



# **Punjab Technical University Jalandhar**

## **Syllabus Scheme**

(1<sup>st</sup> to 4<sup>th</sup> Semester)  
For

## **Master of Business Administration (MBA)**

Implemented  
From Aug. 2005 and onward

### STUDY SCHEME OF MBA

		Total Hrs. (Lec+Pra)	Marks Int.	Marks Ext.	Total Marks
<b>SEMESTER –1</b>					
MBA 101	Principles & Practices of Management	40	25	75	100
MBA 102	Organizational Behaviour	40	25	75	100
MBA 103	Accounting for Management	40	25	75	100
MBA 104	Quantitative Techniques	50	25	75	100
MBA 105	Managerial Economics	40	25	75	100
MBA 106	Communication & Soft Skills	30	50	0	50
MBA 107	Seminar on Executive Communication	15	50	0	50
MBA 108	Workshop on Computers for Management	15	50	0	50
MBA 109	Viva-voce		25	75	100
<b>TOTAL</b>		<b>270</b>	<b>300</b>	<b>450</b>	<b>750</b>
<b>SEMESTER –2</b>					
MBA 201	Business Environment	35	25	75	100
MBA 202	Production and Operations Management	35	25	75	100
MBA 203	Human Resource Management	40	25	75	100
MBA 204	Marketing Management	35	25	75	100
MBA 205	Financial Management	45	25	75	100
MBA 206	Workshop on Research Methodology	30	50	0	50
MBA 207	Workshop on Information Technology	20	50	0	50
MBA 208	Viva-Voce		25	75	100
<b>TOTAL</b>		<b>240</b>	<b>250</b>	<b>450</b>	<b>700</b>

**SEMESTER –3**

MBA 301	Applied Operations Research	50	25	75	100
MBA 302	Corporate Legal Environment	50	25	75	100
MBA 303	Major I	40	25	75	100
MBA 304	Major II	40	25	75	100
MBA 305	Major III	40	25	75	100
MBA 306	Seminar on Management Information Systems	20	100	0	100
MBA 308	Viva-Voce		25	75	100
<b>TOTAL</b>		<b>240</b>	<b>250</b>	<b>450</b>	<b>700</b>

**SEMESTER –4**

MBA 401	Strategic Management	45	25	75	100
MBA 402	Project Evaluation & Implementation	45	25	75	100
MBA 403	Major IV / Minor I	50	25	75	100
MBA 404	Major V / Minor II	50	25	75	100
MBA 405	Major VI / Minor III	50	25	75	100
MBA 406	Final Research Project & Viva-Voce			200	200
<b>TOTAL</b>		<b>240</b>	<b>125</b>	<b>575</b>	<b>700</b>

**Specialization Group – Marketing**

MB 502 Advertising & Sales Management  
 MB 503 Services Marketing  
 MB 504 Consumer Behaviour  
 MB 506 International Marketing  
 MB 507 Rural Marketing  
 MB 509 Product & Brand Management

**Specialization Group – Finance**

MB 511 Financial Services  
 MB 512 Security Analysis & Portfolio Management  
 MB 513 Management of Financial Institutions  
 MB 516 Working Capital Management  
 MB 517 Capital Budgeting  
 MB 518 Management Control Systems

**Specialization Group – Human Resource Management**

MB 531 Organisation Development  
 MB 532 Human Resource Development  
 MB 533 Advanced Industrial Psychology  
 MB 534 Industrial Relations & Labour Laws  
 MB 536 Collective Bargaining & Wage Policy  
 MB 537 International Human Resource Management

**Specialization Group – Information Technology**

MB 541 Programming in C / C++  
 MB 542 Database Management Systems  
 MB 543 Software Engineering  
 MB 544 Advanced Decision Support Systems  
 MB 545 Computer Network & Internet  
 MB 546 E-Commerce & IT Enabled Services

**Major/Minor Specialization :**

- In 3<sup>rd</sup> semester the student will have the choice of choosing any three subjects from a particular specialization group i.e. either from Marketing, Finance, HRM or IT.
- In the 4<sup>th</sup> semester
  - The student can undertake the remaining three subjects of the same specialization group which he/she opted in the 3<sup>rd</sup> semester. In this case he/she will be awarded only Major specialization and no minor.

