1	3
CO3	3	3	3	3	2	3	2	1	1	1	3	2	1	1	3
CO4	3	3	3	3	3	3	3	1	1	1	3	2	1	1	3
CO5	3	2	3	2	3	3	2	1	1	1	3	2	1	1	3

MBA 244 : FINANCIAL MARKETS AND SERVICES

L T P C 3 0 0 3

Course Objectives:

1. To enlighten the students about the role of each component of financial system in economic development
2. To make students aware about financial services in India & it's growth.
3. To enlighten students about Venture Capital Financing
4. To develop understanding about Credit rating and Factoring services.
5. To make students understand about Mutual Funds and Demat services.

Unit I: Structure of Financial System – Role of Financial System in Economic Development– Financial Markets and Financial Instruments – Capital Markets – Money Markets –Primary Market Operations – Role of SEBI – Secondary Market Operations – Regulation –Functions of Stock Exchanges – Listing – Formalities – Financial Services Sector- Problems and Reforms, Banking financial Institutions.

Unit II: Financial Services: Concept, Nature and Scope of Financial Services – Regulatory Frame. Work of Financial Services – Growth of Financial Services in India – Merchant Banking– Meaning-Types – Responsibilities of Merchant Bankers – Role of Merchant Bankers in Issue Management – Regulation of Merchant Banking in India.

Unit III: Venture Capital – Growth of Venture Capital in India – Financing Pattern under Venture Capital – Legal Aspects and Guidelines for Venture Capital, Leasing – types of Leases – Evaluation of Leasing Option Vs. Borrowing.

Unit IV: Credit Rating – Meaning, Functions – Debt Rating System of CRISIL, ICRA and CARE. Factoring, Forfeiting and Bill Discounting – Types of Factoring Arrangements

Unit V: Mutual Funds – Concept and Objectives, Functions and Portfolio Classification, Organization and Management, Guidelines for Mutual Funds, Working of Public and Private Mutual Funds in India. Debt Securitisation – Concept and Application – De-mat Services-need and Operations-role of NSDL and CSDL.

Suggested Reading:

1. Bhole & Mahakud, Financial Institutions and Market, TMH, New Delhi
2. V.A. Avadhani, Marketing of Financial Services, Himalayas Publishers, Mumbai
3. DK Murthy, and Venugopal, Indian Financial System, IK Int Pub House
4. Anthony Saunders and MM Cornett, Fin Markets & Institutions, TMH, ND
5. Edminister R.D., Financial Institution, Markets and Management:
6. Punithavathy Pandian, Financial Markets and Services, Vikas, New Delhi

Course Outcomes:

1. Understand financial system structures, including markets and regulatory functions like SEBI's role etc.
2. Get an overview of financial services, including regulation, growth, and merchant banking& it's significance.
3. Understand venture capital and leasing, comparing their benefits to borrowing.
4. Know about credit rating mechanisms, debt ratings by major agencies, and factoring arrangements' roles.
5. Understand mutual funds, debt securitization, and de-mat services, their objectives and operational importance.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	3	2	3	1	1	1	1	3	2	1	1	2
CO2	3	3	2	3	2	3	2	1	1	1	3	2	1	1	3
CO3	3	3	2	2	2	3	2	1	1	1	3	2	1	1	3
CO4	3	2	3	3	2	3	2	1	1	1	3	2	1	1	3
CO5	3	3	3	3	3	3	3	1	1	1	3	2	1	1	3

MBA 245 : PROJECT FINANCE

L T P C 3 0 0 3

Course Objectives: To provide an understanding to the students about identification of a project, feasibility analysis, alternative project appraisal techniques, Project financing.

Unit I: Project Idea

Introduction to Projects and their Appraisal : Project Definition, Project Identification, Project Life Cycle, Project Stakeholder Analysis, Feasibility study. Types of Project Appraisal (Brief Overview),market and demand analysis ,technical appraisal, financial appraisal, economic appraisal,managerial appraisal and social appraisal.

Unit II: Iinvestment criteria

Concept of Capital Budgeting, Time Value of Money, Cost of Capital, Concept of Risk & Return and calculation of required rate of return for a Project.

Unit III: Project Evaluation

Project Identification and Feasibility Studies, Preliminary Screening, Analysis: Market, Technical, Financial, Economic and Environmental Analysis: Financial Analysis: Estimation of Cost of Project , estimation of cash flows of projects, elements of cash flow, basic principles of cash flow, biases in cash flow.

Unit IV: Project Finance

Financial estimates and projections, projections of profits,projections of cash flow statements, projections of balance sheet, financing of projects :SEBI Guidelines on project financing in India

Unit V: Techniques for Project Management

Multilateral Project Financing, Consortium Financing, Venture Capital.

Suggested Reading:

1. Khanka, S S. 'Entrepreneurial Development', S Chand & Company Ltd. New Delhi
2. Desai, Vasant, 'Project Management and Entrepreneurship', Himalayan Publishing House, Mumbai, 2002.
3. Gupta and Srinivasan, 'Entrepreneurial Development', S Chand & Sons, New Delhi.
4. Investment management theory and practice by Dr. R.P. Rustagi.
5. Investment management by V.K. Bhalla.

Course Outcomes:

1. Understand the fundamentals of project management.
2. Evaluate investment criteria for project decisions.
3. Apply project appraisal techniques.
4. Recognize institutional guidelines for project financing.
5. Understand the project life cycle and its management.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	3	2	2	1	1	2	3	2	1	2	3
CO2	3	3	2	3	2	3	2	2	2	2	3	2	1	1	3
CO3	3	3	3	3	3	2	2	1	1	2	3	2	1	2	3
CO4	3	3	3	2	3	2	3	1	1	1	3	2	2	2	3

CO5	3	2	3	3	3	3	2	1	1	1	3	3	1	2	3

MBA 246 : FINANCIAL DERIVATIVES

L T P C 3 0 0 3

Course Objectives:

1. To make students aware of different types of Derivatives.
2. To develop an understanding amongst students of financial derivatives
3. To have an understanding of the derivative tools such as options, futures and their application to hedging.
4. To understand the working of Indian Derivative Market.

Unit I: Introduction: Derivatives Definition, Evolution and Features of Derivatives, Types of Derivatives, forward , futures and options market, Forward Contracts, Forward market in India , Hedging with forwards.

Unit II: Forwards and Futures Contracts: features of forward contracts, Futures Contract-types, functions, distinction between futures and forward contracts, pricing of future contracts, Currency Futures , Hedging in Currency-Futures, Speculation and Arbitrage in Currency Futures , Pricing of Futures, Cost of Carry Model , Application of Market Index , Index Futures in the Stock Market.

Unit III: Options: Introduction to options, hedging with Currency Options, Speculation and Arbitrage with Options, Pricing Options, General Principles of Pricing, Black Scholes option pricing Model. Index Options, Hedging with Index Options, Speculation and Arbitrage with Index Options, Index Options Market in Indian Stock Market, use of different option strategies to mitigate the risk.

Unit IV: Swaps and other derivatives: Financial Swaps, Types of swaps, Derivatives v/s swaps, Managing Interest Rate Exposure, Interest Rate Swaps, Currency Swaps, Forward Rate Agreement (FRA).

Unit V: Introduction to commodity market, history of commodity trading, major commodities and participants traded in derivatives exchange in India, commodities market in indices, commodity futures and options, uses of commodities derivatives.

Suggested Reading:

1. Thomas Susan, Derivatives Market in India; Tata McGraw Hill,
2. Financial Derivatives: Theory, Concepts and practices by S.L. Gupta, PHI
3. Financial Derivatives by S.S.S Kumar, PHI ,.
4. Options, Futures and other Derivatives, John C. Hull; Prentice Hall of India; New Delhi.

Course Outcomes:

1. Understand about various derivatives instruments and derivative Market structure
2. Understand the forward and future pricing mechanism and strategies for hedging using various futures products
3. Understand the option pricing mechanism and using options strategies for mitigating risk
4. Understand the Swaps derivatives and their mechanism.
5. Understand the Indian Derivative Market.

COs \ POs & PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	2	3	2	3	2	1	2	2	2	3	2	3	1	3
CO2	3	3	3	3	3	2	2	1	2	3	3	3	2	2	3
CO3	3	3	3	3	3	3	2	1	1	3	3	2	2	1	3
CO4	3	2	3	2	3	3	3	1	1	3	3	2	2	2	3

CO5	3	2	2	3	3	2	2	1	2	2	3	2	3	2	3	

MBA 251 : DATA BASE MANAGEMENT SYSTEMS

L T P C 3 0 0 3

Course Objectives:

1. Understanding the Role of database system in business.
2. Understanding the basic concept and techniques of database management system
3. To understand the basic concept of database models.
4. To understand the application of SQL in DBMS
5. Understanding and explore recent trends in database management systems

Unit I: Introduction: Overview, database system Vs file system, Database system concept and architecture, data model schema and instances, data independence and database language and interfaces, data definitions language, DML

Unit II: Relational data Model and Language: keys, Concepts of Super Key, candidate key, primary key, Relational data model concepts, integrity constraints, entity integrity, referential integrity, Keys constraints, Domain constraints,

Unit III: Introduction on SQL: Characteristics of SQL, advantage of SQL. SQL data type and literals. Types of SQL commands. SQL operators and their procedure. Tables, views and indexes. Queries and sub queries. Aggregate functions. Insert, update and delete operations, Joins, Unions, Intersection

Unit IV: Data Base Design & Normalization: Functional dependencies, normal forms, first, second, third normal forms, Transaction system, and Concurrency control

Unit V: Recent Trends in Database Management Systems: Centralized and Client-Server Architectures, Distributed Databases, Data Mining & Warehousing, Mobile Databases, OODB &XML Databases, Multimedia & Web Databases, Spatial and Geographical Databases, Web and Mobile Databases, Active Databases

Suggested Reading:

1. Navathe E - Fundamentals of Database Systems (Pearson Education,)
2. Majumdar and Bhattacharya - Database Management System (Tata McGraw Hill)
3. Chakrabarti- Advance Database Management System (Wiley Dreamtech)
4. Beynon -Davies P- Database Systems (Palgrave)
5. Karthikeyan-Understanding Database Management System (Acme Learning)
6. Hoffer - Modern Database Management (Pearson Education)

Course Outcomes:

1. To gain Knowledge about the DBMS Technology
2. To develop understanding of the business application of DBMS
3. To develop understanding of DBMS and its concepts
4. To create & develop the understanding of SQL
5. To gain Knowledge about Recent Trends in DBMS.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	1	1	1	1	1	3	2	1	1	2
CO2	3	3	2	2	1	2	1	1	2	3	3	2	2	2
CO3	3	3	2	2	1	2	1	1	2	3	3	2	2	2
CO4	3	2	2	3	1	2	1	1	2	3	3	2	3	2
CO5	2	3	2	1	3	2	2	1	3	2	3	2	3	3

MBA 252 : ERP IMPLEMENTATION

L T P C 3 0 0 3

Course Objectives:

1. To introduce the concept and benefit of ERP
2. The course would expose the students to learn different technologies used in ERP.
3. This course leads students to imparts an understanding of ERP Manufacturing Perspective and ERP Modules
4. It will help them to have ability to use the different tools used in ERP.

