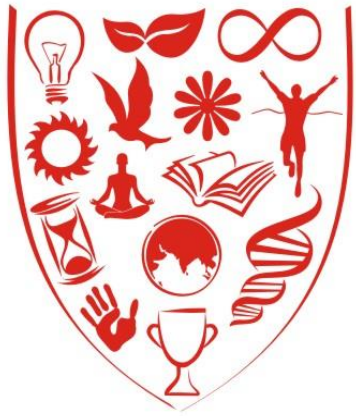


MBA  
DATA SYMATRIX  
SESSION 2020-2022



**JECRC**<sup>TM</sup>  
**UNIVERSITY**  
BUILD YOUR WORLD

**School of Management**

**Syllabi and Course Structure**

**Master of Business Administration**

**(Data Analytics and Data Visualization)**

**Academic Programmes**

**Batch (2020-2022)**

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**Total Credits for the Batch 2020-2022= 125 Credits**

- 1. Minimum Credit required = 112 Credits**
- 2. Total Relaxation = 13 Credits**
- 3. No relaxation in Core and Fundamental subjects**
- 4. Option can be availed in Specialization, Interdisciplinary and General subjects.**

**Summary Sheet**

<b>Semester</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>Total</b>	<b>Min. Credit req. for degree</b>
<b>Credit</b>	<b>32</b>	<b>30</b>	<b>37</b>	<b>26</b>	<b>125</b>	<b>112</b>

<b>Type</b>	<b>Foundation</b>	<b>Core</b>	<b>Specialization</b>	<b>Interdisciplinary</b>	<b>General</b>
<b>Total Credit</b>	<b>23</b>	<b>30</b>	<b>55</b>	<b>12</b>	<b>3</b>

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**Semester I**

<b>FIRST SEMESTER</b>						
<b>Sub Code</b>	<b>Sub Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>Type</b>
MBA001A	Principles and Practices of Management	3	-	-	3	F
MBA002A	Managerial Economics	3	-	-	3	F
MBA101A	Managerial Accounting in Management	3	-	1	4	F
MBA003A	Organizational Behaviour	3	-	-	3	F
MBA161A	Marketing Management	3	-	-	3	C
MBA004A	Quantitative Methods in Management	3	1	-	4	F
MBA221B	Information Technology for Management	2	-	1	3	ID
<b>MBA005B</b>	<b>Business Communication &amp; skills / Overview of Data Science, Data Analytics &amp; AI</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>S</b>
					3	S
MBA491A	Entrepreneurship and Start ups	3	-	-	3	ID
MBA992A	Industrial Visit	-	-	3	3	S
	<b>TOTAL</b>	<b>26</b>	<b>1</b>	<b>5</b>	<b>32</b>	

- Outstation Industrial Visit ( Students will prepare and submit a Report on the learning's of the Visit)

**Semester II**

<b>SECOND SEMESTER</b>						
<b>Sub Code</b>	<b>Sub Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>Type</b>
MBA007A	Business Environment	3	-	-	3	F
MBA102A	Financial Management	3	-	-	3	C
MBA191A	Human Resource Management	3	-	-	3	C
MBA991A	Seminar/Industrial Visit	-	-	3	3	S
MBA013A	Management Research Methodology	3	-	-	3	C
BMC051A	Environmental studies	3	-	-	3	ID
Elective-I	Statics and advanced Data Analytics	3	-	-	3	S
Elective-II	MARKETING	3	-	-	3	S
Elective- III	MARKETING	3	-	-	3	S
Elective- IV	MARKETING	3	-	-	3	S
	<b>TOTAL</b>	<b>27</b>	<b>0</b>	<b>3</b>	<b>30</b>	

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**Semester III**

<b>THIRD SEMESTER</b>						
<b>Sub Code</b>	<b>Sub Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>Type</b>
MBA008A	Strategic Management and Social Capital	3	-	-	3	S
MBA009A	Business Laws	3	-	-	3	C
MBA011A	Project Management	3	-	-	3	F
MBA406A	Event Management	3	-	-	3	S
MBA431A	Production & Operations Management	3	-	-	3	ID
Elective 1	Business communication / Machine Learning for Data Sciences	3			3	s
Elective 2	Corporate social Responsibility/ Data Analytics and Visualization – consumer behavior analytics Tool and Techniques	3			3	s
MARKETING	Elective- VII	3	-	-	3	S
MARKETING	Elective- VIII	3	-	-	3	S
	Swatch Bahart Abhiyan (optional )	-	-	2	2	S
MBA997A	Summer Training	-	-	5	5	S
MBA407A	Industrial Visit	-	-	3	3	S
	<b>TOTAL</b>	<b>27</b>	-	10	<b>37</b>	

- Outstation Industrial Visit ( Students will prepare and submit a Report on the learning's of the Visit)

**Semester IV**

<b>FOURTH SEMESTER</b>						<b>Type</b>
MBA999A	Dissertation	-	-	20	20	C
	Case Studies and Projects			6	6	S
	<b>TOTAL</b>		-	<b>26</b>	<b>26</b>	s

**MBA I**  
**MARKETING MANAGEMENT**  
**PAPER CODE: MBA 161A**  
**CREDITS: (3)**

**Objectives:**

The course is designed to promote understanding of concepts, philosophies, processes and techniques of managing marketing operation and to develop a feel of the market place.

**Unit I:**

Introduction to Marketing function; genesis, the marketing concept. Marketing Management System: objectives, its interfaces with other functions in the organisation. Environment of Marketing- Economic Environment, Political, Social, Demographic etc.

**Unit II:**

Market Segmentation. Consumer-buyer behaviour models. Socio- cultural environment. Legal Environment. Ethical issues in marketing.

**Unit III:**

Marketing Strategy- Marketing planning and Marketing programming. The concept of marketing mix, Product policy; the concept of product life cycle.

**Unit IV:**

New product decisions. Test marketing- Pricing Management of distribution: channels of distribution. Advertising and production. The concept of Unique Selling Proposition.

**Unit V:**

Implementation and Control. The marketing organization- alternative organization structures; the concept of product management. Administration of the marketing programme: sales forecasting; marketing and sales budgeting; sales management; management of sales force. Evaluation of marketing performance; sales analysis; control of marketing effort; marketing audit.

**Course Outcome (CO):**

At the end of this course students will have:

CO1: Identify and respond to marketing its objectives by applying principles of marketing and communications.

CO2: Develop a marketing plan and present and defend it persuasively.

CO3: Contribute to evaluating the effectiveness of marketing initiatives.

CO4: Participate in the development of creative solutions to address marketing challenges.

**MBA I SEMESTER**  
**MANAGERIAL ECONOMICS**  
**PAPER CODE: MBA 002A**  
**CREDITS: (4)**

**Learning Objective:** The purpose of this course is to apply microeconomics concepts and techniques in evaluating business decisions taken by firms. The emphasis is on explaining how the tools of standard price theory can be employed to formulate a decision problem, evaluate alternative courses of action and finally choose among alternatives. Simple geometry and basic concepts of mathematics will be used in course of teaching.

**Course contents:**

**Unit I**

Demand, Supply and Market Equilibrium; Elasticities of Demand & Supply, Short run vs. Long run, Elasticities.

**Unit II:**

Theory of Consumer Behaviour, Indifference curve theory, Indifference curves & its properties, Budget Constraints, Consumer Choice, Revealed Preference, Marginal Utility and Consumer Choice.

**Unit III:**

Production: Technology of Production; Production with one variable input, Production with two variable input, Returns to Scale. Cost: Measuring Costs, Costs in the Short & long run, Long run vs. Short run cost curves; Economies of Scope, Learning Curve.

**Unit IV:**

Theory of Firm & Market Organization: Perfect Competition: Perfectly Competitive markets, Profit Maximization, Marginal revenue, Marginal Cost, Output in the short run & long run, Industry's long run supply curve, Consumer and producer surplus, Minimum prices, price support, Import Quota and tariff, Impact of Tax or subsidy. Monopoly: Monopoly Power & its sources, Social Cost of Monopoly Power, Monopsony, Monopsony Power, Price Discrimination, Peak-load Pricing & Inter-temporal Price Discrimination, Two-part Tariffs. Monopolistic Competition & Oligopoly: Price Competition, Prisoner's Dilemma, Cartels. Pricing of Factors: Competitive Factor Markets, Equilibrium in Factor Markets, Factor Markets with Monopsony & Monopoly Power.