**OR**

- The student can undertake three subjects of some other specialization group than he/she opted in the 3<sup>rd</sup> semester. In this case he/she will be awarded Major specialization in the stream in which he/she has conducted his/her 'Final Research Project' and Minor specialization for the other stream.

**Guidelines for Internal Assessment :**

The internal marks will be based on a continuous assessment and the following is to be adhered to :

- Test/Quiz's (15 Marks). Best 2 out of 3.
- Presentation/Reports/Home assignments (5 Marks)
- Class attendance/General behaviour (5 marks)

**Guidelines for External Practical / Viva-Voce :**

The external practical /viva-voce will be conducted as per the details mentioned above in study scheme by an external examiner appointed by the University.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Definition, nature, purpose and scope of management. Functions of a manager, an overview of planning, organizing and controlling. Is managing a science or art? Ethics in managing and social responsibility of managers.

Evolution of management thought. Contributions made by Taylor, Gantt, Gilbreth, Fayol, Weber, Elton Mayo, Chester Bernard, Maslow, Herzberg, Likert and McGergor. Management Science, Operations Research/Mathematical School/ Decision Theory approach. Systems Approach: Key concepts in systems - Closed system versus open system, Subsystems, System Boundary. McKinsey's 7-S Approach. .

Planning: Types of plans, steps in planning, and process of planning. Nature of objectives, setting objectives. Concept and process of Managing by Objectives. Nature and purpose of strategies and policies. Strategic planning process. SWOT analysis, Portfolio matrix, premising and forecasting.

**Section II**

Decision-Making: Importance and steps in Decision Making; Traditional approaches to decision-making; Decision making under certainty - programmed decisions; Introduction to decision-making under uncertainty, non- programmed decisions; decision tree; group-aided decisions; Brain storming; Creativity - creative problem solving.

Organizing: Concept of organization, process of organizing, bases of departmentation, Authority & power - concept & distinction. Line & Staff concept; problems of use of staff & ways to avoid line-staff conflict, Delegation - concept of delegation; elements of delegation - authority, responsibility, accountability. Reasons for failure of delegation & how to make delegation effective. Decentralization - concept, reasons for decentralization and types (or methods) of decentralization. Span of Management – concept, early ideas on span of management, factors determining effective span-situational approach.

### **Section III**

Coordination- Concept and importance of coordination; factors which make coordination difficult; techniques or methods to ensure effective coordination.

Control: Concept, planning-control relationship, process of control -setting objectives, establishing standards, measuring performance, correcting deviations. Human response to control. Dimensions or Types of Control - (a) Feed forward control (b) Concurrent Control (Real Time Information & Control), (c) Feedback Control v) Techniques of Control - Brief review of Traditional Techniques & Modern Techniques of Control.

Comparative study: Comparative study of main features of Japanese Management and Z-culture of American Companies.

### **MBA 102      ORGANISATIONAL BEHAVIOUR**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Organizational Behaviour - What managers do, definition of OB, contributing discipline to OB, challenges and opportunities for OB.

Foundations of Individual behaviour - biographical characteristics, ability, and learning.

Values, Attitudes and Job satisfaction.

Personality and Emotions

Perception.

#### **Section II**

Motivation - Concept, Theories of Maslow, Herzberg, McClelland, Porter & Lawler Model, Application of Motivation concept.

Foundations of Group Behaviour - Group formation, development and structure, group processes, group decision – making techniques, work teams.

Interpersonal Skill - Transactional analysis, Life Positions, Johari Window.

Leadership: Concept, theories, Styles and their application.

### **Section III**

Power and politics in organization  
Conflict Management, Stress Management, Crisis Management  
Organisational Change & Development, innovation, creating learning organization  
Organisational Culture  
Organisational Effectiveness.

### **MBA 103      ACCOUNTING FOR MANAGEMENT**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

**Introduction of accounting** ---- accounting as an information system, concepts, convention and principles of accounting, Role of accountant in an organization. Branches of accounting: Financial, Cost and Management Accounting and their inter-relationships  
Accounting Cycle, Preparation of financial statements of an organization (with adjustment)

**Introduction to recent developments in cost management**---- Target costing, Kaizen costing and activity based costing.

