

MBA (OPERATIONS & SUPPLY CHAIN MANAGEMENT)
(Course code – 47)

I SEMESTER

Sl.No.	Code	Course Title	Max. Marks	Minimum Passing Marks
1	MBAC 1001	Management Concepts & Organisational Behaviour	100	50
2	MBAC 1002	Managerial Economics	100	50
3	MBAC 1003	Accounting for Managers	100	50
4	MBAC 1004	Business Environment and Law	100	50
5	MBAC 1005	Research Methodology	100	50

II SEMESTER

Sl.No.	Code	Course Title	Max. Marks	Minimum Passing Marks
1	MBAC 2001	Financial Management	100	50
2	MBAC 2002	Marketing Management	100	50
3	MBAC 2003	Human Resources Management	100	50
4	MBAC 2004	Operations Research and Management	100	50
5	MBAC 2005	Strategic Management	100	50

III SEMESTER

Sl.No.	Code	Course Title	Max. Marks	Minimum Passing Marks
1	MBSC 3001	Production and Operations Management	100	50
2	MBSC 3002	Logistics Management	100	50
3	MBSC 3003	Supply Chain Management	100	50
4	MBSC 3004	Materials and Stores Management	100	50
5	MBSC 3005	Information System in Supply Chain Management	100	50

IV SEMESTER

Sl.No.	Code	Course Title	Max. Marks	Minimum Passing Marks
1	MBSC 4001	Project Management in Supply Chain Operations	100	50
2	MBSC 4002	Innovations and R&D Management	100	50
3	MBSC4003	Procurement and Quality Management	100	50
4	MBSC 4004	Customer Relationship Management	100	50
5	MBSC 4005	Global Supply Chain Management	100	50
6	MBSC 4006	Project Work (75 marks) + Viva-voce (25 marks)	100	50

MBA – I Semester

PAPER – I

MANAGEMENT CONCEPTS & ORGANISATIONAL BEHAVIOUR

Paper Code: MBAC1001

Objectives

- to provide conceptual understanding of Management Concepts
- to familiarize the students with the contemporary issues in Management
- to understand and appreciate the human behaviour in organisations

UNIT - I

Nature of Management - Social Responsibilities of Business - Manager and Environment Levels in Management - Managerial Skills - Planning - Steps in Planning Process - Scope and Limitations - Short Range and Long Range Planning - Flexibility in Planning Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies - Scope and Formulation - Decision Making - Techniques and Processes

UNIT – II

An Overview of Staffing, Directing and Controlling Functions - Organising - Organisation Structure and Design - Authority and Responsibility Relationships - Delegation of Authority and Decentralisation - Interdepartmental Coordination - Emerging Trends in Corporate Structure, Strategy and Culture - Impact of Technology on Organisational design - Mechanistic Vs Adoptive Structures - Formal and Informal Organisation

UNIT – III

Perception and Learning - Personality and Individual Differences - Motivation and Job Performance - Values, Attitudes and Beliefs - Stress Management - Communication Types-Process - Barriers - Making Communication Effective

UNIT – IV

Group Dynamics - Leadership - Styles - Approaches - Power and Politics - Organisational Structure - Organisational Climate and Culture - Organisational Change and Development.

UNIT – V

Comparative Management Styles and approaches - Japanese Management Practices Organisational Creativity and Innovation - Management of Innovation - Entrepreneurial Management - Benchmarking - Best Management Practices across the world - Select cases of Domestic & International Corporations - Management of Diversity.

REFERENCES

- Koontz, Weirich & Aryasri**, PRINCIPLES OF MANAGEMENT, *Tata McGraw-Hill, NewDelhi, 2004*
Tripathi & Reddy, PRINCIPLES OF MANAGEMENT, *Tata McGraw-Hill, New Delhi, 2008*
Laurie Mullins, MANAGEMENT AND ORGANISATIONAL BEHAVIOUR, *Pearson, NewDelhi, 2007*
Meenakshi Gupta, PRINCIPLES OF MANAGEMENT, *PHI Learning, NewDelhi, 2009*
Fred Luthans, ORGANISATIONAL BEHAVIOUR, *Tata McGraw-Hill, NewDelhi*
Stephen Robbins, ORGANISATIONAL BEHAVIOUR, *Pearson, New Delhi*
Ricky Griffin, MANAGEMENT: PRINCIPLES & APPLICATIONS, *Cengage, NewDelhi, 2008*

MBA – I Semester

PAPER – II MANAGERIAL ECONOMICS

Paper Code: MBAC1002

Objectives

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

UNIT – I

General Foundations of Managerial Economics - Economic Approach - Circular Flow of Activity - Nature of the Firm - Objectives of Firms - Demand Analysis and Estimation - Individual, Market and Firm demand - Determinants of demand - Elasticity measures and Business Decision Making - Demand Forecasting.

UNIT-II

Law of Variable Proportions - Theory of the Firm - Production Functions in the Short and Long Run - Cost Functions – Determinants of Costs – Cost Forecasting - Short Run and Long Run Costs –Type of Costs - Analysis of Risk and Uncertainty.

UNIT-III

Product Markets -Determination Under Different Markets - Market Structure – Perfect Competition – Monopoly – Monopolistic Competition – Duopoly - Oligopoly - Pricing and Employment of Inputs Under Different Market Structures – Price Discrimination - Degrees of Price Discrimination.

UNIT-IV

Introduction to National Income – National Income Concepts - Models of National Income Determination - Economic Indicators - Technology and Employment - Issues and Challenges – Business Cycles – Phases – Management of Cyclical Fluctuations - Fiscal and Monetary Policies.