**Unit V:**

Market Failure: Externalities, Ways of correcting Market Failure, Stock Externalities & Property Rights, Common Property Resources, Public Goods, Private Preferences for Public Goods  
Course Outcome:

**Course Objectives:**

After the completion of the course, students will be able to –  
CO1: Understand the roles of managers in firms

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CO2: Understand the internal and external decisions to be made by managers  
CO3: Analyze the demand and supply conditions and assess the position of a company  
CO4: Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets.  
CO 5: Analyze real-world business problems with a systematic theoretical framework.  
CO6: Make optimal business decisions by integrating the concepts of economics, mathematics and statistics.

**Text books:**

1. Pindyck, Rubinfeld & Mehta (2009). *Microeconomics* (7th ed.). Pearson.

**References:**

1. Lipsey and Chrystal. (2008). *Economics*. (11th ed.). Oxford University Press.
2. Koutosyiannis (1979). *Modern Microeconomics*. (2nd ed.). Palgrave Macmillan.
3. Dominick Salvatore (2009). *Principles of Microeconomics* (5th ed.). Oxford University Press.

**M.B.A I Semester**

**PRINCIPLES AND PRACTICES OF MANAGEMENT  
PAPER CODE: MBA 001A  
CREDITS ⊕ 3)**

**Objective:**

The objectives of this course is to expose the students to basic concepts of management and to enable them to gain appreciation for emerging ideas, techniques, procedures and practices in the field of management.

**Unit-I:**

Management an Overview, Management Defined, Functions of Management, Managerial Roles and responsibilities, System and Contingency Approach for understanding organizations. Management Thought-Classical Perspective, Scientific Management, Administrative Management, Bureaucratic Management, Behavioral Perspective. Managerial processes, functions, skills and rules in an organization, social responsibilities of Business.

**Unit-II:**

Fundamentals of Planning – Objectives, Strategies, Policies, Decision making, Strategic organizing design, line and staff authority and decentralization

**Unit III:**

Fundamentals of Organizing- Nature and purpose, departmentation, Span of Management.

**Unit-IV:**

Direction-concept, Leadership- Meaning and Importance, transitions in leadership theories, trait theories, behavioral theories, contingency theories, leadership styles and skills, managerial culture and leadership.

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**Unit-V:**

Coordination. Control- concept, nature and purpose, control technique, control of overall performance, span of control.

**Course Outcomes:**

Upon successful completion of the requirements for this course, students will be able to:

CO1: Examine systematically the dynamics of entry, diagnosis, planning, intervention, and sustainability that occur during organization change efforts

CO2: Recognize and understand the intricate relationship between the strategic business plan of the organization and the role of organization development

CO3: Develop and enhance conceptual and behavioral skills to implement system-wide organization Control efforts

**Suggested Books:**

1. Koontz & Weirich, *Essentials of Management*, Tata McGraw Hill, 2010.
2. L.M. Prasad, *Principles & Practices of Management*, Sultan Chand, 2010.
3. Stephen Robbins, *Management*, Pearson, 2011.



**MBA I Semester**

**QUANTITATIVE METHODS IN MANAGEMENT**  
**PAPER CODE: MBA004A**  
**CREDITS: (4)**

**Objectives:**

The course is designed to make the students familiar with the basic statistical and linear programming techniques. The focus of this paper is to enable the students to apply relevant quantitative tools in business decision making. Students will be exposed to relevant software packages as part of the curriculum.

**Unit I:**

Role of quantitative methods and operations research for managerial decision making and support. Role of mathematical models in problem formulation and solving. Structure of decisions, statistical decision theory; decision making under uncertainty, risk, certainty. Decision Trees; method

**Unit II:**

Game theory applications, Transportation & Assignment Problems.

**Unit III:**

Simplex technique; transportation, assignment. Mathematical Programming models formulation and applications. Linear Programming- graphical problems.

**Unit IV**

PERT and CPM. Queuing theory- M/M/1 and M/M/n model. Monte Carlo System Simulation concepts and applications.

**Unit V:**

Case Study applications and use of OR software packages.

**Course Outcomes**

At the end of this course the students will able to learn –

CO1: Understand the elementary concepts and techniques of decision making, risk analysis, business processes, and would able to generate the skills of problem solving.

CO2: Understand the concepts of game theory, programming model, PERT CPM to apply it in real time situation.

**Suggested Books:**

- 1) Levin, R.I. and Rubin, D.S: Statistics for Management, Prentice Hall of India, New Delhi. (2000).

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- 2) Kapoor, V.K. Operations Research. Sultan Chand and Sons, New Delhi. (1999).
- 3) Sharma, J.K. Fundamentals of Operations Research. Macmillan India Ltd., New Delhi. (2001).

**MBA I Semester**

**INFORMATION TECHNOLOGY FOR MANAGEMENT**

**PAPER CODE:- MBA 221A**

**CREDITS: (4)**

**Objectives:**

The objective of this course is to develop micro-level individual competency amongst the participants with regard to contemporary Information Technology Tools and to develop an understanding of the data processing systems existing in organizations.

**Unit I:**

Information & System Concepts-Introduction --Concepts, Classification of Information, Methods of Data & Information Collection, Value of Information, Organization and Information.

**Unit II:**

System: A Definition. Types of Systems, System Decomposition, Integration of Sub Systems, Elements of a System, Human as an Information Processing System. International Business and IT. Management Information System-MIS: Definition, Nature & Scope, MIS Characteristics,

**Unit III:**

Functions, Structure of MIS, Role of MIS, MIS as a Control System, Process of Management, Application of MIS, ERP & IT's Benefits. Internet-Introduction to Internet, Why We Need Internet, Internet Tools & Services, www, Internet in India, Security, Web Browser, Future of Internet.

**Unit IV:**

E-Comm. an Introduction, E Business Fundamentals. New Information Technology: Interconnection and networking, Multimedia, Neural Networks,

**Unit V:**

Artificial Intelligence, Executive Information System, Decision Support System (DSS) and Expert Systems. Issues for Senior Management: Management Control, Management Issues, Security Issues: Viruses, Worms and other creatures, I T issues for Management, Management in a Technological Environment, the changing world of Information.

Course Outcomes –

At the end of this Course the students will

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CO1: Able to develop micro-level individual competency of contemporary Information Technology Tools

CO2: able to develop an understanding of the data processing systems existing in organizations.

**Suggested Readings:-**

1. George W. Reynolds, Course Technology, USA: Informational Technology for Managers
2. Information Technology For Management: Advancing Sustainable, Profitable Business Growth, 9<sup>th</sup> Edition, Wiley Publications, New Delhi.

**MBA I SEMESTER**

**OVERVIEW OF DATA SCIENCE, DATA ANALYTICS AND AI SEMESTER**

**PAPER CODE: MBA ...**  
**CREDITS: 1 Credit: 2-0-1**

Software Req: MS Office 2013/2016 Version Hours: 4 per Week

Objectives: The objective of this course is to teach students the vital data science, Data Analytics and AI concepts

**UNIT – I**

Introduction to Data Science: Defining Data Science and Big Data, Benefits and Uses of Data Science and Big Data, Facets of Data, Structured Data, Unstructured Data, Natural Language, Machinegenerated Data, Graph based or Network Data, Audio, Image, Video, Streaming data, Data Science Process, Big data ecosystem and data science, Distributed file systems, Distributed programming framework, data integration framework, machine learning framework, No SQL Databases, scheduling tools, benchmarking tools, system deployments

**UNIT – II**

Data Science Processes: Six steps of data science processes, define research goals, data retrieval, cleansing data, correct errors as early as possible, integrating – combine data from different sources, transforming data, exploratory data analysis, Data modelling, model and variable selection, model execution, model diagnostic and model comparison, presentation and automation.