#### **Section II**

**Financial Analysis** ---- Concepts and objectives. Tools of Financial Analysis- ratio analysis, common size financial statements, trend analysis, fund flow and cash flow statements.

**Introduction to emerging dimensions in accounting** ---- Price level accounting, human resource accounting, Social Accounting.

#### **Section III**

**Cost Accounting** ---- Meaning, Scope and Classification of costs, Absorption costing, marginal costing, break-even analysis, use of cost data in managerial decision-making.

**Cost Control Techniques** - Preparation of budgets and their control, Zero base budgeting. Standard costing and variance analysis, Responsibility accounting.

## **MBA 104      QUANTITATIVE TECHNIQUES**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Role of Mathematics and statistics in Business Decisions

Theory of Sets

Logarithms: Laws of operations, Log tables, compound interest, depreciation and annuities.

Equations: Linear, Quadratic & Simultaneous Equations

Matrix Algebra

Binomial Theorem

Principles of Mathematical Induction, Arithmetic Progression & Geometric Progression

#### **Section II**

Data Analysis: Measure of Central Tendency

Measures of Dispersion: Range Quartile Deviation, Mean Deviation, and Standard Deviation

Skewness and Kurtosis

Correlation Analysis: Rank Method & Karl Pearson's Coefficient of Correlation and Properties of Correlation.

Regression Analysis: Fitting of a Regression Line and Interpretation of Results, Properties of Regression Coefficients and Relationship between Regression and Correlation

#### **Section III**

Time Series Analysis

Index Numbers

Theory of Probability

Theoretical Distributions: Binomial, Poisson and Normal Distribution

Theory of Estimation

Testing of Hypothesis: Large Sample Tests, Small Sample test, (t, F, Z Test and Chi Square Test).



**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Introduction to Managerial Economics: Scope of Managerial Economics and other disciplines, Basic economic concepts in decision-making. Distinction between Micro and Macroeconomics.

Demand analysis: Types, determinants, elasticity, demand function, Demand forecasting.

Cost Analysis: Concept of cost and its types, cost output relationship in short and long period, supply curve.

**Section II**

Pricing analysis: Market structures, price determination under different market situations, price discrimination, selling costs, product differentiation, Various pricing methods, transfer pricing, break even analysis, profit planning.

National income analysis: Techniques of social accounting. Theories of income, output and employment: Classical Keynesian. Demand behaviour: Duessenbury and Friedman.

**Section III**

Theory of multiplier: Concept of static and dynamic multiplier, balanced budget multiplier. Income generation process through multiplier.

Theory of trade cycles: Concept and causes of trade cycles. Measures to control trade cycles.

Macro economic policy: Monetary and fiscal.

Theories of inflation: causes and control of inflation.

## **MBA-106      COMMUNICATION & SOFT SKILLS**

**Essentials of Grammar:** Parts of Speech, Punctuation, Vocabulary Building, Phonetics

**Office Management :** Types of Correspondence, Receipt and Dispatch of Mail, Filing Systems, Classification of Mail. ,Role & Function of Correspondence, MIS, Managing Computer

**Letter & Resume Writing:** Types of Letters-Formal / Informal, Importance and Function, Drafting the Applications, Elements of Structure, Preparing the Resume, Do's & Don'ts of Resume, Helpful Hints

**Presentation Skills:** Importance of Presentation Skills, Capturing Data, Voice & Picture Integration, Guidelines to make Presentation Interesting, Body Language, Voice Modulation, Audience Awareness, Presentation Plan, Visual Aids, Forms of Layout, Styles of Presentation.

**Interview Preparation:** Types of Interview, Preparing for the Interviews, Attending the Interview, Interview Process, Employers Expectations, General Etiquette, Dressing Sense, Postures & Gestures

**Group Discussion & Presentation:** Definition, Process, Guidelines, Helpful Expressions, Evaluation

(Note: Every student shall be given 15 minutes. of presentation time & 45 minutes of discussion on his/ her presentation.)