UNIT – V

Macro Economic Environment - Economic Transition in India - A quick Review - Liberalization, Privatization and Globalization - Business and Government - Public-Private Participation (PPP) - Industrial Finance - Foreign Direct Investment(FDIs).

REFERENCES

- Yogesh Maheswari**, MANAGERIAL ECONOMICS, *PHI Learning, NewDelhi, 2005*
Gupta G.S., MANAGERIAL ECONOMICS, *Tata McGraw-Hill, New Delhi*
Moyer &Harris, MANAGERIAL ECONOMICS, *Cengage Learning, NewDelhi, 2005*
Geetika, Ghosh & Choudhury, , MANAGERIAL ECONOMICS, *Tata McGrawHill, NewDelhi, 2011*

PAPER –III
ACCOUNTING FOR MANAGERS

Paper code: MBAC1003

Objectives

- To acquaint the students with the fundamentals principles of Financial, Cost and Management Accounting
- To enable the students to prepare, Analyse and Interpret Financial Statements and
- To enable the students to take decisions using Management Accounting Tools.

UNIT-I

Book-keeping and Accounting – Financial Accounting – Concepts and Conventions – Double Entry System – Preparation of Journal, Ledger and Trial Balance – Preparation of Final Accounts –Trading, Profit and Loss Account and Balance Sheet with adjustment entries, simple problems only - Capital and Revenue Expenditure and Receipts.

UNIT-II

Depreciation – Causes – Methods of Calculating Depreciation – Straight Line Method, Diminishing Balance Method and Annuity Method - Ratio Analysis – Uses and Limitations – Classification of Ratios – Liquidity, Profitability, Financial and Turnover Ratios – Simple problems only.

UNIT-III

Funds Flow Analysis – Funds From Operation, Sources and Uses of Funds, Preparation of Schedule of Changes in Working Capital and Funds Flow Statements – Uses and Limitations - Cash Flow Analysis – Cash From Operation – Preparation of Cash Flow Statement – Uses and Limitations – Distinction between Funds flow and Cash Flow – only simple problems

UNIT-IV

Marginal Costing - Marginal cost and Marginal costing - Importance - Break-even Analysis - Cost Volume Profit Relationship – Application of Marginal Costing Techniques, Fixing Selling Price, Make or Buy, Accepting a foreign order, Deciding sales mix.

UNIT-V

Cost Accounting - Elements of Cost - Types of Costs - Preparation of Cost Sheet – Standard Costing – Variance Analysis – Material Variances – Labour Variances – simple problems related to Material and Labour Variances only

[Note: Distribution of Questions between Problems and Theory of this paper must be 60:40 i.e., Problem Questions: 60 % & Theory Questions: 40 %]

REFERENCES

- Jelsy Josheph Kuppapally**, ACCOUNTING FOR MANAGERS, *PHI, Delhi, 2010.*
Paresh shah, BASIC ACCOUNTING FOR MANAGERS, *Oxford, Delhi, 2007*
Ambrish Gupta, FINANCIAL ACCOUNTING FOR MANAGEMENT, *Pearson, Delhi, 2004*
Narayanaswamy R, FINANCIAL ACCOUNTING , *PHI, Delhi, 2011*

MBA - I Semester

**PAPER-IV
BUSINESS ENVIRONMENT AND LAW**

Paper Code: MBAC1004

Objectives

- To acquaint students with the issues of domestic and global environment in which business has to operate
- To relate the Impact of Environment on Business in an integrated manner, and
- To give an exposure to important commercial and industrial laws

UNIT – I

Dynamics of Business and its Environment – Technological, Political, Social and Cultural Environment - Corporate Governance and Social Responsibility - Ethics in Business - Economic Systems and Management Structure - Family Management to Professionalism - Resource Base of the Economy - Land, Forest, Water, Fisheries, Minerals - Environmental Issues.

UNIT - II

Infrastructure - Economic- Social, Demographic Issues, Political context - Productivity Factors, Human Elements and Issues for Improvement - Global Trends in Business and Management - MNCs - Foreign Capital and Collaboration - Trends in Indian Industry - The Capital Market Scenario.

UNIT - III

Law of Contract - Agreement - Offer - Acceptance - Consideration - Capacity of Contract Contingent Contract - Quasi Contract - Performance - Discharge - Remedies to breach of Contract - Partnership - Sale of Goods - Law of Insurance - Negotiable Instruments - Notes, Bills, Cheques - Crossing - Endorsement - Holder in due course - Holder in value - Contract of Agency.

UNIT - IV

Company - Formation - Memorandum - Articles - Prospectus - Shares - Debentures -Directors - Appointment - Powers and Duties - Meetings - Proceedings – Management - Accounts - Audit - Oppression and Mismanagement - Winding up.

UNIT - V

Factory Act – Licensing and Registration of Factories, Health, Safety and Welfare measures - Industrial Disputes Act – Objects and scope of the Act, Effects of Industrial Dispute, Administration under the Act- Minimum Wages Act - Workmen Compensation Act.

REFERENCES

Pathak, LEGAL ASPECTS OF BUSINESS, Tata McGraw- Hill Publishing Company Limited, New Delhi, 2010.

Keith-Davis & William Frederick, BUSINESS AND SOCIETY, McGraw-Hill, Tokyo.

M.M. Sulphery & Az-har Basheer, LAWS FOR BUSINESS, PHI Learning Pvt. Ltd. New Delhi, 2011

Maheswari & Maheswari, MERCANTILE LAW. Himalaya Publishing House. Mumbai

Rudder Dutt & Sundaram, INDIAN ECONOMY, Vikas Publishing House, New Delhi.