Unit I: ERP Introduction, Benefits, Origin, Evolution and Structure: Conceptual Model of ERP, The Evolution of ERP, The Structure of ERP. Business Process Reengineering, Data ware Housing & Data Mining in ERP implementation

Unit II: Online Analytic Processing (OLAP), Product Life Cycle Management(PLM), LAP, Supply chain Management. ERP Marketplace and Marketplace Dynamics: Market Overview, The Changing ERP Market. Case Studies

Unit III: ERP- Functional Modules: Introduction, Functional Modules of ERP Software, Integration of ERP, Supply chain and Customer Relationship Applications. Case Studies

Unit IV: ERP Implementation Basics, ERP Implementation Life Cycle, Role of SDLC/SSAD Object Oriented Architecture, Consultants, Vendors and Employees Case Studies

Unit V: ERP & E-Commerce, Future Directives- in ERP, ERP and Internet, Critical success and failure Factors, Integrating ERP into organizational culture

Suggested Reading:

1. Bradford, M. (2010). Modern ERP Systems: Select, Implement and Use Today's Advanced Business Systems. 2nd Edition.
2. IT Infrastructure & Management, Manish Mahajan
3. Rahul V. Altekar "Enterprise Resource Planning", Tata McGraw Hill
4. Vinod Kumar Garg and Venkitakrishnan N K, "Enterprise Resource Planning – Concepts and Practice", PHI

Course Outcomes:

1. The student will be able to recognize the basic concepts of ERP.
2. The student will be able to describe different technologies used in ERP.
3. The student will be able to apply the concepts of ERP Market place and ERP Modules.
4. The student will be able to discuss the benefits and life cycle of ERP.
5. The student will be able to implement the ERP & E-Commerce.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	1	1	1	1	3	2	1	1	2
CO2	3	2	2	2	3	2	1	1	2	3	3	2	2	2
CO3	3	3	2	2	1	3	2	1	2	3	3	3	3	2
CO4	3	3	2	3	2	2	1	1	2	3	2	2	2	3
CO5	2	3	3	2	3	3	2	1	3	3	3	2	3	3

MBA 253 : CYBER & INFORMATION SECURITY

L T P C 3 0 0 3

Course Objectives:

1. To introduce the basic concepts Cyber and Information Security
2. The course would expose the students to the managerial issues relating to Security issues relating to organizations
3. This course leads students to decide what strategies actually should be used for information security.
4. It will help them to have ability to hold progressively more responsible positions in the analytics field.

Unit I: Introduction to cyber &information security, Need for Information security, Threats to Information Systems, Information Assurance, Cyber Security, and Security Risk Analysis. Case Studies.

Unit II: Application security (Database, E-mail and Internet), Data Security Considerations-Backups, Archival Storage and Disposal of Data, Security Technology- Cryptography. Firewall and VPNs, Intrusion Detection, Access Control. Security Threats, Security Threats to E-Commerce- Electronic Payment System

Unit III: Information Security: Critical Characteristics of Information, NSTISSC Security Model, Components of an Information System, Securing the Components, Balancing Security and Access in SDLC, The Security SDLC, Case Studies.

Unit IV: Security issues: Business Needs, Threats, Quality Standards, Software Attacks, Cyber Terrorism, IP Spoofing, Network Security Issues, Ethical Hacking. Information Security Standards. Case Studies.

Unit V: Risk Management: Identifying and Assessing Risk, Assessing and Controlling Risk, Risk Control Strategies, Access Control Administration, Implementation of Access Controls, Security Administrator, Implementing Kerberos in Distributed Systems. Case Studies.

Suggested Reading:

1. Charles P. Pfleeger, Shari LawerancePfleeger, “Analysing Computer Security ”, Pearson Education India.
2. V.K. Pachghare, “Cryptography and information Security”, PHI Learning Private Limited, Delhi India.
3. Dr. Surya Prakash Tripathi, Ritendra Goyal, Praveen kumarShukla ,”Introduction to Information Security and Cyber Law” Willey Ddreamtech Press.
4. Schou, Shoemaker, “ Information Assurance for the Enterprise”, Tata McGraw Hill.
5. CHANDER, HARISH,” Cyber Laws And It Protection ” , PHI Learning Private Limited, Delhi, India

Course Outcomes:

1. To gain knowledge on cyber and information security, security model, and security of computer systems
2. Describe the issues in security, threats, software attacks and ethical hacking
3. Understand and Control the risk by implementation of access control
4. To understand & evaluate the security of information systems with legal, ethical and professional issues
5. To understand of risk management and control strategy.]

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	3	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	3	3	3	2	2	2
CO3	3	3	3	2	2	3	3	2	2	3	3	3	3	2
CO4	3	3	3	3	2	3	2	1	2	3	3	2	3	3
CO5	2	3	3	3	3	3	2	2	3	3	3	3	3	3

MBA 254 : AI AND MACHINE LEARNING FOR BUSINESS

L T P C 3 0 0 3

Course Objectives:

1. To understand the need of Machine Learning & Statistics for solving various problems
2. To understand the basic concepts of Supervised and Unsupervised learning.
3. To apply regression analysis on the data available.
4. To design appropriate machine learning and apply on real world problems
5. To optimize different Machine Learning & Deep Learning Techniques.

Unit I: Introduction to Artificial Intelligence, Brief history, Various approaches to AI, Areas of application, Simulation of sophisticated & Intelligent Behavior in different area, Problem solving in games, natural language processing, automated reasoning, and visual perception, Knowledge and its role in AI, Heuristic algorithm versus solution guaranteed algorithms, Introduction to soft computing.

Unit II: Representing problems in state space, Informed versus uninformed search, Production System Model, Evaluation of the Production System, Depth First Search and Breadth First Search, Heuristics, Heuristic Search Techniques: Hill Climbing, Best First search, A* Algorithm, Branch and Bound, Cryptarithmatic Problem, Means End Analysis, AO* Algorithm, Game Playing: MINMAX Search, Alpha-Beta Pruning, Heuristic Estimation.

Unit III: Knowledge Representation and Reasoning : Propositional Logic, First Order Predicate Logic, Graphs, Associative Network, Semantic Networks, Conceptual Dependencies, Frames, Scripts, Horn Clauses, Introductory Examples from PROLOG, Case Grammar Theory, Production Rules Knowledge Base, The Interface System, Forward & Backward Deduction, Inference System in Propositional and Predicate Logic, Reasoning under Uncertainty, Understanding Natural Languages

Unit IV: Introduction to Machine Learning Why Machine learning, Examples of Machine Learning Problems, Structure of Learning, Learning versus Designing, Training versus Testing, Characteristics of Machine learning tasks, Predictive and descriptive tasks, Machine learning Models: Geometric Models, Logical Models, Probabilistic Models. Features: Feature types, Feature Construction and Transformation, Feature Selection.

Unit V: Classification and Regression Classification: Binary Classification- Assessing Classification performance, Class probability Estimation- Assessing class probability Estimates, Multiclass Classification. Regression: Assessing performance of Regression- Error measures, Over fitting: Catalysts for Over fitting, Case study of Polynomial Regression. Theory of Generalization: Effective number of hypothesis, Bounding the Growth function, VC Dimensions, Regularization theory.

Suggested Reading:

1. N. J. Nilsson, “Artificial Intelligence: A New Synthesis”, Elsevier Publications.
2. Charnick, “Introduction to A.I.”, Addison Wesley.
3. Rich & Knight, “Artificial Intelligence”, McGraw-Hill Publication.
4. Peter Flach, Machine Learning: The Art and Science of Algorithms that Make Sense of Data, Cambridge University Press, Edition 2012.
5. Hastie, Tibshirani, Friedman: Introduction to Statistical Machine Learning with Applications in R, Springer, 2nd Edition-2012

Course Outcomes:

1. The student will be able to understand different types of AI agents.
2. Student will be able to Understand and apply various AI search algorithms (uninformed, informed, heuristic, constraint satisfaction, genetic algorithms).
3. Student will be able to understand the fundamentals of knowledge representation, reasoning, and machine learning techniques and apply them to real world problems.
4. Student will be able to understand basic concept of Machine learning and Machine Learning Models.
5. Student will be able to Apply various classification and regression techniques and assess their performance.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	3	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	3	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	2	2	3	2	3	2	2	2	3	3	3	2	3
CO5	3	3	3	3	3	3	2	2	3	3	3	3	3	3

MBA 255 : DATA WAREHOUSING AND MINING

L T P C 3 0 0 3

Course Objectives:

1. Understanding of data warehousing and its functions
2. To identify the key processes of data warehousing and applications.
3. To understand data mining basic concepts
4. To understand data mining techniques to solve problems in various disciplines
5. Compare and evaluate data mining techniques

Unit I: Overview of Data Mining: Data Mining-Definition & Functionalities, Data Processing, Form of Data Pre processing, Data Cleaning: Missing Values, Noisy Data, Binning, Clustering, Regression, Computer and Human inspection, Inconsistent Data, Data Integration and Transformation. Data Reduction:-Data Cube Aggregation, Dimensionality reduction, Data Compression, Numerosity Reduction, Clustering, Discretization and Concept hierarchy generation.

Unit II: Concept Description: Definition, Data Generalization, Analytical Characterization, Analysis of attribute relevance, Mining Class comparisons, Statistical measures in large Databases. Measuring Central Tendency, Measuring Dispersion of Data, Graph Displays of Basic Statistical class Description, Mining Association Rules inLarge Databases, Association rule mining, mining Single Dimensional Boolean Association rules from Transactional Databases: Apriori Algorithm, Mining Multilevel Association rules from Transaction Databases and Mining Multi-Dimensional Association rules from Relational Databases

Unit III: Classification and Predictions: What is Classification & Prediction, Issues regarding Classification and prediction, Decision tree, Bayesian Classification, Classification by Back propagation, Multilayer feed-forward Neural Network, Back propagation Algorithm, Classification methods K-nearest neighbor classifiers, Genetic Algorithm. Cluster Analysis: Data types in cluster analysis, Categories of clustering methods, partitioning methods. Hierarchical Clustering- CURE and Chameleon. Density Based Methods-DBSCAN, OPTICS. Grid Based Methods- STING, CLIQUE. Model Based Method –Statistical Approach, Neural Network approach, Outlier Analysis

Unit IV: Data Warehousing: Overview, Definition, Delivery Process, Difference between Database System and Data Warehouse, Multi-Dimensional Data Model, Data Cubes, Stars, Snow Flakes, Fact Constellations, Concept hierarchy, Process Architecture, 3-Tier Architecture, Data Mart.

Unit V: Concept, types OLAP operation, Data Mining interface, Security, Backup and Recovery, Tuning Data Warehouse, Testing Data Warehouse, Industry Trends and Best Practices in data warehousing and data Mining

Suggested Reading:

1. M. H. Dunham, "Data Mining: Introductory and Advanced Topics", Pearson Education
2. Jiawei Han, Micheline Kamber, "Data Mining Concepts & Techniques", Elsevier
3. Sam Anahory, Dennis Murray, "Data Warehousing in the Real World: A Practical Guide for Building Decision Support Systems, 1/e " Pearson Education
4. Mallach, "Data Warehousing System", McGraw –Hill

Course Outcomes:

1. Student will be able to Understand importance of abstraction of Knowledge from unstructured sources at sufficient level.
2. Student will be able to Use of high level operational skills and real world case studies for knowledge discovery and data warehousing based principles.
3. Student will be able to understand the areas of probability, statistics and machine learning algorithms which underpin the knowledge discovery enterprise.
4. Design data mining and data warehousing systems and solutions to meet user requirements and specifications.
5. Compare and contrast OLAP and data mining as techniques for extracting knowledge from a data warehouse.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	3	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	3	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	2	2	3	2	3	2	2	2	3	3	3	2	3
CO5	3	3	3	3	3	3	2	2	3	3	3	3	3	3

MBA 256 : CLOUD COMPUTING

L T P C 3 0 0 3

Course Objectives:

1. To understand cloud services and solutions
2. To know about cloud virtualization technologies and cloud management
3. To understand the relevance of Cloud storage and virtualization.