**The student will be evaluated on the basis of :**

- ⌚ his / her presentation style
- ⌚ Feedback of Faculty & Students
- ⌚ General Etiquette
- ⌚ Proficiency in Letter Drafting / Interview Preparation
- ⌚ The paper is internal and at least 3 tests will be taken. Best 2 of 3 shall account for final grades (70% Test & 30% Presentation)

## **MBA 107      SEMINAR ON EXECUTIVE COMMUNICATION**

Meaning and importance of communication in business, the process of communication, models of communication, types of information-order, advise, suggestion, motivation, persuasion, warning and education.

Channels of communication, their effectiveness, limitations. Media of communication, barriers to communication, approaches to effective communication, tools of communication, Diction, sentence, paragraph, punctuation and report writing.

Group communication through committees, conference and other formal communication with public at large, interviews, seminars, symposia and conferences.

Specific business communication : essentials of effective business communication, structure of business correspondence: inquires and replies, orders and their executions, complaints and adjustment, credit and status inquires, agency letters and sales letters.

**MBA 108**  
**WORKSHOP ON COMPUTERS FOR MANAGEMENT**

Introduction to computers: Classification, types and components of computer system. Problem analysis, flow charting, algorithm and decision tables. Low and high level languages and its implementation. Basic concepts of operating systems. Basic DOS Commands, concepts of files, directories and other systems of computers.

Windows 95 and 98: Introduction, Difference between Windows 95 and 98, system requirement, and new developments in Windows.

Working with Windows 95: Icons on the desktop, Network Neighborhood, recycle bin, briefcase, switching between windows, putting new objects like folders, documents printers and applications etc. on the desktop taskbar, start menu, window buttons, time moving the taskbar, format of a window, title bar, frame, control menu, menu bar, minimize buttons, moving and resizing windows. File printing, deleting and copying etc. and other applications of windows.

MS Office 95/97/2000

Word Processing: MS Word, Word basics, Formatting texts and documents, working with heading and footnotes, tables and sorting, graphics mail merge and macros.

Spreadsheets and their uses in business. Excel basics, rearranging worksheets, excel formatting techniques, chart features and working with graphics in excel.

Power Point: Basics, working with texts and graphics in power point.

Delivering information with Microsoft Mail.

**MBA 109**  
**Viva Voce**

**Total Marks:100**  
**Internal: 25, External: 75**

**Guidelines for Internal Viva**

Prior to the final viva, a three members committee shall conduct a compulsory viva internally.

**Guidelines for External Viva**

The Viva Voce will be conducted jointly by one Internal examiner and one External examiner. The viva voce will be conducted on the basis of all theory and practical subjects of first semester. In addition to this, questions on current affairs, current market trends and Contemporary issues of Management may also be asked.

\*Note: Student has to score minimum passing marks in viva voce in order to qualify this paper.

**MBA 201      BUSINESS ENVIRONMENT**

---

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Introduction and definition of Business and its emergence in the 21<sup>st</sup> century. The concept of environment, components of environment: economic, political, legal, social, technological & international. Need to scan the business environment and techniques of scanning the business environment.

Economic environment: Economic systems, economic planning in India, objectives, strategies and evaluation of current five year plan. Industrial policy and industrial licensing. New economic policies.

### **Section II**

Political Environment: Three political institutions- Legislature, Executive and Judiciary. Fundamental rights and Directive Principles of state policy. Rationale and extent of state intervention.

Legal Environment: company regulatory legislations in India, MRTP, FEMA, EXIM in light of liberalization policies. SEBI guidelines relating to capital issues.

Public sector in India: concepts, philosophy and objectives, performance, problems and constraints. Privatisation. Joint sector and co-operative sector in India.

### **Section III**

Social environment: social responsibility of business, consumer movement & Consumer Protection Act 1986, The Environment Protection Act 1986.

Technological environment: Impact of technology on business. Technological policy, import of technology, appropriate technology, problems in technology transfer.

International environment: Emergence of globalisation. Control of foreign direct investment, benefits and problems from MNCs. WTO, its role and functions, implications for India. Trading blocks.