Veena Keshav Pailwar, ECONOMIC ENVIRONMENT OF BUSINESS, PHI Learning Pvt. Ltd, New Delhi, 2010

MBA-I Semester

PAPER-V RESEARCH METHODOLOGY

Paper code: MBAC1005

Objectives

- To enable the students to know about the information needs of Management
- To introduce the concept of Scientific Research and the methods of conducting Scientific Enquiry and
- To introduce the Statistical Tools of Data Analysis.

UNIT-I

Research – Qualities of Researcher – Components of Research Problem – Various Steps in Scientific Research – Types of Research – Hypotheses Research Purposes - Research Design – Survey Research – Case Study Research.

UNIT-II

Data Collection – Sources of Data – Primary Data – Secondary Data - Procedure Questionnaire – Sampling methods – Merits and Demerits – Experiments – Observation method – Sampling Errors - Type-I Error & Type-II Error.

UNIT-III

Statistical Analysis – Introduction to Statistics – Probability Theories – Conditional Probability, Poisson Distribution, Binomial Distribution and Properties of Normal Distributions – Hypothesis Tests – One Sample Test – Two Sample Tests / Chi-Square Test, Association of Attributes - Standard deviation – Co-efficient of variations .

UNIT-IV

Statistical Applications – Correlation and Regression Analysis – Analysis of Variance – Partial and Multiple Correlation – Factor Analysis and Conjoint Analysis – Multifactor Evaluation – Two-Factor Evaluation Approaches.

UNIT-V

Research Reports – Structure and Components of Research Report – Types of Report, characteristics of Good Research Report, Pictures and Graphs, Introduction to SPSS.

[Note: Distribution of Questions between Problems and Theory of this paper must be 40:60 i.e., Problem Questions: 40 % & Theory Questions: 60 %]

REFERENCES

Panneerselvam, R., RESEARCH METHODOLOGY, *Prentice Hall of India, New Delhi, 2004.*
Kothari CR , RESEARCH METHODOLOGY-METHODS AND TECHNIQUES, *New Wiley Eastern Ltd., Delhi, 2009.*

MBA - II Semester

**PAPER-VI
FINANCIAL MANAGEMENT**

Paper code: MBAC2001

Objectives

- To know the various sources of finance
- To understand the various uses for finance and
- To familiarize oneself with the techniques used in financial management.

UNIT-I

Financial Management – Financial goals - Profit vs. Wealth Maximization; Finance Functions – Investment, Financing and Dividend Decisions – Cost of Capital – Significance of Cost of Capital – Calculation of Cost of Debt – Cost of Preference Capital – Cost of Equity Capital (CAPM Model and Gordon’s Model) and Cost of Retained Earnings – Combined Cost of Capital (weighted/Overall).

UNIT-II

Capital Budgeting – Nature of Investment Decisions – Investment Evaluation criteria – Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index (PI), Payback Period, Accounting Rate of Return (ARR) – NPV and IRR comparison.

UNIT-III

Operating and Financial Leverage – Measurement of Leverages – Effects of Operating and Financial Leverage on Profit – Analyzing Alternate Financial Plans - Combined Financial and Operating Leverage – Capital Structure Theories - Traditional approach - M.M. Hypotheses – without Taxes and with Taxes – Net Income Approach (NI) – Net Operating Income Approach (NOI) - Determining capital structure in practice.

UNIT- IV

Dividend Policies – Issues in Dividend Decisions – Relevance Theory – Walter's Model – Gordon's Model – Irrelevance Theory – M-M hypothesis - Dividend Policy in Practice – Forms of Dividends – Stability in Dividend Policy – Corporate Dividend Behaviour.

UNIT-V

Management of Working Capital – Significance and types of Working Capital – Calculating Operating Cycle Period and Estimation of Working Capital Requirements – Financing of Working Capital and norms of Bank Finance – Sources of Working capital – Factoring services– Various committee reports on Bank Finance – Dimensions of Working Capital Management.

[Note: Distribution of Questions between Problems and Theory of this paper must be 40:60 i.e., Problem Questions: 40 % & Theory Questions: 60 %]

REFERENCES

Khan MY, Jain PK, BASIC FINANCIAL MANAGEMENT, *Tata McGraw Hill, Delhi, 2005.*
Chandra, Prasanna, FINANCIAL MANAGEMENT, *Tata McGraw Hill, Delhi.*
Bhabatosh Banerjee, FUNDAMENTALS OF FINANCIAL MANAGEMENT, *PHI, Delhi,*
Chandra Bose D, FUNDAMENTALS OF FINANCIAL MANAGEMENT, *PHI, Delhi, 2010*
Preeti Singh, FUNDAMENTALS OF FINANCIAL MANAGEMENT, *Ane, 2011.*

MBA- II Semester

PAPER-VII MARKETING MANAGEMENT

Paper Code: MBAC2002

Objectives

- To familiarize with the basic concepts, and techniques of marketing management
- To understand the behaviour of consumers
- To create awareness of marketing mix elements, and
- To analyse and solve marketing problems in the complex and fast changing business environment.

UNIT-I

Introduction to Marketing and Marketing Management, Marketing Concepts - Marketing Process
Marketing mix - Marketing environment. - Consumer Markets and buying behaviour - Market segmentation and targeting and positioning.