Unit I: Introduction To Cloud Computing: Definition of Cloud – Evolution of Cloud Computing – Underlying Principles of Parallel and Distributed Computing – Cloud Characteristics – Elasticity in Cloud – On-demand Provisioning.

Unit II: Cloud Enabling Technologies Service Oriented Architecture: REST and Systems of Systems – Web Services – Publish, Subscribe Model – Basics of Virtualization – Types of Virtualization – Implementation Levels of Virtualization – Virtualization Structures – Tools and Mechanisms – Virtualization of CPU – Memory – I/O Devices –Virtualization Support and Disaster Recovery.

Unit III: Cloud Architecture, Services And Storage: Layered Cloud Architecture Design – NIST Cloud Computing Reference Architecture – Public, Private and Hybrid Clouds – laaS – PaaS – SaaS – Architectural Design Challenges – Cloud Storage – Storage-as-a-Service – Advantages of Cloud Storage – Cloud Storage Providers – S3.

Unit IV: Resource Management And Security In Cloud: Inter Cloud Resource Management – Resource Provisioning and Resource Provisioning Methods – Global Exchange of Cloud Resources – Security Overview – Cloud Security Challenges – Software-as-a-Service Security – Security Governance – Virtual Machine Security – IAM – Security Standards.

Unit V: Cloud Technologies And Advancements Hadoop: Map Reduce – Virtual Box — Google App Engine – Programming Environment for Google App Engine — Open Stack – Federation in the Cloud – Four Levels of Federation – Federated Services and Applications – Future of Federation.

Suggested Reading:

1. Kai Hwang, Geoffrey C. Fox, Jack G. Dongarra, "Distributed and Cloud Computing, From Parallel Processing to the Internet of Things", Morgan Kaufmann Publishers, 2012.
2. Rittinghouse, John W., and James F. Ransome, ―Cloud Computing: Implementation, Management and Security, CRC Press, 2017.
3. Rajkumar Buyya, Christian Vecchiola, S. ThamaraiSelvi, ―Mastering Cloud Computing, Tata Mcgraw Hill, 2013.
4. Toby Velte, Anthony Velte, Robert Elsenpeter, "Cloud Computing – A Practical Approach, Tata Mcgraw Hill, 2009.
5. George Reese, "Cloud Application Architectures: Building Applications and Infrastructure in the Cloud: Transactional Systems for EC2 and Beyond (Theory in Practice), O'Reilly, 2009.

Course Outcomes:

1. Describe architecture and underlying principles of cloud computing.
2. To explain need, types and tools of Virtualization for cloud.
3. Student will be able to understand Services Oriented Architecture and various types of cloud services
4. Explain Inter cloud resources management cloud storage services and their providers Assess security services and standards for cloud computing.
5. Student will be able to analyze advanced cloud technologies.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	3	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	2	2	1	2	3	3	2	2	2
CO3	3	3	3	2	3	3	2	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	2	3	2	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 261 : MANAGEMENT OF MANUFACTURING SYSTEM

L T P C 3 0 0 3

Course Objectives:

1. Understand the practical application of different type of manufacturing system.
2. Understanding the use of IT enabled technology in manufacturing system.
3. Understanding the entire value chain.
4. Develop an ability to analyze the capacity utilization & Strategy.
5. Understanding of tools for maintenance and capacity planning

Unit I: Manufacturing System: Introduction and components, Importance of Manufacturing for Technological and Socioeconomic developments, Production versus Productivity; Strategic benefit of Plant location & Plant Layouts.

Types of manufacturing System: Job shop. Mass, Batch, Project shop, Continuous process Linked cell system (Cellular manufacturing system), Flexible Manufacturing System (FMS).

Unit II: Manufacturing Support System: Process Planning, Computer Aided Process Planning, Production planning and Control Systems, Aggregate Planning and Master Production schedule, Material Requirement Planning, Capacity Planning;

Shop Floor Control: Introduction, Overview of Automatic Identification and Data capture, Bar Code Technology and Radio Frequency Identification.

Unit III: Describe the key components of the entire value chain including supplier, Relationships between manufacturing cost and customer satisfaction, internal and external customer relationship, Evaluate the effective use of Lean techniques, Adopting Continuous Process Improvement (CPI), Just in Time, Enterprise Resource Planning (ERP, Analyze sustainable and green manufacturing practices.

Unit IV: Capacity planning: Analysis of designed capacity, installed capacity, commissioned capacity, utilized capacity, factors affecting productivity and capacity expansion strategies.

Unit V: Maintenance System: Maintenance strategies and planning, Maintenance economics: quantitative analysis, optimal number of machines, Replacement strategies and policies, economic service life, opportunity cost, replacement analysis using specific time period, spares management. Maintenance records.

Suggested Reading:

1. Kalpakjian and Schmid, Manufacturing Engineering and Technology, Pearson.
2. Lindberg, Processes & Materials of Manufacture, Prentice Hall India.
3. J P Kaushik: Manufacturing Processes , PHI
4. James. B. Dilworth, "Operations Management – Design, Planning and Control forManufacturing and Services", McGraw Hill Inc. Management Series,
5. P. Radhakrishnan, S. Subramanyan and V. Raju, "CAD / CAM / CIM", New AgeInternational (Pvt.) Ltd. Publishers

Course Outcomes:

1. Conceptual knowledge of working of Manufacturing unit and complete system.
2. Understanding of the processes of and activities of Manufacturing.
3. Competency to implement effective managerial practices in manufacturing.
4. Understanding of tools for maintenance and capacity planning.
5. Knowledge about the support systems of manufacturing.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	2	3	2	2	3	2	2	3	2	3	2	3
CO2	3	2	3	2	3	3	2	2	3	3	3	3	3	2	3
CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3
CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3
CO5	1	2	3	2	2	3	3	3	3	3	3	3	2	2	3

MBA 262 : OPERATIONAL STRATEGY

L T P C 3 0 0 3

Course Objectives:

1. To develop basic understanding of operations strategy.
2. To analyze strategic decisions related to capacity, facilities, production processes, vertical integration, and supply chain management.
3. To evaluate the importance of sustainable alignment in operations strategy.
4. To explore various supply network strategies, including outsourcing, partnership approaches, and network behavior.
5. To assess alternative strategies like Business Process Reengineering (BPR), Total Quality Management (TQM), Lean, and Six Sigma, and their roles in improving operational performance.

Unit I: Concept and Framework of Operations Strategy

Role and Objectives of Operations Strategy; Operations Strategy Framework: Incorporating Operations Strategy in the Corporate Strategy; Operations performance essentials; Competition, Competencies & Operations; Defining a Operations Strategy in Overall Environment; Process of Operations Strategy Formulation, digital information in operations strategy.

Unit II: Operational Strategy regarding decision categories

Strategic issues and choices regarding capacity, facilities, production process, vertical integration, supply chain, organization and control systems.

Unit III: Process view for operational strategy

Operations Strategy Process – Sustainable Alignment; alignment over time, analysis for formulation, formulation models for alignment.

Unit IV: Operation supply network strategy

Supply network strategy, outsourcing decision, traditional market-based supply, partnership supply, network behavior, network management, Global operation strategy (off shoring, restoring and near shoring decisions),Adoptive and Agile operation strategy.

Unit V: Redefining operations strategy

Operations Strategy Process, Substitutes: BPR, TQM, Lean, Six Sigma: Business Process Focused Strategies & Organization Development: Quality Planning and Controlling System, Improving Response Time with IT, Operations Audit Approach, Adaptive and agile ops strategy.

Suggested Reading:

1. Slack, Nigel & Lewis, Michael (2017), Operations Strategy 5thed, Pearson Education, UK, ISBN:978-1-292-16249-2
2. Brown/Lamming/Bessant/Jones. Strategic Operations Management, Elsevier-India (Butterworth-Heinemann) Walters.
3. Operations Strategy, Palgrave Macmillan-India

Course Outcomes:

1. To develop basic understanding and concepts of operation strategy.
2. Develop ability regarding decision categories in operational strategy.
3. Learning process views in operational strategy.
4. Develop understanding in operations network.
5. Understand about redesigning strategy

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	2	3	2	2	3	2	2	3	2	3	2	3
CO2	3	2	3	2	3	3	2	2	3	3	3	3	3	2	3
CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3

CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3
CO5	1	2	3	2	2	3	3	3	3	3	3	3	2	2	3

MBA 263 : LOGISTICS AND SUPPLY CHAIN MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To gain a comprehensive understanding and explore the interconnections and relationship between various entities within the supply chain network, emphasizing the flow of material, information and finances.
2. Develop analytical skills to identify and assess supply chain challenges and to apply problem solving methodologies and techniques to analyze supply chain problem, develop alternative solutions.
3. To explore the application of mathematical models to address various supply chain decision, such as inventory optimization, network design, production planning and demand forecasting.
4. To gain an understanding of the role and significance of information technology (IT) tools and systems in enhancing supply chain visibility, coordination and efficiency.

Unit I: Fundamental of Supply chain

Definition of Supply Chain Management, Evolution of the Concept of Supply Chain Management, Logistics Vs Supply Chain Management; Supply Chain Management: Significance and Challenges; Supply Chain Management decision and strategy, supply chain design and dynamics.

Unit II: Role of Inventory in Supply chain

Basic EOQ models; Various models of order quantities and order points; Lot sizing with multiple products; Inventory review policies; Materials requirements planning; Just-in-time manufacturing; Enterprise resource planning..

Unit III: Designing of Supply Chain Network

Supply chain network design decisions; supply chain network design factors; network design phases; Network optimization model for regional configuration of facilities.

Unit IV: Networks for Distribution and Transportation

Distribution network in SC and its performance measures; Types of distribution network; Selection of a distribution network; Role of transportation in SC; Factors affecting carriers and shippers decisions; Modes of transportation; Types of transportation network; Trade-offs in transportation design.

Unit V: Supply chain and IT

UseofInformationtechnologyinSupplychain,supplychainITframework,impactofE-businessonSC.

Suggested Reading:

1. Chopra,S.,Meindl,P.,Supply Chain Management: Strategy, Planning and Operation, ed.ii, 2004, PHI.
2. GaitherN.andFrazier,G.,OperationsManagement,ed.ix,2002,Thomson.
3. Krajewski, L.J. and Ritzman, L.P., Operations Management: Processes and Value Chains, ed.vii, First impression, 2006, Pearson Education.
4. Simchi-Levi, D., Kaminsky, P. and Simchi-Levi, E., Designing and Managing the Supply Chain, ed. ii, 2004, TMH.
5. Agarwal, D.k., Logistics and supply chain management, Macmilan India Pvt Ltd. New Delhi, 2008

Course Outcomes:

1. Understanding the elementary of supply chain management.
2. Develop ability to analyze and solve supply chain related problems.
3. Learning mathematical models useful in supply chain
4. To provide an insight about IT tools in supply chain management
5.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	3	3	2	2	3	2	2	3	2	3	2	3
CO2	3	3	3	2	3	3	2	2	3	3	3	3	3	2	3

CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3
CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3

MBA 264 : QUALITY MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. Give students a general idea about how to improve quality of goods and services.
2. To ensure that students know tools of Quality Management.
3. To give students an understanding of SPC techniques.
4. To make students familiar with differences between Common and Special causes of variations and their influence to technological processes outcomes.
5. To explain and show in practice the benefits of teamwork for getting better results.