### **MBA 202      PRODUCTION & OPERATIONS MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Operations Management - Concepts; Functions  
Product Design & Development - Product Design and its Characteristics; Product Development Process (Technical); Product Development Techniques.  
Process Selection - Project, Job, Batch, Mass & Process types of Production Systems;  
Product - Process Mix  
Facility Location - importance; Factors in Location Analysis; Location Analysis Techniques  
Facility Layout - Objectives; Advantages; Basic Types of Layouts

### **Section II**

Capacity Planning - Concepts; Factors Affecting Capacity. Planning, capacity Planning Decisions.  
Production Planning & Control (PPC) - Concepts, Objectives; Functions  
Work Study - Productivity; Method Study; Work Measurement.  
Materials Management - Concepts, Objectives, Functions  
Purchasing Management - Objectives; Functions; Methods; Procedure  
Stores Management - Types of Stores; Functions; Coding Methods  
Value Analysis - Concepts

### **Section III**

Inventory Management - Concepts; Classification; Objectives; Factors Affecting Inventory Control Policy; Inventory Costs; Basic EOQ Model; Re-order Level; ABC Analysis  
Maintenance Management - Concepts; Objectives; Functions; Types of Maintenance  
Quality Management - Quality Concepts, Difference Between Inspection, Quality Control, Quality Assurances, Total Quality Management; Control Charts; acceptance Sampling

## **MBA 203      HUMAN RESOURCE MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

## **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Introduction: Meaning, scope, objectives and importance of Human Resource Management, Personnel Management, its functions, policies & roles. Organizing the Human Resource Management department in the organisation. Human Resource Management practices in India.

HR audit

Human Resource Planning: Definition, objectives, process and importance, job analysis, description, specification, Recruitment, selection, placement and induction process.

### **Section II**

Personnel Development Program: Employee training, executive development and career planning & development, performance appraisal.

Job Compensation: Job evaluation, wage & salary administration, incentive plans & fringe benefits, variable compensation individual & group.

Promotions, demotions, transfers, separation, absenteeism & turnover.

### **Section III**

Quality of work life & quality circles, job satisfaction and morale. Social security, health and safety, employee welfare

Counseling for effective Human Resource Development.

Human Relations: definition, objectives & approaches to human relations, employee grievances and discipline, participation & empowerment, Introduction to collective bargaining.

## **MBA 204      MARKETING MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

## **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Marketing Concepts and orientations, Marketing Tasks, Marketing in modern context.

Strategic Planning, Marketing System & Marketing Environment, Marketing Planning & Marketing Process.

Marketing Information System : Concept and Components.

Consumer Behaviour : Factors influencing consumer buying behaviour, Buying process. Organising for marketing, Marketing Implementation & Control.

### **Section II**

Market Segmentation & Targeting.

Product Decisions: Product Mix, Differentiation & Positioning, New product development, Consumer adoption process, Product Life Cycle and strategies, Packaging, Labeling, Branding.

Pricing Decisions: Objectives, Factors affecting pricing decisions, Pricing Methods, Pricing Strategies.

### **Section III**

Channel Decisions: Nature and types of Marketing Channels, Channel Design and Channel Management Decisions, Retailing, Wholesaling, Physical distribution.

Promotion Decisions : Communication process, Promotion Mix, Advertising, Sales Promotion, Public Relations, Managing the Sales force.

## **MBA 205 FINANCIAL MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Evolution of financial-management, scope and objectives of financial management.  
Capital budgeting: Capital Budgeting Process, Project formulation & Project Selection, Introduction to Various Capital Budgeting Techniques; Payback Period Method, Average rate of return, Net Present Value method, IRR, Benefit-Cost Ratio, Capital Rationing.  
Sources of Long term funds: Equity shares, Preference shares, Debentures, Public deposits, factors affecting long term funds requirements.

## **Section II**

Lease financing: Concept, types. Advantages and disadvantages of leasing.  
Capital Structure: Determinants of Capital Structure, Capital Structure Theories, Cost of Capital, Operating and Financial Leverage.  
Working Capital: Concepts, factors affecting working capital requirements, Determining working capital requirements, Sources of working capital.

## **Section III**

Management of Retained Earnings: Retained earnings & Dividend Policy, Consideration in dividend policy, Forms of Dividends, Dividend Theories, Bonus Shares.  
Corporate Restructuring: Reasons and factors affecting Mergers, Acquisitions, Takeovers and sell-offs'.  
Recent developments—Introduction to concepts of EVA, MVA, and CAPM.