UNIT-II

Product Decisions - concept of a Product - Product mix decisions - Brand Decision - New Product Development – Sources of New Product idea - Steps in Product Development - Product Life Cycle strategies- Stages in Product Life Cycle,

UNIT-III

Price Decisions - Pricing objectives - Pricing policies and constraints - Different pricing method - New product pricing, Product Mix pricing strategies and Price adjustment strategy.

UNIT-IV

Channel Decision - Nature of Marketing Channels –. Types of Channel flows - Channel functions - Functions of Distribution Channel – Structure and Design of Marketing Channels - Channel co-operation, conflict and competition – Retailers and wholesalers.

UNIT - V

Promotion Decision - Promotion mix - Advertising Decision, Advertising objectives - Advertising and Sales Promotion – Developing Advertising Programme – Role of Media in Advertising - Advertisement effectiveness - - Sales force Decision.

REFERENCE

K.S. Chandrasekar, MARKETING MANAGEMENT TEXT AND CASES, *Tata McGraw-Hill Publication, New Delhi.2010*

Govindarajan, MARKETING MANAGEMENT CONCEPTS, CASES, CHALLENGES AND TRENDS, *Prentice Hall of India, New Delhi. 2009*

Philip Kotler, MARKETING MANAGEMENT- ANALYSIS PLANNING AND CONTROL, *Prentice Hall of India, New Delhi,*

Ramaswamy. V S & Namakumari. S, MARKETING MANAGEMENT-PLANNING IMPLEMENTATION AND CONTROL, *Macmillan Business Books, New Delhi, 2002,*

MBA – II Semester

PAPER – VIII HUMAN RESOURCES MANAGEMENT

Paper Code: MBAC2003

Objectives

- To understand and appreciate the importance of the human resources vis-a-vis other resources of the organisation
- To familiarize the students with methods and techniques of HRM
- To equip them with the application of the HRM tools in real world business situations.

UNIT-I

Human Resources Management - Context and Concept of People Management in a Systems Perspective - Organisation and Functions of the HR and Personnel Department - HR Structure and Strategy; Role of Government and Personnel Environment including MNCs.

UNIT – II

Recruitment and Selection - Human Resource Information System [HRIS] - Manpower Planning - Selection – Induction & Orientation - Performance and Potential Appraisal - Coaching and Mentoring - HRM issues and practices in the context of Outsourcing as a strategy

UNIT-III

Human Resources Development – Training and Development Methods - Design & Evaluation of T&D Programmes - Career Development - Promotions and Transfers - Personnel Empowerment including Delegation - Retirement and Other Separation Processes.

UNIT-IV

Financial Compensation- -Productivity and Morale - Principal Compensation Issues & Management - Job Evaluation - Productivity, Employee Morale and Motivation - Stress Management - Quality of Work Life.

UNIT – V

Building Relationships – Facilitating Legislative Framework - Trade Unions - Managing Conflicts - Disciplinary Process - Collective Bargaining - Workers Participation in Management - Concept, Mechanisms and Experiences.

REFERENCES

Venkata Ratnam C. S. & Srivatsava B. K., PERSONNEL MANAGEMENT AND HUMAN RESOURCES, *Tata Mc-Graw Hill, NewDelhi,*,

Aswathappa, HUMAN RESOURCE MANGEMENT, *Tata McGraw Hill, NewDelhi, 2010*

Garry Dessler & Varkkey, HUMAN RESOURCE MANAGEMENT, *Pearson, New Delhi, 2009*

Alan Price, HUMAN RESOURCE MANAGEMENT, *Cengage Learning, NewDelhi, 2007*

Pravin Durai, HUMAN RESOURCE MANGEMENT, *Pearson, New Delhi, 2010*

Snell, Bohlander & Vohra, HUMAN RESOURCES MANAGEMENT, *Cengage, NewDelhi, 2010*

MBA – II Semester

**PAPER – IX
OPERATIONS RESEARCH AND MANAGEMENT**

Paper Code: MBAC2004

Objectives

- To familiarize the Operations Management concepts
- To introduce various optimization techniques with managerial perspective
- To facilitate the use of Operations Research techniques in managerial decisions.

UNIT –I

Introduction to Operations Management - Process Planning - Plant Location - Plant Lay out - Introduction to Production Planning.

UNIT –II

Stages of Development of Operations Research- Applications of Operations Research- Limitations of Operations Research- Introduction to Linear Programming- Graphical Method- Simplex Method - Duality.

UNIT-III

Transportation Problem- Assignment Problem - Inventory Control - Introduction to Inventory Management - Basic Deterministic Models - Purchase Models - Manufacturing Models with and without Shortages.

UNIT-IV

Shortest Path Problem - Minimum Spanning Tree Problem - CPM/PERT - Crashing of a Project Network.

UNIT- V

Game Theory- Two Person Zero-sum Games -Graphical Solution of (2 x n) and (m x 2) Games - LP Approach to Game Theory - Goal programming - Formulations - Introduction to Queuing Theory - Basic Waiting Line Models: (M/M/1):(GD/a/a), (M/M/C):GD/a/a).