Unit I: Introduction to Quality Management (QM)
Evolution of Quality, Definition of Quality, Dimensions of Quality Quality Control, Quality Assurance, Total Quality Management (TQM).

Unit II: Quality as a Strategic Decision & Customer Focus
Meaning of Strategy and Strategic Quality Management, Mission and Vision Statements, Quality Policy, Quality Objectives, Strategic Planning and Implementation, McKinsey 7s Model, Competitive Analysis, Management Commitment to Quality Meaning of Customer and Customer Focus, Classification of customers, Customer Focus, Customer Perception of Quality, Factors affecting customer perception, Customer Requirements, Meeting Customer Needs and Expectations, Customer Satisfaction and Customer Delight, Handling.

Unit III: Cost of Quality & Continuous Improvement Process
Quality Control Tools: (Check Sheet, Histogram, Shapes of histogram, Drawing a histogram, Pareto Chart, Drawing a Pareto chart, Cause & Effect Diagram, Scatter Diagram, Control chart) || Statistical Quality Control (Defining Statistical Quality Control, Understanding the Process, Variations and Causes of Variations, Acceptable Sampling, Sampling methods, Probability based sampling, Non-probability-based sampling, Acceptance sampling plans, Control Charts, Process Capability, Process Capability Index, Six Sigma).

Unit IV: Productivity & Supplier Relation, Quality Tools
Productivity (Defining Productivity, Importance of Productivity, Productivity Factors, Workforce and Productivity, Work study for productivity, Managing Improvement) || Supplier Relations (Principles of Supplier Relations / Supplier Relationship Development, Togetherness, Types of Suppliers, Outsourcing strategy, Partnering, Goals of partnership, Building successful partnership, Supplier Selection and Rating, Establishing due process, Criteria for supplier selection, Supplier rating, Sourcing, Supplier certification)||

Unit V: Quality Management System & Benchmarking
Quality Management System (Quality Management Principles, ISO 9001 Structure, Quality Audits, ISO Registration, Requirements, Benefits of ISO registration, Examples of ISO Standard Application Benchmarking (Definition of Benchmarking, Reasons for Benchmarking, Types of Benchmarking, Benchmarking Process, Advantages of Benchmarking, Limitations of Benchmarking).

Suggested Reading:

1. Quality Gurus: Dr. Walter Shewhart-Contribution of Shewhart to quality management,
2. Dr. Edwards Deming-Contribution of Deming to quality management,
3. Philip B. Crosby-Contribution of Crosby to quality management,
4. Dr. Joseph Juran- Contribution of Juran to quality management,
5. Dr. Genichi Taguchi- Contribution of Taguchi to quality management,
6. Dr. Shiegeo Shingo Contribution to Shiegeo Shingo to quality management,
7. Dr. Kaoru Ishikawa-Contribution of Ishikawa to quality management, Masaaki Imai

Course Outcomes:

1. General understanding of quality improvement
2. Knowledge of quality management tool.
3. Understanding of Statistical Process Control (SPC) Techniques
4. Differentiation between Common and Special Causes of Variations
5. Appreciation of Teamwork in Quality Improvement.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	3	3	2	2	3	3	3	2	3	2	3
CO2	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3
CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3
CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3
CO5	3	3	3	2	3	3	2	3	3	3	3	3	3	3	3

MBA 265 : SERVICE OPERATIONS MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. Gain a comprehensive understanding of the unique characteristics of services compared to tangible goods.
2. Acquire knowledge of service facility design principles and methodologies.
3. Develop skills in forecasting demand for services to ensure adequate capacity planning.
4. Analyse the components and processes involved in service supply chains.
5. Develop strategies for service recovery and implementing service guarantees to enhance overall service quality and performance excellence.

Unit I: Understanding service operations

Services-Iintroduction, nature and characteristics, service operations and management fundamentals, service strategy and competitiveness. Service blue printing

Unit II: Service Facility Design and Facility Location

Service Facility Design, process analysis of facility Layout, facility Location decision factor, Quantitative models for facility location: Service facility on a line or on a plane, Based on different objective functions of optimization criteria, Role of geographic info system.

Unit III: Service delivery

Forecasting demand for services, service capacity management, service delivery gaps, service waiting line-queueing models, resource scheduling. Digital Service modal (cloud service, app based service etc)

Unit IV: Service inventory and supply chain

Service Inventory Management, Service Supply Chains, Processes in Service Supply Chain, Service logistic and last mile delivery challenges.

Unit V: Service quality

Service quality, quality service by design, service process control, total quality management tools, quality philosophy and performance excellence, service recovery and guarantee, SERVQUAl framework customer satisfaction index.

Suggested Reading:

1. B. Fitzsimmons, James A., and Mona J. Fitzsimmons, Service Management: Operations, Strategy, and Information Technology, 6th Ed., Irwin/McGraw-Hill, 2007.
2. C. Haksever, Render B., Russel S. R. and Murdick R. G.,Service Management and Operations,2nd Ed.,Prentice Hall, 2007.
3. Hollins (2007),Managing Service Operations, Sage Publications
4. Deborah(2008),Competitive Strategies for Service Businesses, New Delhi:Jaico

Course Outcomes:

1. Learn the basics of service operations.
2. Understanding the facility design and location in service operations.
3. Develop ability to understand delivery of services.
4. Learning about supply chain and inventory from services perspective.
5. To provide an insight about quality aspects.

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	3	3	2	2	3	3	3	2	3	2	3
CO2	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3
CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3
CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3
CO5	3	3	3	2	3	3	2	3	3	3	3	3	3	3	3

MBA 266 : PROJECT MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. Understand the fundamental concepts and principles of project management.
2. Emphasize the importance of continuous monitoring and control in project management.
3. Address uncertainties inherent in project scheduling and develop strategies to mitigate risks.
4. Utilize project metrics, scorecards, and computer-based project management tools for effective project control.
5. Apply quality management principles to ensure the final project meets predetermined quality standards

Unit I: Project Management Concepts

Project management overview, Project management challenges, Explain the need for projectmanagement, Role of the project manager, project success factors, Organizing Human Resources and Contracting, Project selection, initiation and definition, Uncertainty Analysis.

Unit II: Selecting, Monitoring and Controlling the Project

Assess a project's potential profit, Evaluate and rank projects using a matrix, Adapt an existing evaluation from a matrix to criteria for a project, Select relevant financial data for decision making, Support the importance of monitoring and controlling, Calculate the impact of change on project cost and performance.

Unit III: Project Planning and Scheduling

Produce a statement of work (SOW) and decompose overall project goals, Develop a work breakdown structure (WBS), using established tools and techniques, to achieve stated project objectives, PERT analysis, Gantt chart, Project scheduling under uncertainty.

Unit IV: Project Performance Measurement and Control

Monitoring project progress, Define the concept of earned value performance measurement, Describe how project management information systems (PMIS) are used to Monitor, evaluate, and control planned cost and schedule performance, Project metrics and scorecards, Computer Based Project Management, Future of Project Management.

Unit V: Project Risk Management and Project Quality Management

Role of risk management in overall project management, Identify risk management activities throughout the project life cycle, Measure the element of risk, Develop responses to high-risk events, define the elements of project quality management and apply them to the final project.

Suggested Reading:

1. Meredith,J.R. and Mantel,S.J."Project Management: A Managerial Approach"5thEdition, Wiley.
2. Kerzner, H."Project Management :A Systems Approach to Planning, Scheduling, and Controlling", Wiley.
3. Project Management Institute "A Guide to the Project Management Body of Knowledge", Third Edition.

Course Outcomes:

1. Understandingtheprojectmanagementconceptstoaddressmanagementneeds.
2. Learn about the techniques in selecting, monitoring and controlling the project.
3. Apply methods for project scheduling.
4. Learning about performance measurement and control.
5. Understanding the risk portfolio and asses quality in project management

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	3	3	2	2	3	3	3	2	3	2	3
CO2	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3
CO3	2	3	3	3	3	2	3	3	2	2	2	3	3	3	3
CO4	2	2	3	3	3	3	2	3	3	2	3	2	3	3	3
CO5	3	3	3	2	3	3	2	3	3	3	3	3	3	3	3

MBA 271 : RURAL MARKETING

L T P C 3 0 0 3

Course Objectives: The objective of this course is to develop understanding regarding issues in rural markets like marketing environment, consumer behaviour, distribution channels, marketing strategies, etc.

Unit I: Concept and scope of rural marketing, nature and characteristics of rural markets, potential of rural markets in India, rural communication and distribution.

Unit II: Environmental factors - socio-cultural, economic, demographic, technological and other environmental factors affecting rural marketing.

Unit III: Rural consumer's behaviour - behavior of rural consumers and farmers; buyer characteristics and buying behaviour; Rural v/s urban markets, customer relationship management, rural market research.

Unit IV: Rural marketing strategy - Marketing of consumer durable and non-durable goods and services in the rural markets with special reference to product planning; product mix, pricing Course Objective, pricing policy and pricing strategy, distribution strategy.

Unit V: Promotion and communication strategy - Media planning, planning of distribution channels, and organizing personal selling in rural market in India, innovation in rural marketing.

Suggested Reading:

1. Krishnamacharyulu C & Ramakrishan L. 2002. Rural Marketing. Pearson Edu.
2. Ramaswamy VS &Nanakumari S. 2006. Marketing Management. 3rd Ed. MacMillan Publ.
3. Singh AK & Pandey S. 2005. Rural Marketing. New Age.
4. Singh Sukhpal. 2004. Rural Marketing. Vikas Publ. House

Course Outcomes:

1. Understanding of fundamental concepts and scope of rural marketing and identify potential rural markets in India.
2. Analyze socio-cultural, economic, demographic, technological, and other environmental factors affecting rural marketing.
3. Understand and differentiate rural consumer behavior and apply customer relationship management and market research techniques.
4. Develop and implement marketing strategies for consumer durable and non-durable goods and services in rural markets.
5. Design and execute promotion and communication strategies, including media planning, distribution channels, and personal selling in rural markets.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	2	3	2	1	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3	3	3

MBA 272 : MANAGEMENT OF AGRO CHEMICAL INDUSTRY

L T P C 3 0 0 3

Course Objectives: To familiarize the students with the agrochemicals, their structure, classification and development and also how to manage the agro-chemical industries.

Unit I: Agro-chemicals: Definition and classification; Basic knowledge of agrochemicals; role and status of agro-chemical industry in India.

Unit II: Pesticides — Classification and Introduction, knowledge of different pesticides. Insecticides — Definition and classification based on (a) Mode of Entry (b) Mode of Action and (c) Chemical Structure with example.

Unit III: Insecticidal formulation; preliminary knowledge of mode of action of insecticides; knowledge of plant protection equipments; Insecticidal poisoning, symptoms and treatment; Main features of Insecticide Act.