### **MBA 206      WORKSHOP ON RESEARCH METHODOLOGY**

Introduction to Research: Definition, Scope, Limitations, and Types.  
Objectives of Research  
Research Process  
Research Designs  
Data Collection: Secondary Data, Primary Data, and Methods of Collection.  
Scaling Techniques: Concept, Types, Rating scales & Ranking Scales  
Scale Construction Techniques, Multi Dimensional Scaling.  
Designing Questionnaire.  
Interviewing  
Sampling Designs: Concepts, Types and Techniques  
Sample Size Decision  
Theory of Estimation and Testing of Hypothesis  
Small & Large Sample Tests, Tests of Significance based on t, F , Z test and Chi-Square Test.  
Tabulation, Coding, Editing.  
Interpretation and Report Writing.

### **MBA 207      WORKSHOP ON INFORMATION TECHNOLOGY**

Information Technology : Introduction, New Developments, Information Systems, Software and data, Application of IT in Business & Industry, Home, Education & Training, Entertainment & Arts, Science, Engineering and Math.



Communication - The Electronic Web : Network Applications : Fax, voice, Information Services, Person to Person Communication, Group Communication;

LAN : Architecture, System; Introduction to WAN; Link between Networks : Devices & Media, Protocol and dial up access.

MS Access : Creating database, adding, editing and moving records; Querying: Creating, Saving and Editing; Creating and Using forms; Creating and Printing Reports; Managing Data and Files.

World Wide Web: Introduction, Web access through on-line services, Using Web Browser, Weaving a better Web / Building a better web.

Internet and Intranet: Meaning of Internet; Difference between the Internet and Intranet: Introduction to TCP/IP; Setting up an Internet, what is Internet addressing, IP address; types of Internet connections, sending and reading e-mails.

Practical on Internet access to :

- Create E-mail address
- Perform transactions.
- Send & receive messages.
- Use of search engines.

### **MBA 208**

#### **Viva Voce**

**Total Marks:100**

**Internal: 25, External: 75**

#### **Guidelines for Internal Viva**

Prior to the final viva, a three members committee shall conduct a compulsory viva internally.

#### **Guidelines for External Viva**

The Viva Voce will be conducted jointly by one Internal examiner and one External examiner. The viva voce will be conducted on the basis of all theory and practical subjects of second semester. In addition to this, questions on current affairs, current market trends and Contemporary issues of Management may also be asked.

\*Note: Student has to score minimum passing marks in viva voce in order to qualify this paper.

### **MBA 301      APPLIED OPERATIONS RESEARCH**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Introduction to OR Managerial Decision Making and OR.  
OR Models: Principles and Types.

Linear Programming: Problem Formulation, Graphical & Simplex Method, Duality, and Sensitivity Analysis

**Section II**

Transportation Models, Transshipment Problem, Traveling Salesman Problem, Assignment Models.  
Replacement Models.  
Dynamic Programming

**Section III**

Queuing Theory : Models (M/M/1) : ( $\infty$ /FcFs); (M/M/1) : (N/FcFs);  
(M/Ek/1): (FcFs/ $\infty$ ) and (M/M/C) : ((FcFs/N)  
Inventory control (deterministic Models only)  
Game Theory.  
PERT-CPM

**MBA 302      CORPORATE LEGAL ENVIRONMENT**

---

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Law of Contract : Definition, offer and Acceptance, Consideration, Capacity of parties, Free Consent, Legality of Object, Performance and Discharge of Contract and Remedies for Breach of Contract. Introduction to the concept of agent and different types of mercantile agents.

Law of Insurance: Fundamentals Elements of Insurance.

**Section II**

Negotiable Instrument: Bills of Exchange, Promissory Note, Cheque and Rules Regarding the Crossing of Cheques. Dishonor of cheques and liability of banker and drawer.  
Sale of Goods Act: Meaning, Formation of contract, Meaning of condition and warranties, Difference between Transfer of Property and Possession, Right of an Unpaid Seller.

### **Section III**

Basic features of law relating to carriers (Air, Road, Rail and Shipping)

Company law: Characteristic of Company, distinction between company and partnership. Kinds and Formation of Company, Meeting. Winding Up by court.

Taxation: Constitutional framework of taxation. Direct and indirect taxes. Basic features of Central excise, Customs, Central and state sales tax.