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UNIT – III

Introduction to Machine Learning: What is Machine Learning, Learning from Data, History of Machine Learning, Big Data for Machine Learning, Leveraging Machine Learning, Descriptive vs Predictive Analytics, Machine Learning and Statistics, Artificial Intelligence and Machine Learning, Types of Machine Learning – Supervised, Unsupervised, Semi-supervised, Reinforcement Learning, Types of Machine Learning Algorithms, Classification vs Regression Problem, Bayesian, Clustering, Decision Tree, Dimensionality Reduction, Neural Network and Deep Learning, Training machine learning systems

UNIT – IV

Introduction to AI: What is AI, Turing test, cognitive modelling approach, law of thoughts, the relational agent approach, the underlying assumptions about intelligence, techniques required to solve AI problems, level of details required to model human intelligence, successfully building an intelligent problem, history of AI Introduction to Data Analytics: Working with Formula and Functions, Introduction to Charts, Logical functions using Excel, Analyzing Data with Excel.

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**MBA I**  
**Entrepreneurship Skills & Starts Ups**  
**Subject Code: MBA 131A**  
**Credit :(3 L)**

**Objective**

To Develop and Strengthen Entrepreneurial Quality And Motivation In Students And To Impart Basic Entrepreneurial Skills And Understanding To Run A Business Efficiently And Effectively

**UNIT I :**

Entrepreneur – Types Of Entrepreneurs – Difference Between Entrepreneur And Intrapreneur  
Entrepreneurship In Economic Growth, Factors Affecting Entrepreneurial Growth.

**UNIT II:**

Generating business ideas – sources of new ideas, methods of generating ideas, creative problem solving, opportunity recognition, environment scanning, competitor and industry analysis.

**UNIT III :**

Project Formulation – Steps Involved In Setting Up A Business – Identifying, Selecting A Good Business Opportunity, Market Survey And Research, Techno Economic Feasibility Assessment – Preparation Of Preliminary Project Reports – Project Appraisal – Sources Of Information – Classification Of Needs And Agencies.

**UNIT IV :**

Need – Sources Of Finance, Term Loans, Capital Structure, Financial Institution, Management Of Working Capital, Costing, Break Even Analysis, Taxation – Income Tax, Excise Duty – Sales Tax.

**UNIT V:**

Sickness In Small Business – Concept, Magnitude, Causes And Consequences, Corrective Measures – Business Incubators – Government Policy For Small Scale Enterprises – Growth Strategies In Small Industry – Expansion, Diversification, Joint Venture, Merger And Sub Contracting.

After studying this course, you should be able to:

- CO1 Understand the nature of entrepreneurship
- CO2 Understand the function of the entrepreneur in the successful, commercial application of innovations
- CO3 Confirm an entrepreneurial business idea
- CO4 Identify personal attributes that enable best use of entrepreneurial opportunities

**MBA II Semester**  
**BUSINESS ENVIRONMENT**

**PAPER CODE: MBA 007A**

**CREDITS: (3)**

**Objectives:** The objective of the course is to develop an understanding of the methods for analyzing Business Environment and implications of changes in micro and macro environment for businesses.

**UNIT – I**

Nature of the Environment of Business:- Nature, Concept and Significance of Internal Environment, Management of Organizational Resources for Developing Effective Internal Organizational Environment.

**UNIT - II**

Economic Policies, Government and Business:- Industrial, Monetary, Fiscal and Foreign Trade Policies, Economic System, Economic Structure, Social Responsibility of Business and Social Responsibility of Government, Business Ethics.

**UNIT - III**

Non-Economic Environment of Business:- Social and Cultural Forces Affecting Business. Political and Legal Forces Affecting Operation of Business in a given Economic Framework, Concept and Significance of Technological Environment, Government Guidelines for Technological Up gradation, Regulation for Foreign Collaboration and Investment.

**UNIT - IV**

Natural Environment and Value of Life:- The concept of Value of Life Used in Economic Analysis, Environmental Regulation for Pollution Control, Recycling and Disposal of Industrial Waste.

**UNIT - V**

Recent Development in Business Environment of India:- Market Freedom, Privatisation, Globalization, WTO and its Impact on Indian Industries, Consumer Protection, Disinvestment, Government of India's Commercial Banking, and Government Policy regarding Small Sector Enterprises.

Course outcome –

At the end of this course the student will able to learn-

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CO1: Have a solid understanding of basic environmental concern underlying the importance of the transnational corporation, of international trade, and of competitiveness

CO 2; Have background knowledge of the institutional, economic, political, cultural and technological environments that constitute today's global business environment

CO3 : Be able to use the theory and background knowledge learned to enhance your general understanding of the significance and likely impacts of different business decisions

CO4: Be able to use the theory and background knowledge learned to enhance your general understanding of everyday world events and their impacts on business, and to formulate critical opinions around such issues

**Suggested Books:**

1. Chidambaram, Business Environment, Vikas Publication House Pvt Ltd, 2003
2. Dr. Justin Paul, Business Environment, Tata McGraw Hill Publishing Co.Ltd
3. Francis Cherunillam, Business Environment, Himalaya Publishing House
4. Ghosh, Economic Environment of Business, Vikas Publication House Pvt Ltd 2003
5. J.Bhagwati, India In Transition, Oxford University Press, 1994
6. K.Aswathapa, Essentials of Business Environment, Himalaya Publishing, 2000

**MBA II Semester**

**FINANCIAL MANAGEMENT**

**PAPER CODE: MBA 102A**

**CREDITS: (3)**

**Objective:** To familiarize the students with the principles and practice of financial management.

**UNIT I**

Financial Management: Meaning & Scope of FM. Objectives of FM, Functions of Financial Managers, Financial Decisions, Financial Statement Analysis: Meaning, Techniques of analysis (Trend analysis, Ratio Analysis). Fund Flow & Cash Flow Analysis.

**UNIT II**

Funds Raising Decision : Capital Structure – Determination of capital structure, optimum capital structure, over capitalization & Under capitalization, Return on capital employed, Capital Gearing, Trading on equity,

**Unit III:**

Leverages: Meaning, Types of leverages, calculation of Leverages, Basic theories of capital structure ( Net operating, Net Income & MM Theory), Computation of Cost of capital.

**UNIT IV:**

Working Capital Management: Meaning, Components of WC, Operating Cycles Method, Basic meaning of Inventory Management.

**Unit V:**

Receivable Management (Excluding practical), Capital Budgeting (Traditional & modern Techniques).

Course outcome –

At the end of this course the student will able to learn-

CO1: Apply and critically evaluate corporate finance techniques and critically evaluate theories of financial statements and related analysis;

CO2: Identify, define and analyse problems and identify and create process to solve them and Exercise critical judgement in creating new understanding;

CO3 ; Demonstrate advanced numeracy and quantitative skills and Identify and evaluate social, cultural, global, ethical and environmental responsibilities and issues;

**Suggested Books:**

- 1) Pandey, I.M. *Finance: A Management Guide for Managing Company Funds and Profits*. Prentice Hall of India, New Delhi. (2003).
- 2) Bhattacharya, *Financial Accounting for Business Managers*. Prentice Hall of India, New Delhi 2003
- 3) Saraswat, Bhatnagar, *Financial Management*, Garima Publications, 2012.
- 4) M.R. Agarwal, *Financial Management*, Garima Publications Jaipur, 2009.



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**MBA II Sem**

**HUMAN RESOURCE MANAGEMENT**  
**PAPER CODE: MBA 191A**  
**CREDITS: (3L)**

**Learning Objective:** The objective of this course is to help the students to develop an understanding of the concept & techniques of essential functions of human resource management.