Unit IV: Fungicides — Classification and preliminary knowledge of commonly used fungicides; Biomagnifications of pesticides and pesticidal pollution.

Unit V: Directorate of Plant Protection, Quarantine and Storage — A brief account of its organizational set up and functions; IPM Concept — Bio-pesticides — Plant products.

Suggested Reading:

1. Dhaliwal GS, Singh R & Chhillar BS. 2006. Essentials of Agricultural Entomology.
2. Kalyani. Hayes WT & Laws ET. 1991.
3. Hand Book of Pesticides. Academic Press.
4. Matsumura F. 1985. Toxicology of Insecticides. 2nd Ed. Plenum Publ.

Course Outcomes:

1. To Understand role and status of the Indian agro-chemical industry.
2. To Understand importance of pesticides, including insecticides.
3. To Understand act and treatment related to insecticides.
4. To understand issues related to pesticide biomagnifications and pollution.
5. To understand the organizational setup and functions of the Directorate of Plant Protection.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	2	2	1	2	3	3	2	2	2
CO3	3	3	3	2	3	3	2	2	2	3	3	3	3	3
CO4	3	3	3	3	3	3	3	2	3	3	3	2	3	3
CO5	3	3	2	3	2	3	2	2	3	3	3	3	3	3

MBA 273 : AGRICULTURAL INPUT MARKETING

L T P C 3 0 0 3

Course Objectives: The present course aims at familiarizing the participants with various aspects of agricultural input marketing in India. This will help them in gaining a deeper understanding of the four P's of marketing as applied to agricultural input marketing. Also an exposure to social and ethical issues is oriented in the course.

Unit I: Agricultural input marketing —meaning and importance; Management of distribution channels for agricultural input marketing; Agricultural Inputs and their types — farm and non-farm, role of cooperative, public and private sectors in agri input marketing.

Unit II: Seed- Importance of seed input; Types of seeds- hybrid, high yielding and quality seeds; Demand and supply of seeds; Seed marketing channels, pricing, export-import of seeds; Role of NSC and State Seed Corporation.

Unit III: Chemical Fertilizers- Production, export-import, supply of chemical fertilizers, Demand/consumption, Prices and pricing policy; subsidy on fertilizers; marketing system — marketing channels, problems in distribution; Role of IFFCO and KRIBCO in fertilizer marketing.

Unit IV: Plant Protection Chemicals- Production, export/import, consumption, marketing system — marketing channels; Electricity/Diesel Oil- marketing and distribution system; pricing of electricity for agriculture use; subsidy on electricity.

Unit V: Farm Machinery- Production, supply, demand, Marketing and distribution channels of farm machines; Agro-industries Corporation and marketing of farm machines implements/Equipment.

Suggested Reading:

1. S. P. Seetharaman: Agricultural Input Marketing, Oxford & IBH Pub. Co.
2. Manohar Lal: Marketing of Agricultural Inputs: A study of Gorakhpur District, Himalaya Pub. House
3. C. S. G. Krishnamacharyulu: Rural Marketing : Text and Cases, Pearson Education India
4. Acharya SS & Agarwal NL. 2004. Agricultural Marketing in India. 4th Ed. Oxford & IBH.
5. Broadway AC & Broadway Arif A. 2003. A Text Book of Agri-Business Management. Kalyani,
6. Singh AK & Pandey S. 2005. Rural Marketing. New Age. Singh Sukhpal 2004. Rural Marketing- Focus on Agricultural Inputs. Vikas Publ. House.

Course Outcomes:

1. To understand the significance and distribution management of agricultural input marketing.
2. To understand seed input, marketing channels, pricing, and roles of NSC and State Seed Corporations.
3. To understand the production, supply, demand, pricing policies, and marketing channels of chemical fertilizers, including the roles of IFFCO and KRIBCO.
4. To understand the marketing and distribution of plant protection chemicals and electricity/diesel oil for agriculture, including pricing and subsidies.
5. Evaluate the production, supply, demand, and marketing channels of farm machinery and the role of Agro-industries Corporations.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	2	2	1	2	3	3	2	2	2
CO3	3	3	3	2	3	3	2	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 274 : SEED PRODUCTION TECHNOLOGY AND MANAGEMENT

L T P C 3 0 0 3

Course Objectives: To refresh the basic knowledge of seed development and structures and apprise students with its relevance to production of quality seed. It also aims to apprise students about the seed supply system, concepts and principles of effective marketing of seed and strengths and weaknesses of the seed sector.

Unit I: Seed Technology — Role of Seed Technology, Objective and goal, Seed Industry in India, National Seed Corporation — Tarai Development Corporation, State Seed Corporations, National Seed Project and State Farms and their role.

Unit II: Development and Management of Seed Programmes — Seed Village Concept, Basic Strategy of Seed Production and Planning and Organization of Seed Programme; Types of Seed Programme — Nucleus seed, Breeders seed, Foundation seed and Certified seed etc.

Unit III: Maintenance of genetic purity — Minimum seed certification standard and Management of breeders & Nucleus seed; Management of seed testing laboratory and research and development.

Unit IV: Management of seed processing plant, seed storage management; seed packaging and handling. Seed Marketing; GM Crop seed, IPR, PBR, Patents and related issues and their impact on developing countries.

Unit V: Statutory intervention in the seed industry; Seed legislation and seed law enforcement, Seed act; Orientation and visit to seed production farms, seed processing Units, NSC, RSSC, RSSCA and seed testing laboratories

Suggested Reading:

1. Agrawal RL. 1997. Seed Technology. Oxford & IBH.
2. Desai BB, Katecha PM &Salunkhe DK. 1997. Seed Handbook: Biology, Production, Processing and Storage.
3. Marcel Dekker. Kelly A. 1988. Seed Production of Agricultural Crops. Longman.
4. McDonald MB Jr. & Copeland LO. 1997. Seed Production: Principles and Practices. Chapman & Hall.
5. Thompson JR. 1979. An Introduction to Seed Technology. Leonard Hill.

Course Outcomes:

1. To understand Seed Technology.
2. To understand Development and Management of Seed Programmes
3. To understand Maintenance of genetic purity.
4. To understand the Management of seed processing plant.
5. To Understand the Statutory intervention in the seed industry.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	3	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 275: RURAL DEVELOPMENT

L T P C 3 0 0 3

Course Objectives: The objective of this course is to acquaint the students with the background in which rural development as a subject has gained importance and further identify the important concepts of rural development and a assess the importance of evolving rural development strategies; enumerate the different rural development strategies advocated by different schools of thought; and explain the importance of planning rural development strategies.

Unit I: Rural development- Concept of Development, Indicators of Development, Characteristics of Underdevelopment, Dissatisfaction with the Conventional Indicators of Development.
Theories of Development- Rostow's Stages of Growth, The Lewis Theory of Development, International Dependence Theories, Gandhian View of Development, Marxian Concept of Development.

Unit II: Issues in Development- Growth vs Distribution, Agricultural vs Industrial Development, Capital vs Labour Intensive, Centralization vs Decentralization, Urban vs Rural Development. Concepts of Rural Development, Integrated Rural Development, Local Level Participation in Rural Development.
Rural Development Strategies- Rural Development Policies, Types of Rural Development Strategies, Rural Development Planning.

Unit III: Rural development in India- The Community Development Programme, Green Revolution Phase, Special Programmes for Area, Development and Poor Farmers, Beneficiary Approach towards Rural Poverty, Wage Employment Programmes, Current Status of the Rural Development Programmes and the Emerging Challenges.
Unit IV: Poverty in India- Poverty Alleviation Programmes, Impact of Poverty Alleviation Programmes, Implementation of Rural Development Projects, Minimum Needs: Concept and Approaches, Basic Needs Concept, Evolution of MNP Components of MNP, Progress of the Different Components of MNP, Elementary Education, Adult Education, Rural Health, Rural Water Supply, Rural Roads, Rural Electrification, Rural Housing, Environmental Improvement of Urban Slums, Nutrition, Rural Domestic Cooking Energy, Rural Sanitation, Public Distribution System.

Unit V: Rural Empowerment-Essential Ingredients of Empowerment, Social Empowerment, Economic Empowerment, Political Empowerment, Cultural Empowerment, Empowerment: Concept and Definition, Economic Empowerment of the Rural Poor, Political Empowerment, Salient Features of Participatory Development, Empowerment through Self-Governance, Social Empowerment, Cultural Empowerment, Self Help Groups (SHGs) as a Strategy for Empowerment of Weaker Sections, Voluntary Organisations as Change Agents, Rural Development Programmes.

Suggested Reading:

1. Aslam, M.: Integrated Rural Development in Asia.
2. Harris, J.: Rural Development: Theories of Peasant Economy and Agrarian Change
3. Madan, Vandana: The Village in India
4. Potter, Jack M: Peasant Society.

Course Outcomes:

1. To understand the concept of development theories.
2. To understand key issues in development and strategies of rural development.
3. To understand and examine the history and current status of rural development programs in India.
4. To understand poverty in India.
5. To understand and explore Rural Empowerment.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 276 : AGRICULTURAL SUPPLY CHAIN MANAGEMENT

L T P C 3 0 0 3

Course Objectives: The course introduces students to the concepts and processes of agricultural supply chain management, framework for structuring supply chain drivers; network designs, demand forecasting, inventory planning, sourcing decisions and IT enablement of supply chain.

Unit I: Supply Chain: Changing Business Environment; SCM: Present Need; Conceptual Model of Supply Chain Management; Evolution of SCM; SCM Approach; Traditional Agri. Supply Chain Management Approach; Modern Supply Chain Management Approach; Elements in SCM.

Unit II: Demand Management in Supply Chain: Types of Demand, Demand Planning and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing Management.

Unit III: Procurement Management in Agri. Supply chain: Purchasing Cycle, Types of Purchases, Contract/Corporate Farming, Classification of Purchases Goods or Services, Traditional Inventory Management, Material Requirements Planning, Just in Time (JIT), Vendor Managed Inventory.

Unit IV: Logistics Management: History and Evolution of Logistics; Elements of Logistics; Management; Distribution Management, Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management; Service Innovation; Warehousing; Packaging for Logistics, Third-Party Logistics (TPL/3PL); GPS Technology.

Unit V: Concept of Information Technology: IT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Performance Measurement and Controls in Agri. Supply Chain Management- Benchmarking: introduction, concept and forms of Benchmarking.

Suggested Reading:

1. Altekar RV. 2006. Supply Chain Management: Concepts and Cases. Prentice Hall of India.
2. Monczka R, Trent R & Handfield R. 2002. Purchasing and Supply Chain Management. Thomson Asia.
3. Van Weele AJ. 2000. Purchasing and Supply Chain Management Analysis,
4. Planning and Practice. Vikas Publ. House.

Course Outcomes:

1. To understand the fundamentals and evolution traditional and modern approaches.
2. To understand demand management, including forecasting and operations management principles.
3. To understand the process of procurement management and modern strategies.
4. To understand logistics management in agriculture.
5. To understand the role of IT applications in supply chain management.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 281 : INTERNATIONAL BUSINESS MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To give the student an exposure to the dynamic environment of International Business
2. To understand the impact of environment on the International Business Operations of the firm
3. To explain the functions and form of the global monetary system
4. To explain the role of international organizations and Regional Trade

Unit I: Introduction: Meaning, Nature and Scope of International Management, Driving and Restraining Forces, Domestic to Transnational Business, Modes of Entry. Globalization – Forces, Meaning, dimensions and stages in Globalization, Characteristics and role of MNCs. International Business Environment –The economic, social, cultural, political, legal and regulatory environment, natural and technological environment.