### **MBA 306      SEMINAR ON MANAGEMENT INFORMATION SYSTEM**

Introduction: Definition & Significance, Evolution, MIS Support for Programmed and Non-Programmed Decision Making, Model of Decision Making.

Structure of MIS: Based on Management Activity & Organisational Function, Conceptual & Physical Structure of MIS.

Systems Concept: Definition of a System, Types of Systems, Sub-System, and Systems Concepts & Organisation.

Information Concept: Definition of Information, Information Presentation, Quality of Information.

Decision Support Systems: Characteristics of DSS, Decision Support & Structure of Decision Making. Decision Support & Repetitiveness of Decisions. Classes of DSS, DSS Users, GDSS, Characteristics of GDSS.

Organisation & Information Systems : Relationship, Salient Feature of Organisation, Effect of organisation on Information Systems and Vice Versa.

Advanced Information Systems: Knowledge Work Systems, Executive Support Systems, Expert Systems Artificial intelligence.

ERP: An Introduction, Application Examples of Information Systems.

### **MBA 307**

#### **Viva Voce**

**Total Marks:100**

**Internal: 25, External: 75**

#### **Guidelines for Internal Viva**

Prior to the final viva, a three members committee, comprising of experts from the specializations opted shall conduct a compulsory viva internally.

#### **Guidelines for External Viva**

The Viva Voce will be conducted jointly by one Internal examiner and one External examiner. The viva voce will be conducted on the basis of all theory and practical subjects of third semester. In addition to this, questions on current affairs, current market trends, Contemporary issues of Management and areas of specializations may also be asked.

\*Note: Student has to score minimum passing marks in viva voce in order to qualify this paper.

## **MB 401      STRATEGIC MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Definition, nature, scope, and importance of strategy; and strategic management (Business policy). Strategic decision-making. Process of strategic management and levels at which strategy operates. Role of strategists.

Defining strategic intent: Vision, Mission, Business definition, Goals and Objectives.

Internal Appraisal – The internal environment, organisational capabilities in various functional areas and Strategic Advantage Profile. Methods and techniques used for organisational appraisal (Value chain analysis, Financial and non financial analysis, historical analysis, Industry standards and benchmarking, Balanced scorecard and key factor rating). Identification of Critical Success Factors (CSF).

#### **Section II**

Environmental Appraisal—Concept of environment, components of environment (Economic, legal, social, political and technological). Environmental scanning techniques- ETOP, QUEST and SWOT (TOWS).

Corporate level strategies-- Stability, Expansion, Retrenchment and Combination strategies. Corporate restructuring. Concept of Synergy.

Business level strategies—Porter's framework of competitive strategies; Conditions, risks and benefits of Cost leadership, Differentiation and Focus strategies. Location and timing tactics. Concept, Importance, Building and use of Core Competence.

#### **Section III**

Strategic Analysis and choice—Corporate level analysis (BCG, GE Nine-cell, Hofer's product market evolution and Shell Directional policy Matrix). Industry level analysis ; Porters's five forces model. Qualitative factors in strategic choice.

Strategy implementation: Resource allocation, Projects and Procedural issues. Organisation structure and systems in strategy implementation. Leadership and corporate culture, Values, Ethics and Social responsibility. Operational and derived functional plans to implement strategy. Integration of functional plans.

Strategic control and operational Control. Organisational systems and Techniques of strategic evaluation.

## **MB 402      PROJECT EVALUATION & IMPLEMENTATION**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each. The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Project: Definition, characteristics, importance, types, steps in identification of projects, project life-cycle.

Project management: meaning and scope.

Technical appraisal, Environmental appraisal, Managerial appraisal.

#### **Section II**

Economic & market appraisal including market survey for forecasting future demand and sales.

Financial appraisal: project cost estimation & working capital requirements, sources of funds, appropriate composition of funds (capital budgeting), preparation of projected financial statements viz. Projected balance sheet, projected income statement, projected funds & cash flow statements. Preparation of detailed project report.

Need & techniques for ranking of projects : payback method, accounting rate of return, internal rate of return, net present value method, net terminal value method, multiple internal rate of return.

#### **Section III**

SCBA - meaning, rationale, approaches to SCBA SCBA by FI's : UNIDO approach, L-M approach, social appraisal of projects in developing countries with special reference to India.