[Note: Distribution of Questions between Problems and Theory of this paper must be 60: 40 i.e, Problem Questions: 60 % & Theory Questions : 40 %]

REFERENCES

Kanishka Bedi, PRODUCTION & OPERATIONS MANAGEMENT, *Oxford, NewDelhi, 2007*

Panneerselvam, R, OPERATIONS RESEARCH, *Prentice-Hall of India, New Delhi, 2002.*

G.Srinivasan, OPERATIONS RESEARCH, *PHI Learning, NewDelhi,2010*

Tulsian & Pandey, QUANTITATIVE TECHNIQUES, *Pearson, NewDelhi, 2002*

Vohra, QUANTATIVE TECHNIQUES IN MANAGEMENT, *Tata McGrawHill, NewDelhi, 2010*

MBA- II Semester

PAPER-X STRATEGIC MANAGEMENT

Paper Code: MBAC2005

Objectives

- Integrating the knowledge gained in functional areas of management
- helping the students to learn about the process of strategic management, and
- helping the students to learn about strategy formulation and implementation

UNIT-I

Concepts of Strategy - Levels at which strategy operates; Approaches to strategic decision making; Mission and purpose, objectives and goals; Strategic business unit (SBU); Functional level strategies

UNIT-II

Environmental Analysis and Diagnosis - Environment and its components; Environment scanning and appraisal; Organizational appraisal; Strategic advantage analysis and diagnosis; SWOT analysis

UNIT-III

Strategy Formulation and Choice - Modernization, Diversification Integration - Merger, take-over and joint strategies - Turnaround, Divestment and Liquidation strategies - Strategic choice - Industry, competitor and SWOT analysis - Factors affecting strategic choice; Generic competitive strategies - Cost leadership, Differentiation, Focus, Value chain analysis, Benchmarking, Service blue printing

UNIT-IV

Functional Strategies: Marketing, production/operations and R&D plans and policies- Personnel and financial plans and policies.

UNIT-V

Strategy Implementation - Inter - relationship between formulation and implementation - Issues in strategy implementation - Resource allocation - Strategy and Structure - Structural considerations - Organizational Design and change - Strategy Evaluation- Overview of strategic evaluation; strategic control; Techniques of strategic evaluation and control.

REFERENCES

Azhar Kazmi, STRATEGIC MANAGEMENT & BUSINESS POLICY, *Tata McGraw-Hill Publishing Company Limited, New Delhi 2008.*

Vipin Gupta, Kamala Gollakota & Srinivasan, BUSINESS POLICY & STRATEGIC MANAGEMENT, *Prentice Hall of India Private Limited, New Delhi, 2008.*

Amita Mittal, CASES IN STRATEGIC MANAGEMENT, *Tata McGraw-Hill Publishing Company Limited, New Delhi 2008.*

Fred R. David, STRATEGIC MANAGEMENT CONCEPT AND CASES, *PHI Learning Private Limited, New Delhi, 2008.*

MBA (Operations & Supply Chain Management) – III Semester

**PAPER - XI
PRODUCTION AND OPERATIONS MANAGEMENT**

Paper Code: MBSC3001

Objectives

- To understand the concepts and principles of Production and Operations
- To appreciate the importance of quality in Production Management
- To apply the productivity improvement techniques

UNIT I

Transformation process model: Inputs, Process and outputs; Classification of operations; Responsibilities of Operations Manager; New Product Development, Selection and Design of Product / Services.

UNIT II

Process types in manufacturing: Project, jobbing, batch, line, mass, continuous; Process types in services: professional services, services shops, mass services; Plant location; Layout planning.

UNIT III

Production Planning & Control: Production planning techniques for various process choices, Techniques of production control, Aggregate planning techniques,

UNIT IV

Quality management: Introduction; Meaning; Quality characteristics of goods and services; Tools and techniques for quality improvement: check sheet, histogram, scatter diagram, cause and effect diagram, Pareto chart, process diagram, statistical process control chart; Quality assurance; Total quality management (TQM) model; Service quality, concept of Six Sigma and its application.

UNIT V

Productivity Improvement Techniques: Work study; Method study; Work measurement: time study: stop watch time study; Work sampling. Maintenance: maintenance policies for facilities and equipment; Time of failure; Preventive versus breakdown maintenance; Procedure for maintenance, total productive maintenance (TPM)

REFERENCES

Adam Jr Everetl E. R J, PRODUCTION AND OPERATIONS MANAGEMENT , *Prentice-Hall, 1992, 2000 5th ed.*

Chary, PRODUCTION AND OPERATIONS MANAGEMENT, *Tata McGraw-Hill, 1997 9th e*

Hill T, OPERATIONS MANAGEMENT , *Palgrave, 2000*

Haleem A, PRODUCTION AND OPERATIONS MANAGEMENT , *Galgotia Publication, 2004*

Shanker Ravi, *Industrial Engineering, Galgotia Publication.*

Kanishka Bedi, PRODUCTION & OPERATIONS MANAGEMENT, *Oxford University Press*

MBA (Operations & Supply Chain Management) – III Semester

PAPER - XII LOGISTICS MANAGEMENT

Paper Code: MBSC3002

Objectives

- To introduce process and functions of logistics system
- To understand the major building blocks, functions, business process, performance metrics and decision making in supply chain network, and
- To provide an insight into the role of Internet Technologies in Logistics Management

UNIT I

Introduction to logistics management- Definition, scope, functions, objectives - Integrated logistics management, role of logistics in the Supply chain - Logistics & customer service, Role of logistics in competitive strategy, Logistics organization & performance measurement, ERP – SAP - ORACLE

UNIT II

Inventory planning- inventory costs, classifying inventory, Nature & importance of warehousing, types of warehouses, warehousing functions, warehouse layout & design. Material handling -objectives, guidelines & principles, selection of material handling equipments. Packaging-role of packaging, packaging materials, consumer & industrial packaging, material handling efficiency

UNIT III

Transportation- role of transportation in logistics, transportation selection decision, basic modes of transportation- Rail, Road, Water, Air, Pipeline- characteristics of different modes-transport economics - Inter modal operations

UNIT IV

Containerization-concept, types, benefits, Types of carriers- indirect & special carriers, Role of intermediaries- shipping agents, brokers- freight management- route planning Role of ports, ICDs, CONCOR - Global shipping options