Unit II: International Trade Theories: Mercantilism; Absolute Cost theory, Comparative Cost theory, Factor endowment theory, International Product life Cycles Theory, International Investment Theories: Theory of Capital Movements, Market Imperfections theory; Internationalization Theory; Location Specific Advantage Theory; Eclectic Theory Free Trade: Advantages and Disadvantages, Forms of Protection; Case Studies.

Unit III: International Marketing: Nature & significance, International Marketing Orientations, International Segmentation, International Product Life Cycle International HRM: International Staffing Approaches, Expatriate Management, International Labor Relations; Case Studies.

Unit IV: Foreign Exchange Determination Systems: Basic Concepts Relating to Foreign Exchange, Various types of Exchange Rate Regimes, Factors Affecting Exchange Rates, Brief History of Indian Rupee; Case Studies.

Unit V: International Institutions: Objectives and Functions of WTO, IMF, IBRD, UNCTAD, Regional Economic Integration: Introduction, Levels of Economic Integration, Objectives and Functions of EU, NAFTA, ASEAN, SAARC, BRICS.

Suggested Reading:

1. Joshi, R M : International Business, OUP
2. Hill - International Business, McGraw-Hill2.Cherunilam F- International Business: Textand Cases, PHI
3. Ehud Manipaz and Shiv S. Tripathi, International Business, SAGE Publishing India
4. Aswathappa- International Business, McGraw-Hill
5. Cherunilam, F - International Trade and Export Management, Himalaya
6. Daniels - International Business (Pearson).
7. Sinha Yashwant & Srivastava Vinay K , The Future of Indian Economy: Past reformsand challenges ahead, Rupa India.

Course Outcomes:

1.Nature and scope of International management.
2 Apply theories of international investment, such as Capital Movements and Eclectic Theory, to real world scenarios.
3. Identify and evaluate different international marketing orientations and segmentation strategies
4. Analyze the factors that affect exchange rates and their implications for international business.
5. Analyze the functions of key international institutions such WTO, IMF,IBRD and UNCTAD**.**

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 282 : MANAGEMENT OF INTERNATIONAL LOGISTICS

L T P C 3 0 0 3

Course Objectives:

1. To help students understand the issues in International Logistics.
2. To provide an understanding of Sales Contract in International Logistics.
3. To provide a detail understanding of models of Forecasting in Supply Chain Management.

Unit I: Foundation Concepts in International Logistics

Managing the Supply Pipeline for Global Trade Flows, The Global Logistics Operators, Comparison between National and International Logistics, International Transport System, Globalisation and International Trade Environment. Factors Driving Global Supply Chain Management, Customs and Global Supply Chain Management. Case Studies and Latest Updates.

Unit II: 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. Case Studies and Latest Updates.

Unit III: 3 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. Case Studies and Latest Updates.

Unit IV: International Transport Systems

Introduction to International Transport System- Basic Terms, Characteristics and Relations, Significance of Transportation Services, Characteristics of Modes of Transports -Road Transportation, Rail Transportation, Maritime Transport, Air Transport. Technical performance & Transport Economic Indicators, Maritime Routing Patterns, The Containerization of Commodities, Transcontinental Bridges. Case Studies and Latest Updates.

Unit V: Cost and Economy of International Logistics

International Transport and Economic Development, Transportation and Commercial Geography, Components of International Transport Costs, International Transport Supply and Demand, Location Analysis, Market Area Analysis, The Nature of International Transport Policy, International Transport Planning, International Transport Safety and Security, Traffic Counts and Traffic Surveys, Cost / Benefit Analysis. Case Studies and Latest Updates.

Suggested Reading:

1. Joshi, R M : International Business, OUP
2. Hill - International Business, McGraw-Hill2.Cherunilam F- International Business: Textand Cases, PHI
3. Ehud Manipaz and Shiv S. Tripathi, International Business, SAGE Publishing India
4. Aswathappa- International Business, McGraw-Hill
5. Cherunilam, F - International Trade and Export Management, Himalaya

Course Outcomes:

1. To get an overview of the key issues and concepts of International Business.
2. To develop an understanding how and why the world's countries differ.
3. To understand the monetary framework in which international business transactions are conducted.
4. To understand the role of International Organizations and Regional Trade blocks
5. To develop an understanding for Implementing the decisions for international operations in a superior manner

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 283 : EXPORT IMPORT DOCUMENTATION

L T P C 3 0 0 3

Course Objectives:

1. The basic objective of this course enrich youth with the knowledge, skills and foundations for acquiring a wide range of rewarding careers into the rapidly expanding world of Import & Export Management
2. To promote basic understanding of the concepts of export & import documentation.

Unit I: Introduction to exports, Registration process, Selection of products and market Payment terms, Export costing and pricing, Preliminaries for exports. Registration – IEC, RCMC, EPC, Central Excise. Categories of Export, Physical – Direct &Indirect, Deemed Exports Merchant& Manufacturer Exports.

Unit II: Shipment procedures, Role of clearing and forwarding agent, Cargo management Containerization, Shipping documents and terms used in shipping, Export Procedures Excise clearance for exports, Marine insurance of Export cargo Shipment goods, Quality and Pre-Shipment inspection, EGC Services, GSP rules of origin; Case Studies.

Unit III: Meaning and importance of letter of credit, Documentation papers of L/CEXPORT incentives, risk and insurance, Benefits of Exports, excise clearance Benefit / Rebate, Income Tax Benefit, Shipment & Transport – Sea, Air, Rail, Road, Pipeline, Role of overseas agent & remittance of commission. Case Studies.

Unit IV: The organization of exports –imports firms and business planning, planning of export/import operations. Import procedures Overview of various export promotion schemes Duty Drawback Advance License, Remission Scheme, DEPB Scheme.

Unit V: Export Promotion Capital Goods Scheme. Diamond & Jewellery, Agricultural & Pharmaceutical product exports promotion, scheme. Export of Principal Commodities in India, SEZ, EHTP, STP& EOU's, Types of Export Houses.

Suggested Reading:

1. Ram Singh, Export and Import Management, 2021, SAGE Publishing
2. C Ramagopal, Export import Policy Procedure & Documentation, New age publisher
3. Kiran rai Usha, Export import & logistics management--,Eastern economy edition
4. Singh, ram, International trade Logistics , Oxford publishing house.
5. New Import Export Policy - Nabhi Publications
6. EXIM Policy & Handbook of EXIM Procedure – VOL I & II
7. A Guide on Export Policy Procedure & Documentation– Mahajan
8. How to Export – Nabhi Publications
9. Export Management – D.C. Kapoor.

Course Outcomes:

1. To understand and identify the process of Registration process, Payment terms, Export costing and pricing.
2. To interpret the process of Shipment procedures, & summarize the various documents used in Shipping,
3. To understand the concept of various incentives, benefits & risk involved in shipping process
4. To understand the Import & export procedures
5. To understand the functioning and types of Export Houses.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 284 INTERNATIONAL TRADE LAWS

L T P C 3 0 0 3

International Trade Law has two objectives: public and private.

1. The public aspect deals with the harmonization and coordination of national commercial policies
2. Private aspect seeks to provide a legal framework for International commercial transactions between individuals belonging to different nationalities. This course covers both public and private aspects

Unit I: The World Trade Organization-Part 1: Introduction to International trade and the law of the WTO, Sources of WTO Law, Basic rules and principles of WTO Law, Economic Theories of free trade-Absolute Advantage theory; Comparative Advantage theory; Huckster–Ohlin theory; Leontief Paradox and New trade theory, Evolution of GATT as a trading institution and transition of GATT to WTO; Marrakesh Agreement, Institutional structure of the WTO, WTO Dispute Settlement challenges, Principles of Nondiscrimination-Most favored nation treatment and National treatment obligation, Dumping-Anti-dumping Measures.

Unit II: The World Trade Organization-Part 2: WTO jurisprudence on TBT and SPS Agreements-Agreement on Sanitary and Phy, What is the difference between sanitary and phytosanitary, WTO and environment protection, General Agreement on Trade in Services (GATs) - Meaning of trade in services, General obligations, Specific obligations in Financial services, Telecommunication services, India and the GATs. Trade-Related Aspects of Intellectual Property Rights (TRIPs), IPRS covered by TRIPs, Indian response to the TRIPs, Agreement on Agriculture, Trade Related Investment Measures (TRIMS).

Unit III: Transnational, Transactions and Resolution: Transnational Commercial Laws: Meaning and scope of Transnational Commercial Law, Sources of Transnational Commercial Law, Movement towards unification of national commercial laws. UNIDROIT and UNCITRAL, International Carriages- Carriage of goods by sea; Carriage by air; Multimodal transportation, International Sales of goods, The role of International Chamber of Commerce in the development of Transnational Commercial Laws; Uniform Customs and Practices on Documentary Credits. International Commercial Arbitration. UNCITRAL Model Law on International commercial arbitration. Indian Arbitration and Conciliation Act, 1996; Enforcement of foreign arbitral awards.

Unit IV: Foreign Trade Development and Regulation) Act, 1992. Foreign Exchange Management Act, 1999. Special Economic Zones and International trade. Law relating to Customs Act, 1962. Foreign Investment in India-Liberalization in the nineties. Foreign Investment Promotion Board. Current issues relating to foreign direct investment. The Industries (Development and Regulation) Act and its application.

Unit V: The recent challenges and proposed amendments by third world. Role of SAARC and B|RICS.

Suggested Reading:

1. Law of International Trade , Author : Dr. Jason Chuah , Edition : 5th South Asian Edition 2017
2. Foreign Trade - Theory, Procedures, Practices and Documentation by Dr. Khushpat S. Jain and Apexa V. Jain
3. International trade law by Dr. S.R MYNENI
4. International Trade Law by Hemant Goel
5. International Trade Law by NiharikaVij.

Course Outcomes:

1. Understand and apply different meanings and dimensions of "culture"
2. Review and apply the various WTO agreements for effective international trade
3. Analyze the forces that shape the international commercial laws.
4. Understand and evaluate the export import policy in India
5. Analyze the recent challenges in international trade and role of international institutions.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 285 : CROSS CULTURAL MANAGEMENT

L T P C 3 0 0 3

Course Objectives:

1. To consider the nature of intercultural communication
2. To learn to think across cultural differences
3. To experiment with different ways of acting in cross-cultural situations
4. To reflect on the cultural foundations of economic systems and of organizational practices

Unit I: Introduction: Understanding culture: Values, world views and socio-cultural systems what is culture and why is it important? How do people react to cultural differences? Can we measure or graph cultural differences? Is it possible to change a culture? If so, how? What does culture have to do with business? Ways of describing cultural differences Going International, Case Studies.

Unit II: Cultural diversity and multicultural teams: The impact of cultural differences on individuals, Verbal and non-verbal communication across cultures, Kohlberg's theory of moral reasoning, Measuring cultural development, The historical origins of beliefs and values, Impact of cross cultural communication, Kohlberg, Malcolm X, and Martin Luther King Jr, Are some societies better than others?, Relativism vs. development, Respect cultural differences vs. stages of development, The possibility of an international subculture.