Course Contents:

**Unit I Introduction to Human Resource Management**

HRM – Nature and Scope of HRM, Using HR Analytics for recognizing changing trends in HRM - Strategic HRM, Managing Global Human Resources Role of HR in Internationalization of Business - Staffing Global Organizations - Implementing Global HR System

**Unit II Recruitment and Selection**

HR forecasting, Recruitment and Selection, Human Resource Planning - Job Analysis – Job Evaluation - Recruiting Talent – Selecting Right Talent , Application Forms, Selection Test, Interviews, Evaluation, Placement, Induction

**Unit III Training and Development**

Training and development approaches , Training Budget, Training -ROI, Evaluation of Training and Management Development, Performance Management and Appraisal, Concept of Employee Growth, Managing Career Planning, Elements of a Career Planning Programme, Succession Planning.

**Unit IV -Compensation**

Concept of compensation, Elements of Compensation, Process of Determining Compensation , Managing Wages, Concept of Rewards and Incentives,

**Unit V- Practical aspects of HRM**

Preparing recruitment forms, Drafting offer letter, Appointment letters, Job Discription and Specification Forms, Preparing Training & placement Doc, Performance Appraisal Forms.

Course outcome –

At the end of this course the student will able to learn-

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CO1: Demonstrate an understanding of key terms, theories/concepts and practices within the field of HRM;

CO2: Demonstrate competence in development and problem-solving in the area of HR Management; Provide innovative solutions to problems in the fields of HRM;

CO3: Work effectively with colleagues with diverse skills, experience levels and way of thinking and be able to identify and appreciate the significance of the ethical issues in HR

CO4: Be able to evaluate HRM related social, cultural, ethical and environmental responsibilities and issues in a global context.

**Text Book**

Aswathappa, K. (2013). Human Resource Management: Text and Cases, 7/e; New Delhi, McGraw-Hill GRGSMS / MBA 2016-18

Dessler, Gary and Biju Varkkey (2016). Human Resource Management, 14/e; New Delhi; Pearson Education

Bernardin, John H (2013). Human Resource Management: An Experiential Approach, 5/e; New Delhi, McGraw-Hill

**MBA II SEMESTER**

**MANAGEMENT RESEARCH METHODOLOGY**

**SUBJECT CODE: MBA013A**

**CREDITS: (3L)**

**Unit I**

Meaning, Objective and Motivation in research, Type of research, research approaches, Significance of research, research process, criteria for good research, Define the research problem, selecting a problem, research design, meaning of research design, need of research design, features of good design.

**Unit II**

Sampling Designing: Census and sample survey, implications of sample design, steps in sample design, criteria of selecting a sample, characteristic of a good sample design, Different type of sample design, random sampling. Data collection techniques: collection of data, interview,

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schedule and questionnaire method, difference between questionnaires and schedules, Collection of secondary data, selection of appropriate method for data collection.

### **Unit III**

Processing and analysis of data, type of analysis, statistics in research, type of series, measurement of central tendency, measurement of dispersion, regression analysis, least square method, Mean based method , correlation analysis, Karl Pearson coefficient of correlation, Spearman single rank method, repeated rank method, relationship between correlation and regression analysis.

### **Unit IV**

Hypothesis Design, Basic concept concerning hypothesis testing, procedure of hypothesis testing, Important Parametric test: Z test, T test and F test, Non parametric test: Chi square test, Sign test, run test, mann- whitney U test, Limitation of the testing of hypothesis.

### **Unit V**

Scaling technique, measurement in research, type of measurement scales, techniques of developing measurement tools, Interpretation and report writing, technique of interpretation, Significance of report writing, Different steps in writing a report, Lay out of the research report, types of report.

Course outcome-

1. Apply a range of quantitative and / or qualitative research techniques to business and management problems / issues
2. Understand and apply research approaches, techniques and strategies in the appropriate manner for managerial decision making
3. Demonstrate knowledge and understanding of data analysis and interpretation in relation to the research process
4. Conceptualise the research process
5. Develop necessary critical thinking skills in order to evaluate different research approaches utilised in the service industries

### **Reference Books:**

1. Research Methodology: C R Kothari.
2. Business Statistics for managers: Levin and Rubin.
3. Business Research Methods: Coopers & Swindlers.

**MBA II SEMESTER**  
**STATISTICS AND ADVANCE DATA ANALYTICS**

**SUBJECT CODE:**

**CREDITS: (3L)**

SEMESTER: 2 Credit: 2-0-1 No of Hours: 4 per week

Objectives: The objective of this course is to teach students the concepts of Statistics, probability, probability distribution, and other statistical methods to solve various engineering problems

UNIT – I Introduction to Statistics: Introduction to Statistics. Role of statistics in scientific methods, current applications of statistics. Scientific data gathering: Sampling techniques, scientific studies, observational studies, data management. Data description: Displaying data on a single variable (graphical methods, measure of central tendency, measure of spread), displaying relationship between two or more variables, measure of association between two or more variables.

UNIT – II Probability Theory: Sample space and events, probability, axioms of probability, independent events, conditional probability, Bayes' theorem. Random Variables: Discrete and continuous random variables. Probability distribution of discrete random variables, binomial distribution, poisson distribution. Probability distribution of continuous random variables, The uniform distribution, normal (gaussian) distribution, exponential distribution, gamma distribution, beta distribution, t-distribution, "F" distribution. Expectations, variance and covariance. Probability Inequalities. Bivariate distributions

UNIT -III Point Estimations: Methods of finding estimators, method of moments, maximum likelihood estimators, bayes estimators. Methods of evaluating estimators, mean squared error, best unbiased estimator, sufficiency and unbiasedness Interval Estimations: Confidence interval of means and proportions, Distribution free confidence interval of percentiles

UNIT - IV Test of Statistical Hypothesis and p-values: Tests about one mean, tests of equality of two means, test about proportions, p-values, likelihood ratio test, Bayesian tests Bayesian Statistics: Bayesian inference of discrete random variable, Bayesian inference of binomial proportion, comparing Bayesian and frequentist inferences of proportion, comparing Bayesian and frequentist inferences of mean

**MBA III SEMESTER**

***Strategic Management and Social Capital***

**Subject Code: MBA008A**

**Credit : (3L)**

**Objectives:**

The objective of this course is to develop a holistic perspective of an organization and to enable the students to analyze the strategic situation facing the organization, to access strategic options available to the organization and to implement the strategic choices made by it.

**Unit I**

Introduction: Business policy-evolution of the concept. Difference between business policy and strategic management. Corporate governance- concept, issues, models, evolution and significance. Introduction to Strategic Management-Concept importance of strategic Management, Strategy & Competitive Advantage, Strategy Planning & Decisions, strategic Management Process.

**Unit II**

Top management perspective: Establishing company direction-developing strategic vision, setting objectives and crafting a strategy-Internal & External Environment, Formulating Long Term objective & Strategy, Strategic Analysis & Choice.

**Unit III**

Analyzing business environment: Analysis of Business environment at 3 levels-Macro external environment analysis, external environment analysis (Industry analysis and competitor analysis) porter's five forces and competitor analysis framework, and firm level internal analysis. Identifying alternative strategies: Grand strategies: stability, growth, retrenchment & combination strategies, Generic strategies. Organization structures and strategy.

**Unit IV**

Competitive strategy and competitive advantage: Industry and competitive analysis, strategy and competitive advantage, Principles of Competitive Advantage-Identifying Value Activities, Competitive Scope and the Value Chain.

**Unit V**

Social Capital-Social theory and social structure , Concept and characteristics ,concept of bonding-bridging & linking : Putnam's theory ,A paradigm for social capital, Leveraging social capital in Business set-up & NGO's ,Social capital in the organisation, Social capital outside the organisation , Social capital, exchange and contribution, Social capital, intellectual capital and the organizational advantage.

**Course outcome-**

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1. Analyse and evaluate an organisation in its context from a strategic perspective.
2. Determine appropriate strategic directions for an organisation.
3. Define and recommend a course of action that is consistent with the recommended strategic direction

**Reference Books:**

1. G. Saloner, A. Shepard, and J. Padolny, *Strategic Management*, Wiley India, New Delhi, 2008
2. Anthony Henry, *Understanding Strategic Management*, OUP, New Delhi, 2011
3. A. Haberberg and A. Rieple, *Strategic Management: Theory and Application*, OUP, New Delhi, 2008

**MBA III Semester**  
**COMMUNICATION SKILLS II**  
**Subject Code : MBA012A**  
**Credit : 3L**

**Objectives**

Apply appropriate communication skills across settings, purposes, and audiences  
Demonstrate knowledge of communication theory and application. Practice critical thinking to develop innovative and well-founded perspectives related to the students' emphases.