UNIT V

Reverse logistics- scope, design, e-logistics- logistics information system-application of IT in logistics- automatic identification technologies- bar coding, RFID, Logistics outsourcing- 3PL & 4PL, Global logistics- operational & strategic issues

REFERENCES

Ailawadi C Sathish & Rakesh, LOGISTICS MANAGEMENT, *Prentice Hall, India, 2005*
Agrawal D K, LOGISTICS & SUPPLY CHAIN MANAGEMENT , *Macmillan India Ltd, 2003*
Coyle et al., THE MANAGEMENT OF BUSINESS LOGISTICS, *Thomson, 7th ed., 2004*
Bowersox Donald J, LOGISTICAL MANAGEMENT- THE INTEGRATED SUPPLY CHAIN PROCESS, *Tata McGraw Hill, 2000*

**MBA (Operations & Supply Chain Management) – III Semester
PAPER - XIII**

SUPPLY CHAIN MANAGEMENT

Paper Code: MBSC3003

Objectives

- To introduce process and functions of supply chain management
- Appreciate the design and network in supply chain management
- To understand the role of coordination in supply chain management

UNIT I

Introduction to Supply Chain Management- Supply chain – objectives – importance – decision phases – process view – competitive and supply chain strategies – achieving strategic fit – supply chain drivers – obstacles – framework – facilities – inventory – transportation – information – sourcing – pricing.

UNIT II

Designing the Supply Chain Network- Designing the distribution network – role of distribution – factors influencing distribution – design options – e-business and its impact – distribution networks in practice – network design in the supply chain – role of network – factors affecting the network design decisions – modeling for supply chain.

UNIT III

Planning Demand and Supply- Role of forecasting – demand forecasting – approaches – role of IT.

Planning and Managing Inventories- Safety inventory and its appropriate level – impact of supply uncertainty, aggregation and replenishment policies.

UNIT IV

Transportation Networks and Sourcing- Role of transportation – modes and their performance – transportation infrastructure and policies - design options and their trade-offs – Tailored transportation. Sourcing – In-house or Outsource – 3rd and 4th PLs – supplier scoring and assessment.

UNIT V

Coordination in a Supply Chain- Lack of supply chain coordination and the Bullwhip effect – obstacle to coordination – managerial levels – building partnerships and trust – continuous replenishment and vendor-managed inventories – collaborative planning, forecasting and replenishment.

REFERENCES

Sunil Chopra and Peter Meindl, SUPPLY CHAIN MANAGEMENT – STRATEGY, PLANNING AND OPERATION, *PHI, 4th Edition, 2010.*

Wisner, Keong Leong and Keah-Choon Tan, PRINCIPLES OF SUPPLY CHAIN MANAGEMENT A BALANCED APPROACH, *Thomson Press, 2005.*

Coyle, Bardi, Longley, THE MANAGEMENT OF BUSINESS LOGISTICS – A SUPPLY CHAIN PERSPECTIVE, *Thomson Press, 2006.*

Jeremy F Shapiro, MODELING THE SUPPLY CHAIN, *Thomson duxbury 2002.*

**MBA (Operations & Supply Chain Management) – III Semester
PAPER - XIV**

MATERIALS AND STORE MANAGEMENT

Paper Code: MBSC3004

Objectives

- To understand the concepts and principles materials and store management
- To appreciate the role of store management and forecasting
- To analyze the management aspects of health and safety in work

UNIT I

Determination of Stockholding Policy. Customer expectations – internal/external; supply market conditions; Categories of risks and their evaluation; Requirements of the business and the need for stock; Economics constraints; methods of avoiding carrying stock; General control methods e.g. ABC analysis. Control of Stock Range Coding, classification and categorization methods;

UNIT II

Variety reduction and standardization; Application and approval of new stock items; Control of slow moving; obsolete and redundant stock; Role of and function in determining stock range, Control of Stock Levels Forecasting techniques in relation to demand and lead times; Independent demand situations and the use of fixed order quantity and periodic review systems; Techniques for dealing with dependent demand.

UNIT III

The Kanban approach and Just in Time philosophy; Coping with uncertainty in achieving required service levels; Suppliers contribution to controlling stock. Management of Storage Facilities. Identifying types of commodities to be stored and their characteristics with regard to storage and handling needs; Materials requirements planning (MRP) and manufacturing resource planning (MRPII) and distribution requirements planning (DRP); Pull systems.

UNIT IV

Physical Management of Stock Selection and operation of appropriate storage and materials handling equipment – general outline; Methods of stores layout to optimize the use of space and minimize picking costs; Outsourcing the activity and vendor managed inventory; Maintenance of security and prevention of theft; Storage and disposal of redundant, obsolete and scrap items; Environmental issues.

UNIT V

Management Aspects Health and Safety at work – operational issues: Health and Safety at work – management issues interdependence and teamwork; Relationships with other functions. Relevant Techniques Use of operational research techniques of queuing theory, network analysis, simple simulation techniques and decision trees; Identifying methods to distinguish between stores efficiency and effectiveness; Benchmarking and measurement of performance.

REFERENCES

Jessop & Morrison, STORAGE AND SUPPLY OF MATERIALS,

Duru C. Innocent, PURCHASING AND STORES MANAGEMENT, *Ken Printing Press*,

Terry Lucey, QUANTITATIVE TECHNIQUES, *Letts Educational, 5th Edition*.