Unit III: Conflict and negotiation: Gender differences, Gender, multi-ethnicity, religion, geography Body language, the culture of poverty, Hofstede's dimensions, Cultural aspects of international business negotiations, Negotiation process, Negotiation Strategies, Case Studies.

Unit IV: Cultural diversity and multicultural teams: National cultures vs. organizational cultures, Knowledge cultures, Cross-cultural intelligence and managerial competence, Motivating across cultures, Management of cross-culture teams, Leadership traits required for managing cross culture teams Participatory Strategic Planning and the Technology of Participation Change in corporate culture: the example of quality improvement.

Unit V: Culture and ethics: Understanding significance of cultural values & ethics in cross boarder businesses, Corporate Culture and Cross Border HRM and Employment Practices with respect to Japan, European countries, US, China, corporate social responsibility in MNC's, Case Studies.

Suggested Reading:

1. Cross culture management by Ms Shobhana Madhavan, Oxford University Press,
2. Eastern and Cross Culture Management by N K Singh , Springer
3. Gannon, Martin J. Paradoxes of Culture and Globalization. Sage Publications.

Course Outcomes:

1. Understand and apply different meanings and dimensions of "culture"
2. Describe and analyze the impact of culture on business practices
3. Explain and evaluate the impact of national culture on organizational cultures
4. Understand the impact of culture on Human Resource Management
5. Explain how leadership differs across cultures.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	1	2	2	1	1	1	3	2	1	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 286 : INTERNATIONAL ECONOMICS

L T P C 3 0 0 3

Course Objectives: To build foundation of International economics required for managing complexity of International Business.

Unit I: Introduction to International Economics: Concepts of trade, Offer curves, production possibility curves, theories of international trade, absolute cost, comparative cost, factor endowment theory, Hecksher-Ohlin Model, Fleming Mendell Open Economy Model.

Unit II: International Financial Transactions: Concept of Balance of Trade and Balance of Payments, Current and Capital Account, International capital movement – FDI, FII, Foreign Exchange market, Foreign Exchange rates – Fixed and floating rates, Spot and forward rates, IMF and its role in ensuring world financial stability. Purchasing Power Parity Theory.

Unit III: International Trade and Investment: Theories: Complimentary trade theories – stopler – Samuelson theorem, International Product life Cycles. Investment Theories – Theory of Capital Movements, Market Imperfections theory; Internationalization Theory; Location Specific Advantage Theory; Eclectic Theory, Instruments of Trade Policy- Tariffs, Subsidies, Import Quotas, Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy.

Unit IV: International Trade Policies and Organisations: Bilateral and multilateral trade agreements, WTO – its objectives, functions and other issues – Trade in goods, Trade in services. Trade policies – tariffs, quotas and other trade restrictions- 'Optimal' tariff.

Unit V: International Economic Integration & EMEs: Meaning, advantages, disadvantages and its various economic stages, working of European Union. EMEs –characteristics and global prospects. Past financial crises: Mexico 1994, Asia 1997-98, Russia 1998. Financial and economic crisis of 2008-09, what was the same, and what was different in 2008-09.European crisis in 2010-15- Russian crisis in 2014-15.

Suggested Reading:

1. Krugman & Obstfeld (2017); International Economics: Theory & Policy; Pearson, 10th Edition.
2. Cherunilum F. (2017); International Economics; McGraw Hill Education, 5th Edition.
3. Maheswari Y. (2005); Managerial Economics; PHI, 2nd Edition.
4. Varsheney R.L. (2014); Managerial Economics; Sultan Chand & Sons, 2nd Edition.
5. Dewett K.K. & Navalur M.H. (2006); Modern Economic Theory; S. Chand, 1st Edition

Course Outcomes:

1. To understand and apply different Theories of International Economics
2. To understand various International Financial Transactions
3. To understand and International Trade and Investment.
4. To understand and evaluate the International Trade Policies and Organisations.
5. To understand about International Economic Integration & EMEs.

COs / POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	2	1	1	1	3	2	2	1	2
CO2	3	3	2	2	3	3	2	2	2	3	3	2	2	3
CO3	3	3	3	2	3	3	3	2	2	3	3	3	3	3
CO4	3	3	2	3	3	3	2	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3

MBA 291 : DATA ANALYSIS USING R

L T P C 3 0 0 3

Course Objectives:

1. Learn fundamentals of R.
2. Covers how to use different functions in R, how to read data into R, accessing R packages, writing R functions, debugging, and organizing data using R functions.
3. Cover the basics of statistical data analysis with examples.

Unit I: Introduction to Data Analysis

Overview of Data Analytics, Need of Data Analytics, Nature of Data, Classification of Data: Structured, Semi-Structured, Unstructured, Characteristics of Data, Applications of Data Analytics.

Unit II: Introduction to R Ecosystem:

Overview of R Programming, Downloading and installing R, History of R, R Commands, Variables and Data Types, Control Structures, Array, Matrix, Vectors, Factors, Functions, R packages.

Unit III: : Data Types, Sub setting, Writing data, Reading from csv files, Creating a vector and vector operation, Initializing data frame, Control structure, Installing and loading packages, Setting up your working directory, Downloading and importing data, Working with missing data, Writing R scripts, Adding comments and documentation, Creating reports.

Unit IV: Descriptive Statistics:

Mean, Median, Mode, SD- Skewness- Kurtosis. Correlation – Karl Pearson's and Spearman's Rank Correlation, Regression analysis: Simple and Multiple Regression Analysis.

Unit V: Testing of Hypothesis:

Parametric – One sample – Two sample Independent t– test – Paired t–test - Non – parametric: One sample KS test- Mann-Whitney U test – Wilcoxon Signed Rank test - Kruskal Wallis test – Friedman test- Chi- square test. Analysis of variance: One way and Two way ANOVA.

Suggested Reading:

1. Sandip Rakshit, R Programming for Beginners, McGraw Hill Education (India), 2017
2. Seema Acharya, Data Analytics using R, McGrawHill Education (India), 2018
3. Tutorials Point (I) simply easy learning, Online Tutorial Library (2018).
4. R Programming, Retrieved from https://www.tutorialspoint.com/r/r_tutorial.pdf.
5. Andrie de Vries, Joris Meys, R for Dummies A Wiley Brand, 2nd Edition, John Wiley and Sons, Inc, 2015.
6. 6An Introduction to R, Notes on R: A Programming Environment for Data Analysis and Graphics

Course Outcomes:

1. Examine the benefits of using the R programming language.
2. Discover how to use RStudio to apply R to your analysis.
3. Explore the fundamental concepts associated with programming in R.
4. Explore the contents and components of R packages.
5. Gain an understanding of dataframes and their use in R.

CO \ PO & PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	2	1	2	1	1	3	2	2	1	2
CO2	2	3	2	2	3	1	2	2	1	2	3	2	2	1
CO3	3	2	3	1	2	2	2	1	2	3	3	2	1	2
CO4	2	2	2	3	1	2	3	2	2	2	2	3	2	3
CO5	3	1	3	2	2	3	2	3	1	3	2	2	3	2

MBA 292 : DATA ANALYSIS USING PYTHON

L T P C 3 0 0 3

Course Objectives:

1. Understand fundamentals of Python and Juypter Notebook.
2. Understand the data structure, dataframes and Pandas Idioms
3. Knowledge of Natural Language Processing and learning algorithm for machine learning
4. Understanding of Image and Pattern Recognition.

Unit I: Introduction of Python, Juypter Notebook, Python Functions, Python Types and Sequences, Python More on Strings, Reading and Writing CSV files.

Unit II: Advanced Python Objects, map, Numpy, Pandas, Visualization DataMatplotlib, Bar Charts, Line Charts, Scatter plots.

Unit III: : Descriptive Statistics
Meaning, Scope, types, functions and limitations of statistics, Measures of Central tendency – Mean, Median, Mode, Quartiles, Measures of Dispersion – Range, Inter quartile range, Mean deviation, Standard deviation, Variance, Coefficient of Variation, Skewness and Kurtosis.

Unit IV: Hypothesis Testing& Business Analytics
Hypothesis Testing: Null and Alternative Hypotheses; Type I and Type II errors; Testing of Hypothesis: Large Sample Tests, Small Sample test, (t, F, Z Test and Chi Square Test).

Unit V: Correlation Analysis: Rank Method & Karl Pearson's Coefficient of Correlation and Properties of Correlation. Regression Analysis: Fitting of a Regression Line and Interpretation of Results, Properties of Regression Coefficients and Relationship between Regression and Correlation.

Suggested Reading:

1. Learning Python, 5th Edition by Mark Lutz, O'reilly
2. Mastering Apache Spark 2.x - Second Edition, by Romeo Kienzler, Packt Publishing Ltd.
3. Python Programming for the Absolute Beginner By Michael Dawson, 2nd Edition, PremierPress, 2003
4. Image Processing and Pattern Recognition, Volume 5, 1st Edition, By Cornelius Leondes,Academic Press

Course Outcomes:

1. Examine the benefits of using the Python programming language.
2. Discover how to use Jupyter Notebook to apply to your analysis.
3. Explore the fundamental concepts associated with programming in Python.
4. Explore the contents and components of Python worries/ packages.
5. Gain an understanding of data frames and their editing in Python.

COs/Pos & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	2	1	1	2	1	1	3	2	2	2
CO2	2	3	2	1	1	1	1	1	1	2	3	2	1
CO3	3	3	2	2	2	2	2	2	2	3	2	3	2
CO4	2	2	3	3	2	2	3	2	2	2	2	3	2
CO5	2	2	3	3	2	2	2	3	3	2	3	2	3

MBA 293 : DATA MINING & VISUALIZATION

L T P C 3 0 0 3

Course Objectives:

1. To understand the implementation of descriptive statistics in R.
2. To understand the basic concept of data visualization with R.
3. To apply R functions to visualize categorical data in the form of Bars and Charts.
4. To understand the representation of Histogram, Pyramids, and Box plot in R.
5. To understand the visualization of time series and scatter plot.

Unit I: Data Mining: Overview, Motivation, Definition & Functionalities, difference between data mining and Data Processing, KDD process, Form of Data Preprocessing, Data Cleaning. : Missing Values, Noisy Data, Binning, Clustering, Regression, Computer and Human inspection, Inconsistent Data, Data Integration and Transformation. Data Reduction:-Data Cube Aggregation, Dimensionality reduction, Data Compression. Applications of Data Mining in today's world.

Unit II: Data Mining Techniques: Data Generalization, Analytical Characterization, Analysis of attribute relevance, Mining Class comparisons, Statistical measures in large Databases, Statistical-Based Algorithms, Distance-Based Algorithms, Association rules: Introduction, Large Item sets, Basic Algorithms, Apriori Analysis, Generating Filtering Rules, Target Marketing, Risk Management, Customer profiling.

Unit III: : Classification: Definition Decision Tree-Based Algorithms, Clustering: Introduction, Similarity and Distance Measures, Hierarchical and Partitioned Algorithms. Hierarchical Clustering- CURE and Chameleon. Parallel and Distributed Algorithms, Neural Network approach, Business , Data mining Case study, Applications of Data Mining, Introduction of data mining tools like WEKA, ORANGE , SAS, KNIME etc.