**Unit-I**

**Principles of Communication**

1. Introduction to Communication
2. Barriers to Communication
3. Basics of Technical Communication

**Unit-II**

**Constructing Sentences**

1. Modal Auxiliaries
2. Prepositions
3. The Passive
4. Narration
5. Subject-Verb Agreement
6. Determiners

**Unit- III**

**Speak Well (Speech Mechanism)**

**Phonetics**

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Organs of Speech- The Respiratory System, ThePhonatory System, The Articulatory System. Vowel Sounds- Pure Vowel Sounds (Monophthongs), Diphthongs, Consonant sounds and Symbols. Phonetic Transcription of some Common English Words

**Unit- IV**

**Composition**

1. Précis Writing
2. Essay Writing
3. Email Writing
4. Comprehension

**Unit-V**

**Composition**

1. Business Letter Writing- Structure, Format, Parts of Letter, Various Styles of Letter Writing, Floating Enquiry, Quotations, Quarry for Product specification, Price and other details, Placing the orders and their Execution, Handling Complaints, Sales Letters, Job Applications and their Cover Letters, Letters to Editors.
2. CV Writing
3. Technical Proposal Writing.

***Course Outcome (CO):***

At the end of this course students will have:

CO1: The knowledge using proper communication skills and demonstrate knowledge of communication theory and application.

CO2: They will have innovative and well-founded perspectives and would able to build and maintain healthy and effective relationships.

CO 3 : they will able to use technology to communicate effectively in various settings and contexts and would demonstrate appropriate and professional ethical behavior.

***Suggested Books***

1. Communication Skills for Engineers and Scientists, Sangeeta Sharma and Binod Mishra, PHI Learning Pvt. Ltd. (New Delhi)
2. English Grammar and Composition, Gurudas Mukherjee, Ane Books Pvt. Ltd.(New Delhi)
3. Current English Grammar and Usage with Composition, R.P. Sinha, Oxford University Press (New Delhi)
4. Effective Technical Communication, M Ashraf Rizvi, Tata McGraw Hill (New Delhi)

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5. Business Communication, Meenakshi Raman & Prakash Singh, Oxford University Press (New Delhi)
6. Professional Communication, Aruna Koneru, Tata McGraw Hills, New Delhi.
7. A Practical Course for Developing Writing Skills in English, J.K. Gangal, PHI Learning Pvt. Ltd., New Delhi.
8. “Communicative English for Engineers and Professionals”, by Nitin Bhatnagar & Mamta Bhatnagar, Pearson (New Delhi).
9. “The Ace of Soft Skills”, by Gopalswamy Ramesh & Mahadevan Ramesh, Pearson (New Delhi)
10. Communication Skills for Engineers and Scientists, Sangeeta Sharma & Binod Mishra, PHI Learning Pvt. Ltd.

**MBA III Semester**

**PRODUCTION AND OPERATIONS MANAGEMENT**

**PAPER CODE: MBA 431A**

**CREDITS: (3)**

**Objectives:**

The course is designed to familiarize the students with decision making in planning, scheduling, control and productivity improvement in production and operations function in both manufactories and service organizations. Emphasis would be on to bring about effectiveness and efficiency of operations by job and work design, process design, layout design and design and control of systems related to production resources planning, quality, scheduling, maintenance, inventory and environment and safety.

**Unit I Lectures:**

Operations Management: An Introduction: Introduction to Production & Operations Management: Definition, need, responsibilities, key decisions of OM, goods vs. services, Operations as a key functional area in an organization. Operation Strategies-Definition, relevance, strategy formulation process, order qualifying and order winning attribute. Definition of lean production, lean Demand Pull logic, waste in operations, elements that address elimination of waste, 2 card kanban Production Control system.

**Unit II Lectures:**

Forecasting and Scheduling: Forecasting-Definition, types, qualitative (grass roots, market research and delphi method) and quantitative approach (simple moving average method, weighted moving average and single exponential smoothing method), forecast error, Mean Absolute Deviation (MAD). Scheduling: Operation scheduling, goals of short term scheduling, job sequencing (First Cum First Serve (FCFS), Shortest Processing Time (SPT), Earlier Due Date (EDD), Longest Processing Time (LPT), Critical Ration (CR)) & Johnson's rule on two machines, Gantt charts.

**Unit III Lectures:**



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Planning Techniques: Aggregate Planning: Definition, nature, strategies of aggregate planning, methods of aggregate planning (level plan, chase plan and mixed plan, keeping in mind demand, workforce and average inventory). Capacity Planning: Definition, measures of capacity (input and output), types of planning over time horizon, Decision trees analysis. Queuing and Inventory Models: Elementary Queuing Theory Models: Poisson- Exponential Single Server Model with Infinite Population; M/M/1, M/M/C, Inventory Management: Economic Order Quantity with finite and infinite supply

**Unit IV Lectures:**

Operations and Services Design: Process Selection: Definition, Characteristics that influence the choice of alternative processes (volume and variety), type of processes- job shop, batch, mass and continuous, product-process design Matrix and Services design matrix, technology issues in process design, flexible manufacturing systems (FMS), computer integrated manufacturing (CIM). Layout Decision: Layout planning – Benefits of good layout, importance, different types of layouts (Process, Product, Group technology and Fixed position layout). Assembly line balancing by using Longest Operating Time (LOT) rule. Location Decisions & Models: Facility Location – Objective, factors that influence location decision, location evaluation methods-factor rating method.

**Unit V Lectures:**

Maintenance Management & Quality Control: Maintenance Management: Need of maintenance management, equipment life cycle (Bathtub curve), measures for maintenance performance (Mean Time Before Failure (MTBF), Mean Time To Repair (MTTR) and availability), Reliability: Definition and function of series and parallel. Statistical Quality control: Variations in process (common & assignable causes), Variable measures (mean and range chart), Attribute measures (proportion of defects and no. of defects) using control tables control charts, single sampling plan : OC curve Acceptance sampling.

Course outcome –

At the end of this course the student will able to learn-

CO1: To analyze the various process characteristics and identify how they support operations strategy through cases and Project work

CO2: Apply decision-making techniques in Business Management with emphasis on decision making under risk and sensitivity analysis, in business cases & Apply workforce management techniques with emphasis on Learning curves in business cases.

CO3: To explain the concept of capacity management and apply capacity techniques in business examples. Identify and apply layout techniques for different types of Process strategies in business examples.

CO 4: Apply forecasting techniques as applied in the business environment. Through cases apply inventory Management techniques including Just - In Time (JIT) systems in optimizing inventory levels. Apply network models and techniques in Project Management problems

**Text Books:**

1. Mahadevan B (2006). *Operations Management Theory & Practice* (2nd ed.). Pearson Education.

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2. S.N. Chary(2000). *Production & operations management* (3rd ed.). New Delhi: Tata McGraw Hill.

**Suggested Readings:**

1. S.C. Gupta & V.K. Kapoor (2010). *Fundamentals of Applied Statistics* (4th ed.). Sultan Chand & Son
2. Heizer Jay & Render Barry (2005). *Production & Operations Management* (8th ed.). Pearson Education
3. Chase R B, Aquilano N J , Jacobs F R and Agarwal N(2006): *Production & Operation Management Manufacturing and Services*(11th ed.), Tata McGraw Hill
4. V.N.A Naikan (2011): *Reliability Engineering And Life Testing*, Eastern Economy edition, PHI

**MBA III SEMESTER  
BUSINESS LAW  
SUBJECT CODE: MBA009A  
CREDIT: (3L)**

**Objectives:**

The course is designed to provide an understanding of legal processes involved in management of an organization. The main focus is on understanding basic laws affecting the operation of a Business Enterprise.