Dobler & Burt. PURCHASING & SUPPLY MANAGEMENT

MBA (Operations & Supply Chain Management) – III Semester

**PAPER - XV
INFORMATION SYSTEM IN SUPPLY CHAIN MANAGEMENT**

Paper Code: MBSC3005

Objectives

- To appreciate the role of IT in supply chain
- To understand data mining in supply chain
- To analyze IT practices in supply chain

UNIT I

The role of IT in Supply Chain .Uses of IT in inventories, Transportation & facilities within a Supply Chain .The Supply Chain IT frame work-macro Processes

UNIT II

The future of IT in the Supply Chain, Internal Supply Chain management, Supply Relationship Management, The Transaction Management Foundation .Data mining –Methods application area in Supply Chain

UNIT III

Goals of Supply Chain information Technology, Standardization, information Technology infrastructure Presentation Devices, Communication Devices .Data base, System architecture.

UNIT IV

The Supply Chain IT in Practice, Integrating Supply Chain Information Technology, Stage of Development, Implementation of ERP & DSS. Structure of DSS. Selection of Supply Chain DSS. Supply Chain master Planning.

UNIT V

Supply Chain Information System Design – Planning, Capacity, Performance requirement' manufacturing requirement, Operation, Transportation, Inventory Development .E-Business – Role in Supply chain, Framework, Impact on Cost.

REFERENCES

David Simchi-Levi et al, DESIGNING AND MANAGING THE SUPPLY CHAIN – CONCEPTS, STRATEGIES, AND CASE STUDIES, *McGraw Hill International Edition 2003*.

N. Chandrasekaran, SUPPLY CHAIN MANAGEMENT, *Oxford University Press, New Delhi 2010*

Donald J Bowersox et al, SUPPLY CHAIN LOGISTICS MANAGEMENT, *McGrawe hlll Education (India) Pvt. Ltd.New Delhi 2007*

MBA (Operations & Supply Chain Management) – IV Semester

**PAPER - XVI
PROJECT MANAGEMENT IN SUPPLY CHAIN OPERATIONS**

Paper Code: MBSC4001

Objectives

- To understand the role of project management
- To understand the technique to manage conflict in project planning
- To appreciate the role of IT in project management

UNIT I

Introduction – Project life cycle – Project selection – Types of project selection models –Project manager – Selection of Project Manager.

UNIT II

Project Organization – types – Project planning. Sorting out the project – Work breakdown structure and Linear Responsibility charts – Conflict and Negotiation – Conflict and Project life cycle – some requirements and principles of negotiation.

UNIT III

Budgeting and cost estimation – Scheduling – Network techniques: PERT and CPM –Gantt charts – Resource allocation – Resource loading – Resource Leveling.

UNIT IV

Monitoring and Information Systems – Project Control – Types of control processes –Control as a function of Management.

UNIT V

Project auditing – Purposes of evaluation – Project Audit Life Cycle – Project termination – Termination process.

REFERENCES

Jack R. Meredith & Samuel J. Mantel, PROJECT MANAGEMENT – A MANAGERIAL APPROACH

Prasanna Chandra, PROJECTS PLANNING, ANALYSIS, SELECTION, IMPLEMENTATION AND REVIEW

P. Gopalakrishnan & V.E. Ramamoorthy, TEXTBOOK OF PROJECT MANAGEMENT

Richard B. Chase et al, OPERATIONS AND SUPPLY CHAIN MANAGEMENT, *Tata McGraw Hill education Pvt. Ltd, New delhi2010*

MBA (Operations & Supply Chain Management) – IV Semester

**PAPER - XVII
INNOVATIONS AND R&D MANAGEMENT**

Paper Code: MBSC4002

Objectives

- To understand the managerial aspects of Innovation functions
- To appreciate the Research & Development in management
- To evaluate the financial aspects of R&D projects

UNIT I

Introduction & Managerial aspects of Innovation function

Introduction, Components of Innovation, Types of Innovations, Models of Innovation Processes, Evolution and characteristics of Innovation Management, Key drivers of Innovation, Factors influencing Innovation,

Organizing for Innovation, Factors influencing organizational design, Developing Innovation Strategy, Characteristics of creative of creative organization.

UNIT II

Research and Development Management-

Introduction, Meaning, Objectives, Significance, Classification of R&D according to R&D type, process phase, measurement level, purpose of measurement and measurement perspective. Technology development approaches, Performance of R&D management in Indian scenario.

UNIT III

Financial Evaluation of R&D Projects

Introduction, Cost effectiveness of R&D, R&D financial forecasts, Project selection, Evaluating R&D ventures, Conflicting views of managers. Allocation of resources, R&D programme planning and control. Project management, Project Planning and Control Techniques.

UNIT IV

Organization R&D and innovation, HRM issues in innovation and R&D, Leadership and R&D management, Organization Design and structure of R&D, R&D Project Management, Measurement, Evaluation and assessment of R&D

UNIT V

National R&D infrastructure and Institutional Framework, Fiscal and other incentives and Promotional /Support measures, Industry, Institutions and government cooperations. Other important issues in R&D management, Commercialization of R&D.

REFERENCES

White, THE MANAGEMENT OF TECHNOLOGY AND INNOVATION-A STRATEGIC APPROACH, Cengage Publication

S Moikal, INNOVATION MANAGEMENT, Sage Publication

C.K Prahalad & M.S. Krishnan, THE NEW AGE OF INNOVATION, Tata McGraw Hill Education Pvt. Ltd. New Delhi 2008.