Unit IV: Visualization of Categorical Data in R: Bar Chart Simple, Bar Chart with Multiple Response Questions, Column Chart with two-line labeling, Column chart with 45o labeling, Profile Plot, Dot Chart for 3 variables, Pie Chart and Radial Diagram, Chart Tables.

Unit V: Distributions: Histogram overlay, Box Plots for group, Pyramids with multiple colours, Pyramid: emphasis on the outer and inner area, Pyramid with added line, Aggregated Pyramids, Simple Lorenz curve.

Suggested Reading:

1. Data Mining with R: Learning with Case Studies, Luís Torgo, Chapman and Hall/CRC;
2. R Data Mining: Implement data mining techniques through practical use cases and real world
3. datasets, Andrea Cirillo, Packt Publishing; 1 edition
4. R Data Science Essentials, By Raja B. Koushik, Sharan Kumar Ravindran, Packt Publishing
5. Jiawei Han, Micheline Kamber, "Data Mining Concepts & Techniques" Elsevier.
6. Alex Berson, Stephen J. Smith "Data Warehousing, Data-Mining & OLAP", TMH

Course Outcomes:

1. Understanding of data warehousing and its functions
2. To identify the key processes of data warehousing and applications.
3. To understand data mining basic concepts
4. To understand data mining techniques to solve problems in various disciplines
5. Compare and evaluate data mining techniques Analyzing

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1	2	1	2	1	1	2	3	2	2	1
CO2	2	3	2	2	1	3	1	2	2	1	2	3	1	2
CO3	3	1	2	3	2	1	2	3	1	2	3	2	3	1
CO4	2	2	3	1	3	2	1	2	3	1	2	1	3	2
CO5	1	3	2	2	3	1	3	2	2	3	1	2	3	3

MBA 294 : AI AND MACHINE LEARNING

L T P C 3 0 0 3

Course Objectives:

1. Make use of Data sets in implementing the machine learning algorithms
2. Implement the machine learning and artificial intelligence concepts and algorithms using python.

Unit I: **Basic Concepts and understanding the application & usage of Machine Learning.**
Meaning and basics of AI and is practical scenario and its application in medical, manufacturing etc.
Introduction to Neural Network. Write a Python program to load the iris data from a given csv file into a data frame and print the shape of the data, type of the data and first 3 rows.
Write a Python program using Scikit-learn to print the keys, number of rows columns, feature names and the description of the Iris data. Write a Python program to split the iris dataset into its attributes (X) and labels (y). The X variable contains the first four columns (i.e. attributes) and y contains the labels of the dataset.

Unit II: Write a Python program to draw a scatterplot, then add a joint density estimate to describe individual distributions on the same plot between Sepal length and Sepal width.
Write a Python program using Scikit-learn to split the iris dataset into 70% train data and 30% test data. Out of total 150 records, the training set will contain 120 records and the test set contains 30 of those records. Print both datasets.

Unit III: : Implement and demonstrate the any suitable algorithm for finding the most specific hypothesis based on a given set of training data samples. Read the training data from a .CSV file.
For a given set of training data examples stored in a .CSV file, implement and demonstrate the Candidate-Elimination algorithm to output a description of the set of all hypotheses consistent with the training examples.
Write a program to demonstrate the working of the decision tree using any suitable algorithm. Use an appropriate data set for building the decision tree and apply this knowledge to classify a new sample. Build an Artificial Neural Network by implementing the Back-propagation algorithm.

Unit IV: Write a program to implement the naïve Bayesian classifier for a sample training data set stored as a .CSV file Write a program to construct a Bayesian network considering medical data.
Use this model to demonstrate the diagnosis of heart patients using standard Heart Disease Data Set.
Apply any suitable algorithm to cluster a set of data stored in a .CSV file. Use the same data set for clustering using k-Means algorithm. Compare the results of these two algorithms and comment on the quality of clustering.

Unit V: Write a program to implement k-Nearest Neighbor algorithm to classify the iris data set.
Implement the non-parametric Regression algorithm in order to fit data points. Select appropriate data set for your experiment and draw graphs. Write a Python program to get the accuracy of the Logistic Regression.

Suggested Reading:

1. Artificial Intelligence for Business Leaders: Ajit Kr. Jha
2. Machine Learning in Business: John C. Hull
3. An Introduction to Statistical Learning with Applications in R : James, G., Witten, D., Hastie, T., Tibshirani, R. (Springer)

Course Outcomes:

1. To apply regression analysis on the data available
2. To understand the need of Machine Learning & Statistics for solving various problems
3. To understand the basic concepts of Supervised and Unsupervised learning
4. To design appropriate machine learning and apply on real world problems
5. To optimize different Machine Learning & Deep Learning Techniques

\ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	2	1	2	1	1	2	1	3	2	2	1
CO2	2	3	2	1	3	2	1	2	2	3	2	3	1	2
CO3	3	2	1	3	2	3	1	2	1	2	3	2	3	1
CO4	2	1	3	2	3	1	2	3	2	1	2	1	3	2
CO5	1	3	2	2	3	1	3	2	3	2	1	2	3	3

MBA 295 : SOCIAL MEDIA AND TEXT ANALYTICS

L T P C 3 0 0 3

Course Objectives:

1. To provide basic understanding of the use and deployment of Digital marketing tools and web/social /mobile analytics platforms.
2. Gaining a grounded understanding of web analytics and business implication.
3. To prepare the students with growth potentials for Web Analysts professionals.

Unit I: Social Media & Analytics: Introduction to Social Media, Social media landscape, Social Media Analytics & its need. SMA in Small and large organizations; Application of SMA in different social media platforms.

Unit II: Introductory overview of Text Mining - Introductory Thoughts - Data Mining vs. Text Mining - Text Mining and Text Characteristics - Predictive Text Analytics - Text Mining Problems - Prediction & Evaluation - Python as a Data Science Platform Python for Analytics - Introduction to Python Installation - Jupyter Notebook Introduction.
Index Numbers:- Meaning , Types of index numbers, uses of index numbers, Construction of Price, Quantity and Volume indices:- Fixed base and Chain base methods.

Unit III: : Text mining modeling using NLTK - Text Corpus - Sentence Tokenization - Word Tokenization - Removing special Characters - Expanding contractions - Removing Stop words - Correcting words: repeated characters - Stemming & lemmatization - Part of Speech Tagging - Feature Extraction - Bag of words model - TF-IDF model - Text classification problem - Building a classifier using support vector machine.

Unit IV: Facebook Analytics: Introduction, parameters, demographics. Analyzing page audience: Reach and engagement analysis. Post-Performance on FB; Social Campaigns: Goals and evaluating outcomes, Measuring and analyzing social campaigns, Social Network Analysis like Instagram, twitter, LinkedIn, YouTube etc. AdWords, Benchmarking, Categories of traffic: Organic traffic, Paid traffic;
Google Analytics: Brief introduction and working, Google website optimizer, Implementation technology, Limitations, Performance concerns, Privacy issues.

Unit V: Qualitative Analysis: Heuristic evaluations: Conducting a heuristic evaluation, Benefits of heuristic evaluations; Site Visits: Conducting a site visit, Benefits of site visits; Surveys: Website surveys, Post-visit surveys, creating and running a survey, Benefits of surveys.

Suggested Reading:

1. Data Mining with R: Learning with Case Studies, Luís Torgo, Chapman and Hall/CRC;
2. R Data Mining: Implement data mining techniques through practical use cases and real world datasets, Andrea Cirillo, Packt Publishing; 1 edition
3. R Data Science Essentials, By Raja B. Koushik, Sharan Kumar Ravindran, Packt Publishing
4. Jiawei Han, Micheline Kamber, “Data Mining Concepts & Techniques” Elsevier.
5. Alex Berson, Stephen J. Smith “Data Warehousing, Data-Mining & OLAP”, TMH

Course Outcomes:

1. Students will develop knowledge, understanding and skills in analysis of Social Media
2. To develop analytical skills for effective decision alternatives in social media operations
3. To understand data mining basic concepts
4. To understand data mining techniques to solve problems in various disciplines
5. To Compare and evaluate data mining techniques

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	2	1	2	1	1	2	1	3	2	2	1
CO2	2	3	2	1	3	2	1	2	2	3	2	3	1	2
CO3	3	2	1	3	2	3	1	2	1	2	3	2	3	1
CO4	2	1	3	2	3	1	2	3	2	1	2	1	3	2
CO5	1	3	2	2	3	1	3	2	3	2	1	2	3	3

MBA 296 : DEEP LEARNING

L T P C 3 0 0 3

Course Objectives:

1. To learn the fundamentals of Neural Network.
2. To gain an in-depth understanding of training Deep Neural Networks.
3. To acquire knowledge of advanced concepts of Convolution Neural Networks, Auto encoders and Recurrent Neural Networks.
4. Students should be familiar with the recent trends in Deep Learning

Unit I: INTRODUCTION: Introduction to machine learning- Linear models (SVMs and Perceptrons, logistic regression)- Intro to Neural Nets: What a shallow network computes- Training a network: loss functions, back propagation and stochastic gradient descent- Neural networks as universal function approximates.

Unit II: DEEP NETWORKS: History of Deep Learning- A Probabilistic Theory of Deep Learning Back propagation and regularization, batch normalization- VC Dimension and Neural Nets-Deep Vs Shallow Networks-Convolutional Networks- Generative Adversarial Networks (GAN), Semi supervised Learning.

Unit III: DIMENTIONALITY REDUCTION: Linear (PCA, LDA) and manifolds, metric learning – Auto encoders and dimensionality reduction in networks - Introduction to Convnet - Architectures – Alex Net, VGG, Inception, ResNet - Training a Convnet: weights initialization, batch normalization, hyper parameter optimization.

Unit IV: OPTIMIZATION AND GENERALIZATION: Optimization in deep learning– Non-convex optimization for deep networks- Stochastic Optimization Generalization in neural networks- Spatial Transformer Networks- Recurrent networks, LSTM - Recurrent Neural Network Language Models- Word-Level RNNs & Deep Reinforcement Learning - Computational & Artificial Neuroscience.

Unit V: CASE STUDY AND APPLICATIONS: Image net- Detection-Audio Wave Net-Natural Language Processing Word2Vec - Joint Detection-Bioinformatics- Face Recognition- Scene Understanding Gathering Image Captions.

Suggested Reading:

1. Cosma Rohilla Shalizi, Advanced Data Analysis from an Elementary Point of View, 2015.
2. Deng & Yu, Deep Learning: Methods and Applications, Now Publishers, 2013.
3. Ian Goodfellow, Yoshua Bengio, Aaron Courville, Deep Learning, MIT Press, 2016.
4. Bunduma, N. (2017). Fundamentals of Deep Learning
5. Heaton, J.(2015). Deep Learning and Neural Networks, Heaton Research Inc.

Course Outcomes:

1. Describe the feed-forward and deep networks.
2. Design single and multi-layer feed-forward deep networks and tune various hyper-parameters.
3. Implement deep neural networks to solve a problem
4. Analyse performance of deep networks.
5. Analyse case studies with applications.

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1	2	1	2	1	1	2	3	2	2	1
CO2	2	3	2	2	1	3	1	2	2	1	2	3	1	2
CO3	3	1	2	3	2	1	2	3	1	2	3	2	3	1
CO4	2	2	3	1	3	2	1	2	3	1	2	1	3	2
CO5	1	3	2	2	3	1	3	2	2	3	1	2	3	3