**UNIT I:**

Nature of Business law, Sources of Business law and their classification. Mercantile law, Statute I Case law, Customs and Usage. Agreement and their legal obligations.

**UNIT II:**

Essential elements of a valid contract, types of contract, Void and voidable contract. Unenforceable and illegal agreements. Offer and acceptance over the telephone. Law of Arbitration-Definition of Arbitration, Effect of an arbitration. Arbitration without Intervention of Court. Powers and duties of Arbitrators.

**UNIT III:**

Sale of Goods Act. Definition and essentials of a contract of sale, Distinction between sale and agreement to sell, sale and hire purchase, sale distinguished from contract for work and labour. Kinds of goods, perishable goods. Document to the title of goods. Rules regarding transfer of property, Transfer of Title on sale.

**UNIT IV:**

Rules regarding delivery of goods. Buyers rights against seller, and unpaid seller's rights. Consumer protection act. Consumers rights, consumer's disputes redressal agencies, consumer protection council.

**UNIT V:**

Negotiable Instruments act. Definition and characteristic of Negotiable instrument. Liabilities of Parties to Negotiable Instruments. Brief exposure to Company Law including incorporation of a company - objects, registration, article of association, raising capital from public, company management and reconstruction, amalgamation and winding up.

Course outcome-

1. Demonstrate an advanced and integrated understanding of law and understand the impact of these laws on business practice.
2. Critically evaluate business law in defining corporate governance in an organization.
3. Analyse and research complex problems relating to business law and make reasoned and appropriate choices amongst alternatives.
4. Demonstrate sophisticated cognitive and creative skills in approaching legal issues relating to business law and generate appropriate responses.
5. Demonstrate the intellectual and practical skills needed to justify and interpret theoretical propositions, legal methodologies, conclusions and professional decisions.

**Reference Books:**

1. P.C. Tulsian, **Business Law**, Tata McGraw Hill, New Delhi, 2000
2. Kavita Krishnamurthy, **Business Law**, Global Vision Publishing, New Delhi, 2011

**MBA III SEMESTER**  
**Corporate Social Responsibility, Human Values and Ethics**  
**Subject Code :MBA010A**  
**Credit : (3L)**

**Objective**

The objective of this course is to develop an understanding and appreciation of the importance of value system, ethical conduct in business and role and responsibilities of corporate in social systems. It aims at applying the moral values and ethics to the real challenges of the organizations.

**Unit I**

Moral Values and Ethics: Values – Concepts, Types and Formation of Values, Ethics and Behaviour. Values of Indian Managers; Managerial Excellence through Human Values; Development of Ethics, Ethical Decision Making, Business Ethics- The Changing Environment and Stakeholder Management, Relevance of Ethics and Values in Business, Spiritual Values. Modern Business Ethics and Dilemmas, Overview of Corporate Social Responsibilities (CSR) and Sustainability.

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**Unit II**

Managing Ethical Dilemmas at Work: The Corporation and External Stakeholders, Corporate Governance: From the Boardroom to the Marketplace, Corporate Responsibilities towards Consumer Stakeholders and the Environment;

**Unit III**

The Corporation and Internal Stakeholders; Values-Based Moral Leadership, Culture, Strategy and Self-Regulation; Spiritual Leadership for Business Transformation. Organizational Excellence and Employee Wellbeing through Human Values.

**Unit IV**

Corporate Social Responsibility: A Historical Perspective from Industrial Revolution to Social Activism; Moral Arguments for Corporate Social Responsibility, Development of Corporate Conscience as the Moral Principle of Corporate Social Responsibility, Corporate Social Responsibility of Business, Employees, Consumers and Community.

**Unit V**

Corporate Governance and Code of Corporate Governance, Consumerism, Current CSR Practices of the Firms in India and Abroad. Challenges of Environment: Principles of Environmental Ethics, Environmental Challenges as Business Opportunity, Affirmative Action as a form of Social Justice. Unethical Issues in Sales, Marketing, Advertising and Technology: Internet Crime and Punishment.

**Course outcome-**

1. Build upon the understanding of the moral dimension in business and its importance to appraise the benefits and challenges of a corporate citizen
2. Distinguish and address the various expectations and demands of stakeholders on business firms
3. Apply decision making skills through the understanding of ethical, cultural and global issues that affect business
4. Practice appropriate business responses and management approaches for dealing with social, political, environmental, and global issues
5. Critically apply a broad and coherent knowledge of governance in business and recognize the legitimacy of business as an institution in a global society

**Reference Books:**

1. D. Crowther, *Corporate Social Responsibility*, Deep & Deep Publications, New Delhi, 2008
2. Kesho Prasad, *Corporate Governance*, PHI, New Delhi, 2013
3. Madhumita Chatterji, *Corporate Social Responsibility*, OUP, New Delhi, 2011

**M.B.A. III SEMESTER**  
***Project Management***  
**Subject Code: MBA011A**  
**Credit: (3L)**

**Objectives:**

The aim is to provide a suitable framework for gaining insight in the process of preparation, appraisal, monitoring and control of a project. The role project management techniques and how to mobilize finance for domestic and international projects shall be highlighted.

**Unit I**

Introduction to Project Management: Definition, functions, evolution of Project Management, classification of projects, Project management in different environments. The Project Management Systems, Methodologies & Systems Development Cycle: Systems approach, systems analysis, systems development, project feasibility, project life cycle, project appraisal, project contracting, the phases of system development life cycle.

**Unit II**

Project Feasibility Study: Developing a project plan, market and technical analysis, financial analysis evaluation of project proposals, risk analysis, sensitivity analysis, and social cost benefit analysis. Project Planning: Planning fundamentals, project master plan, work breakdown structure & other tools of project planning, work packages project organization structures & responsibilities, responsibility matrix.

**Unit III**

PERT, CPM, Resource allocation: Tools & techniques for scheduling development, crashing of networks, time-cost relationship, and resource leveling multiple project scheduling.

**Unit IV**

Cost Estimating Budgeting : Cost estimating process elements of budgeting, project cost accounting & management information systems, cost schedules & forecasts. Managing Risks in Projects: Risk concept & identification, risk assessment, risk priority, risk response planning, risk management methods.

**Unit IV**

Project Control: Information monitoring, internal & external project control, cost accounting systems for project control, control process, performance analysis, variance limits, and issues in project control. Project Management Information System: Computer based tools, features of PMIS, using project management software, (MS Projects) Project Evaluation, Reporting & Termination: Project reviews & reporting, closing the contract.

**Course outcome-**

1. Manage the scope, cost, timing, and quality of the project, at all times focused on project success as defined by project stakeholders.
2. Align the project to the organization's strategic plans and business justification throughout its lifecycle.

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3. Identify project goals, constraints, deliverables, performance criteria, control needs, and resource requirements in consultation with stakeholders.
4. Adapt projects in response to issues that arise internally and externally.
5. Implement general business concepts, practices, and tools to facilitate project success.

**Reference Books:**

- 1.R.B. Khanna, *Project Management*, PHI,New Delhi,2011
- 2.Roel Grit,*ProjectManagement: A Practical Approach(2012)*,Akshara Books, New Delhi
- 3.Joseph Phillips, *PMP Project Management Professional Study Guide*, McGraw Hill Education(India)2009

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**MBA III SEM**

**Event Management MBA406A (3 credits)**

Objective

Course Description: The purpose of this course is to enable the students to acquire a general knowledge about the "event management" and to become familiar with management techniques and strategies required for successful planning, promotion, implementation and evaluation of special events.

**Unit I Principles of Event Management**

Historical Perspective, Introduction to event Management, Size & type of event, Event Team, Code of ethics Principles of event Management, concept & designing. Analysis of concept, Logistics of concept. Feasibility.