MBA (Operations & Supply Chain Management) – IV Semester

**PAPER - XVIII
PROCUREMENT AND QUALITY MANAGEMENT**

Paper Code: MBSC4003

Objectives

- To understand the concepts of quality in supply chain
- To appreciate the role quality control in supply chain
- To analyze benefit and risk in outsourcing

UNIT I

Definition of Quality, Quality Standard, Quality Control, Aspects of Quality Control, Quality Control of Purchased Materials in a Supply Chain.

UNIT II

General Problems of Vendor Quality, Suppliers Quality Survey, Model for evaluation of Suppliers Quality.

UNIT III

Management Action for Quality Assurance, Activities under Quality Assurance, Evaluating Product Quality, Control Chart – Mean & Range.

UNIT IV

Element of Quality Management, Benefits, Six Sigma Quality Control, Principles, Benefits, Steps of Six Sigma.

UNIT V

Benefits and Risk of Outsourcing, What is E-Procurement, Framework of E-Procurement.

REFERENCES

David Simchi-Levi, Philip Kamiusky, Edith Simchi Levi, DESIGNING & MANAGING THE SUPPLY CHAIN, Tata Mc Graw Hill

Dr. R.P. Mohanty & Dr. S.G. Deshmukh, ESSENTIALS OF SUPPLY CHAIN MANAGEMENT, Jaico Publishing House

L.C. Jhamb, PRODUCTION MANAGEMENT, EPH.

Richard B. Chase et al, OPERATIONS AND SUPPLY CHAIN MANAGEMENT, Tata McGraw Hill education Pvt. Ltd, New delhi2010

MBA (Operations & Supply Chain Management) – IV Semester

PAPER-XIX CUSTOMER RELATIONSHIP MANAGEMENT

Paper Code: MBSC4004

Objectives

- To understand the concepts and principles of CRM
- To appreciate the role and changing face of CRM as an IT enabled function, and
- To enable managing Customer Relationship.

UNIT I

CRM concepts - Acquiring customers, - Customer loyalty and optimizing customer relationships - CRM defined - success factors, the three levels of Service/ Sales Profiling - Service Level Agreements (SLAs), creating and managing effective SLAs.

UNIT II

CRM in Marketing - One-to-one Relationship Marketing - Cross Selling & Up Selling - Customer Retention, Behaviour Prediction - Customer Profitability & Value Modeling, - Channel Optimization - Event-based marketing. - CRM and Customer Service - The Call Centre, Call Scripting - Customer Satisfaction Measurement.

UNIT III

Sales Force Automation - Sales Process, Activity, Contact- Lead and Knowledge Management -Field Force Automation. - CRM links in e-Business - E-Commerce and Customer Relationships on the Internet - Enterprise Resource Planning (ERP), - Supply Chain Management (SCM), - Supplier Relationship Management (SRM), - Partner relationship Management (PRM).

UNIT IV

Analytical CRM - Managing and sharing customer data - Customer information databases - Ethics and legalities of data use - Data Warehousing and Data Mining concepts - Data analysis - Market Basket Analysis (MBA), Click stream Analysis, Personalization and Collaborative Filtering.

UNIT V

CRM Implementation - Defining success factors - Preparing a business plan requirements, justification and processes. - Choosing CRM tools - Defining functionalities - Homegrown versus out-sourced approaches - Managing customer relationships - conflict, complacency, resetting the CRM strategy. Selling CRM internally - CRM development Team - Scoping and prioritizing - Development and delivery - Measurement.

REFERENCES

Alok Kumar Rai, CUSTOMER RELATIONSHIP MANAGEMENT CONCEPT & CASES, *Prentice Hall of India Private Limited, New Delhi, 2011*

S. Shanmugasundaram, CUSTOMER RELATIONSHIP MANAGEMENT, *Prentice Hall of India Private Limited, New Delhi, 2008*

Kaushik Mukherjee, CUSTOMER RELATIONSHIP MANAGEMENT, *Prentice Hall of India Private Limited, New Delhi, 2008*

Jagdish Seth, et al, CUSTOMER RELATIONSHIP MANAGEMENT

V. Kumar & Werner J., CUSTOMER RELATIONSHIP MANAGEMENT, *Willey India, 2008*

MBA (Operations & Supply Chain Management) IV Semester

PAPER - XX

GLOBAL SUPPLY CHAIN MANAGEMENT

Paper Code: MBSC4005

Objectives

- To understand the global market force in supply chain
- To analyze risks and advantages in supply chain
- To appreciate green supply chain indicators

UNIT I

Introduction, Forces of Global Supply Chain- Global market force, Technology force, Global cost force, Political force. Stages of International Development.

UNIT II

Risk of Global Supply Chain- Speculative Strategies, Hedge Strategies, Flexible Strategies Requirements for Global Strategy implementation, Advantages of Global Supply Chain. Supply Chain security.

UNIT III

Issues in international Supply Chain Management –International Versus Regional Product, Local autonomy versus control logistics –Importing & Exporting, Main forces, Barriers

UNIT IV

The Global Supply Chain-Performance Cycle length, operations, system integration, Alliances, Views of Global Logistics –Importing & Exporting, Main force.

UNIT V

Green Supply Chain –Strategies. Green Supply Chain indicators, Strategic, tactical, Operational. Wastivity in Supply Chain.

REFERENCES

Sunil Chopra & PeterMeindl, SUPPLY CHAIN MANAGEMENT , *PHI*

Donald J. Bowersox David J. Closs, LOGISTICAL MANAGEMENT , *TATA MC GRAWHILL*

Dr. R.P.Mohanty & Dr. S.G.Deshmukh ESSENTIALS OF SUPPLY CHAIN MANAGEMENT, *Jaico Student Edition*