**Unit II -Event Planning & Team Management**

Aim of event, Develop a mission, Establish Objectives Preparing event proposal, Use of planning tools Protocols, Dress codes, staging, staffing Unit III Leadership, Traits and characteristics

**Unit III -Event Marketing and Advertising**

Nature of Marketing, Process of marketing Marketing mix, Sponsorship Unit II Image, Branding, Advertising Publicity and Public relations

**Unit IV - Organization of Events**

Concept, theme, Types and category, Sports, Rallies, Wedding, Fabrication of Events , light & sound, handling vendors

**Unit V - EVENT LAWS & LICENSES**

Relevant legislations, liquor licenses, trade acts, stake holders and official bodies, contracts

Reference & Text Book

Lynn Van Der Wagen & Brenda R. Carlos, Event Management for Tourism, Cultural, Business and Sporting Events, Pearson Prentice Hall, 2005 2.

Anton Shone & Bryn Parry, „ Event Successful Management’ , Cengage learning 2002 3.  
Leonard H. Hoyle, Jr, Event Marketing, John Willy and Sons, New York .

Avrich, Barry Event and Entertainment Marketing, Vikas Publishing House New Delhi, 1994 5.  
Julia Rutherford Silvers Professional Event Coordination, John Willey & Sons 2003

**MBA III SEM (Elective DM)**

**MACHINE LEARNING FOR BUSINESS SEMESTER (3 credits)**

: 3 Credit: 2-0-1 No of Hours: 4 per week

**Objectives:** The objective of this course is to teach students the basic concepts of machine learning, supervised learning, unsupervised learning, and reinforcement learning

UNIT – I Introduction: Learning systems, real world applications of machine learning, why machine learning, variable types and terminology, function approximation Types of machine learning: Supervised learning, unsupervised learning, reinforcement learning Important concepts of machine learning: Parametric vs non-parametric models, the trade-off between prediction accuracy and model interpretability, the curse of dimensionality, measuring the quality of fit, bias-variance trade off, overfitting, model selection, no free lunch theorem

UNIT – II Linear Regression: Linear regression, estimating the coefficients, accessing the accuracy of coefficient estimates, accessing the accuracy of the model Classification: Logistic regression, estimating regression coefficients, making predictions, multiple logistic regressions, linear discriminant analysis, bayes' theorem of classification,

UNIT – III Resampling Methods, Model Selection and Regularization: Cross-validation, leave-one-out crossvalidation, k-fold cross-validation, the bootstrap, subset selection, shrinkage methods, ridge and lasso regression, dimension reduction methods, principal components regression Tree Based Methods: Advantages and disadvantages of trees, regression Trees, classification trees, bagging, random forest, boosting

UNIT – IV Support Vector Machine: Maximum margin classifier, classification using a separating hyperplane, the maximal margin classifier, support vector classifier, support vector machines, classification with non-linear decision boundaries, support vector machine Unsupervised Learning: Principle component analysis, what are principal components, clustering methods, k-means clustering, hierarchical clustering,



**MBA III SEM (Elective DM)**

**DATA ANALYSIS AND VISUALIZATION (3 credits)**

2-0-1 Software: Microsoft Office 2013 or 2016, Tableau Desktop, Power BI No of Hours : 4 Per Week:

UNIT - I INTRODUCTION TO DATA HANDLING Overview of Data analysis, Introduction to Data visualization, Working with Logical and financial functions, Data Validation & data models, Power Map for visualize data , Power BI-Business Intelligence , Dashboard designing.

UNIT - II INTRODUCTION TO DATA MANIPULATION USING FUNCTION: Heat Map, Tree Map, Smart Chart, Azure Machine learning , Column Chart, Line Chart , Pie,Bar, Area, Scatter Chart, Data Series, Axes , Chart Sheet , Trendline , Error Bars, Thermometer Chart , Gantt Chart , Pareto Chart etc , Frequency Distribution, Pivot Chart, Sensitivity Analysis, Histogram, Descriptive, Statistics, Anova, F-Test, t-Test, Moving, Average, Exponential Smoothing | Correlation model | Regression model, Practical Lab

UNIT – III TABLEAU SOFTWARE: GETTING STARTED WITH TABLEAU SOFTWARE: What is Tableau? What does the Tableau product suite comprise of? How Does Tableau Work? Tableau Architecture, What is My Tableau Repository? Connecting to Data & Introduction to data source concepts, Understanding the Tableau workspace, Dimensions and Measures, Data Types & Default Properties, Building basic views, Saving and Sharing your work-overview, Practical Lab

UNIT - IV Data Strategy & Consumer behaviour Analytics - Understanding Product & Category, Competitive Analysis, Market Share understanding- Market potential Index, Seasonality-Sales Trending, Consumer behaviour Analytics-MIND AND MARKET FACTORS, Budget planning & Execution- MIMI, Regression & Correlation Analysis for Sales trending, Forecasting method with predictive investment modelling.

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**MBA IV SEMESTER**

**Dissertation (MBA997A)**

Project Report submission and viva – voce on six months industrial training done.

**MBA IV SEMESTER**

**Project and Case Studies**  
**Credit 6**

**MBA (Elective-Marketing)  
Advertising Management  
Subject Code:MBA162A  
Credit :(3 L)**

**Objectives:**

To understand the process of marketing communications. To understand and integrate marketing communications theory and concepts with all elements of the promotional mix. To acquaint students with approaches and methods to develop, execute and evaluate advertising campaigns.

**Unit I:**

Mass communication theory and practices, marketing and promotion mix interrelationship and interdependence advertising. Sales Promotion, Publicity and Public Relations- Scope, Objectives, activities and creative role. Advertising, objectives tasks and process, market segmentation and target audience- Message and copy development.

**Unit II:**

Mass media, selection, planning, budgeting and scheduling. Integrated programme and budget planning. Implementing the programme, coordination and control.

**Unit III:**

Advertising Agencies in India, their services and terms, advertisement campaign development, Agency selection and appointment; Agency Organization and operation, Getting the best of the agency services. Analysis of effectiveness of advertisement and promotional campaign.

**Unit IV:**

Why and when sales promotion support, Sales promotion activities; Consumer Oriented-Sales channel Oriented-Sales staff oriented, Planning, budgeting, implementing and controlling campaigns.

**Unit V:**

Valuation and measurement of advertising and sales promotion effectiveness, Company organization for advertising: sales manager, Sales Promotion Manager, Market Development Manager- Role of Tasks, advertising ethics, economics and social relevance. The Public Relations Activities, Public relations and mass media.

**Course outcome**

At the end of the course the students will be able to:

CO1: Identify and respond to clients' advertising and marketing communications objectives by applying principles of marketing and communications.

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CO2: Develop an advertising plan and present and defend it persuasively. Contribute to evaluating the effectiveness of advertising and marketing communications initiatives.

CO3: Collaborate in the development of advertising and marketing communications material, in compliance with industry standards and business practices.

**Reference Books:**

1. Jaishree Jethwaney, *Advertising Management*, OUP, New Delhi, 2012

2. Larry Percy and Richard R. Elliot, *Strategic Advertising Management*, OUP, New Delhi, 2012

**MBA (Elective-Marketing)**

**International Marketing**  
**Subject Code: MBA164A**  
**Credit : (3 L)**

**Objectives:**

The course aims at making students understand the concept and techniques of international marketing and train them to develop and implement plans and marketing strategies for entering into international markets and managing overseas operations.

**Unit I:**

International marketing-its scope and tasks- world economy prospects and Challenges; India's external trade. Analysis of export performance. Why all organizations cannot go global Shipping terms and international trade terms. Information needs of exports.

**Unit II:**

Costing and pricing in international trade. Advantages and disadvantages of globalization.

**Unit III:**

Strategic export planning. Handling an export transaction. Export marketing Checklist; Selection of Markets: Choosing Markets; Export pricing; Management of export logistics. Documentation for export; processing of an export trade. Sales forecasting in international trade, Identifying geographical territories for expansion. Cultural factors affecting business in global market.

**Unit IV:**

Export credit system pre shipment and post- shipment, finance, medium and long term credit financing; ECGC; Transportation and shipment of cargo; Marine insurance of cargo; procedure for claiming rebate of excise duty. Import replenishment licensing procedures.

**Unit V:**

Generalized scheme of preferences. Sourcing and Transfer pricing mechanism. WTO related issues and IPR related issues impacting global trade.

Course Outcomes-

By the end of this module the student should be able to:

1. Critically analyse concepts, models, theories and issues relevant to international marketing.
2. Analyze the influences on, and the decisions involved in, the development and implementation of international marketing strategy.
3. Apply relevant knowledge and understanding to the analysis and creative solution of problems in international marketing and be able to communicate this through the medium of a management report.

**Reference Books:**

1. Rakesh M. Joshi, *International Marketing*, OUP, New Delhi, 2014
2. K. Lee and S. Carter, *Global Marketing Management*, OUP, New Delhi, 2012
3. Justin Paul and Rajiv Aserkar, *Export Import Management*, OUP, New Delhi, 2013

**MBA (Elective-Marketing)**  
**Product Management and Brand Building**  
**Subject Code: MBA165A**

**Objectives:**

To understand the product management functions and its strategic role. To learn the issues involved in the product management function through the cases and project. To understand Brand development and its sustenance in competitive market.

**Unit I:**

The product in corporate life, Corporate and product objective, product management role, responsibility, scope and functions. Product strategy and policy, optimum product pattern/line range.

**Unit II:**

New product development and launching. Challenge of change opportunity and risk-product innovation, modification, addition and elimination product proposals-sources, generation, processing and selection.

**Unit III:**

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Establishing techno-economic feasibility product testing and test marketing. Developing the strategy and the plan. Implementing the plan, coordination and control. Brand identity, Image, Equity, Brand Plan and Management, New Product Development Process.

**Unit IV:**

Organization for Product Management, Marketing manager product manager-brand manager concept, approaches and organizational role, product manager- functions and tasks-tools and techniques.

**Unit V:**

Brand extensions, acquisitions, Brand value, Consumer insight.

Course outcome

At the end of the course the students will be able to:

CO1: Understand the fundamental concepts of product and brand development and management.

Gain the tools to develop products and to analyze their success.

CO2: Evaluate new product ideas. Understand the development of a product over time.

CO3: Develop some sensitivity for the problem in strategic product management.

**Reference Books:**

1. Richard Elliot, *Strategic Brand Management*, OUP, New Delhi, 2007

2. Kirti Dutta, *Brand Management*, OUP, New Delhi, 2012

**MBA (Elective-Marketing)**  
**Consumer Behaviour and Market Research**  
**Subject Code: MBA163A**  
**Credit :(3 L)**

**Objectives:**

The subject explores the mysterious world of the consumer's psyche and guidelines to the students to understand what makes consumers to purchase a particular product or avail a particular service.

**Unit I**

Identifying and classifying customers, buying behavior, attitude of consumer, consumer perception.

**Unit II**

Factors influencing buying behavior; Reference groups, opinion leaders, social influences. Consumer behavior process; Understanding consumer motivation, personality and self concept, learning, memory.

**Unit III**

Research concepts; exploratory, descriptive and conclusive research. The marketing decision making process and the need of different types of research. Types of marketing problems and type of marketing research activity. Sources of data; use and appraisal of existing information.

**Unit IV**

Information from respondents, sampling design, scaling techniques and questionnaire design, interviewing, mail surveys.

**Unit V**

Information from experiment, experimental design for marketing, Motivational research, Advertising research, Analysis and reporting. Marketing Information Systems, Structure and design, its role in planning and control; the place of marketing research.

Course outcome-

1. Analyze the nature and scope of consumer behavior.
2. Define, illustrate and critically analyses the main components of consumer behavior.
3. Critically evaluate the existing theories of consumer behavior and their contributions and limitations.
4. Assess the implications of consumer behavior theories for business and wider society.
5. Critically examine alternative ways of thinking about consumers as individuals and within their families, groups and broader cultural context.

**MBA (Elective-Marketing)**  
**Sales and Distribution Management**  
**Subject Code:MBA167A**  
**Credit:(3 L)**

**Objectives:**

The course aims to impart skills and knowledge needed to manage sales force and distribution function so as to gain competitive advantage. As a successful marketer, the sales and distribution function needs to be properly managed this incorporates understanding of various concepts, which the course aims to provide to the student participants.

**Unit I:**

The Sales Management - Introduction to sales management and sales organization, Sales function & policies, Personal selling - nature, scope & objectives, Formulating Personal selling strategy.

**Unit II:**

Planning the Sales Effort - Sales planning and Budgeting, Estimating Market Potential and Sales forecasting, Setting the sales territory & quotas, Sales and cost Analysis.

**Unit III:**

Organizing and Directing the sales Force - Recurring and training sales personnel, Designing & compensating sales Personnel, Motivating and Leading the sales force, Evaluating sales force performance.

**Unit IV:**

Distribution Management - Managing marketing logistics & channels,

**Unit V:**

Channel Integration - VMS, HMS, Channel Management, and Marketing channel Policies & legal issue. Channel Institutions & control, Wholesaling &- Retailing, Channel Information systems, Managing & Evaluating Channel Performance Case & future trends in sales & distribution Management.

1. Tapan K. Panda and Sunil Sachdev, *Sales and Distribution Management*, OUP, New Delhi, 2011
2. P. K. Mallik, *Sales Management*, OUP, New Delhi, 2011
3. Dinesh Kumar, *Marketing Channels*, OUP, New Delhi, 2012

**MBA (Elective-Marketing)**  
**Rural Marketing**  
**Subject Code: MBA166A**  
**Credit: (3 L)**

**Objectives:**

To expose students to the reality of rural markets. To understand the problems, challenges in rural marketing. The objective of the course is to provide conceptual understanding on the Rural Marketing with special reference to Indian context and develop skills required for planning of Rural Products.

**Unit I**

Rural Marketing : Characteristics and Dimensions of Rural Markets - Rural Market Profile - Rural Market in India - Size and Scope - Environment and Emerging Profile of Rural Markets in India - Constraints in Rural Marketing and strategy to overcome the constraints.

**Unit II**

Rural Market Behavior ~ Rural consumer dimensions - Rural Demand Dimension - Tapping the Rural Markets - Rural Market Segmentation - Basis and Strategies - Consumer Behavior in Rural Markets - Approach to Rural Markets of India - Marketing Research.

**Unit III**

Marketing Mix for Rural Marketing - Product Planning for Rural Products - Pricing Methods and Strategies for Products of Rural Markets Product Management in Rural Markets.

**Unit IV**

Channels of Distribution : Distribution pattern and methods in rural markets - Special characteristics of rural channels - Channel management in rural markets - Managing physical distribution in rural markets - Storage, warehousing and transportation.

**Unit V**

Marketing Communication in Rural Markets : Promotion as a component in marketing communication - Advertising and sales promotion for rural markets - Major challenges in Media planning - Sales force management in rural markets - Selecting the Media Mix - Evaluation of promotional activities.



**Reference Books:**

1. Krishnamacharyalu, *Rural Marketing*, Pearson, New Delhi, 2011
2. Pradeep Kashyap, *Rural Marketing*, Pearson, New Delhi, 2012

**MBA (Elective-Marketing)**  
**Retail management**  
**Subject Code: MBA461A**  
**Credit: (3 L)**

**Objectives:**

To introduce the student to the field of retailing management and enable them to understand the problems and issues faced by retailers and develop winning strategies for retailing business.

**Unit I**

Introduction to Retail marketing – retail environment – the growing importance of retail industry.

**Unit II**

Consumer behavior in the retail context - buying decision process – its implication for retail management.

**Unit III**

Store lay out – design – Merchandising – private brands – national brands – merchandising buying and handling.

**Unit IV**

Retail Marketing Mix – 4 Ps – Merchandise Management – Negotiating Purchase.

**Unit V**

Consumerism and ethics in retailing – international retail structures – future of retailing

**Reference Books:**

1. P.K. Sinha, and D.P. Uniyal, *Managing Retailing*, OUP, New Delhi, 2012
2. Bajaj, Tuli, and Srivastava, *Retail Management*, OUP, New Delhi, 2010

MBA  
DATA SYMATRIX  
SESSION 2020-2022