Implementation of projects: Project scheduling & control, problems of project implementation, role of project manager, project audit.

Contract management: basic concept. Remedies for non-performance of contract.

**MBA 406**

**Final Research Project and Viva**

**Total Marks: 200**

**External: 100**

**Viva Voce: 100**

Topic for the research project is to be allocated in the beginning of 3rd Semester and topic should be related to the specialization area chosen by the student. Project would be assigned on individual basis. Each student would require to work under the supervision of a teacher assigned by the Institution/LC. The students must submit their Projects before one month of final exams of fourth semester.

An external examiner will evaluate the written report of Final Research Project out of 100 marks. A viva of 100 marks on Project report will be conducted jointly by internal and external examiner. The Institute/LC will select and invite an external examiner for the evaluation.

In order to qualify for MBA degree, the students will have to get minimum passing marks in this paper.

\*Note: Student has to submit 3 hard copies and 1 soft copy of his project: 1 for internal examiner, 1 for external examiner and 1 hard and soft copy for Institution/LC library. Original copy of the project report has to be retained by the student him/herself. While appearing in the Viva Voce student has to bring his own copy of Project report with him/her.

**Instructions for Students**

- Students must read the guidelines for preparing Project report given in the SIM thoroughly.
- Project report should be made in the format suggested in the SIM.

**Instructions for Supervisors**

- Supervisors must read the guidelines given in the SIM properly and give an orientation lecture to all the students on those lines.
- Evaluation of project report and presentation will be done on the parameters as suggested in the guidelines.
- At the time of evaluation it is responsibility of the institution/LC to brief the same guidelines to the external examiner

## **SPECIALIZATION GROUP - MARKETING**

### **MBA 502      ADVERTISING & SALES MANAGEMENT**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Advertising: Its definition, Objectives, Scope and Social Implications and Advertising. Concept of Integrated Marketing communication.

Advertising as a Communication Process, Communication Models: AIDA Modal, Laivdge - Stenier Model, Role of Advertising in Marketing Mix.

Advertising Campaign: Introduction, Planning and Managing, Advertising Budget, Marketing Strategies, Market Segmentation and Brand positioning.

#### **Section II**

Media: Types of Media, Media planning, Media Selection, and Multi-Media Strategies.

Creative styles. Guidelines for copywriting, Copywriting for print, Audio, TV and outdoor media. Advertising layout

Evaluation of Advertisements: Measuring Advertising Effectiveness.

Advertising Agencies: Structure, Functions and Client Relationship.

Laws and Ethics of Advertising in India, ASCI, Consumer protection and MRTP.

#### **Section III**

Objectives of Sales Management, Selling process, Personal Selling objectives, Determining Sales Related Marketing Policies.

Basic types of sales organisation structures: Relationship of sales department with other departments in the organisation.

Managing Distribution Channels

Motivating Sales Personnel Compensating Sales Personnel, Sales Contests.

Controlling the Sales Force :- Setting Standards, Comparing Standards to Performance, Control, Sales Budget, Sales Quotas, Sales Territories.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Growth of service sector economy, Service Characteristics, Service Classification, Service Marketing Triangle, Service Marketing Mix, Quality Gaps Model. Consumer Behaviour in Services, Customer Expectation of Service, Customer Perception of Service. Understanding Customer expectation and Perception through Marketing Research. Relationship Marketing - Concept, Benefits and Strategies. Market Segmentation and Targeting.

**Section II**

Service recovery.  
Service Development and Design: New Service Types, Supplementary Services, Developing Positioning Strategy,  
Positioning Maps  
Servicescape Types, Servicescape effects on behaviour  
Importance and Strategies for effective delivery through Employees, Intermediaries and Customer Participation.

**Section III**

Managing Demand, Managing Capacity, Waiting Line Strategies  
Services Marketing Communication Mix, Communication Strategies  
Factors related to Pricing, Pricing approaches, Pricing Strategies  
Service Quality and Productivity, Quality Gaps, Prescriptions for closing Quality Gaps, Customer Service Function.  
Services Management Trinity, Interfunctional Conflicts, Internal Marketing



### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Consumer behavior: Scope, importance and interdisciplinary nature. Marketing concept, societal marketing concept, social responsibility and ethics in marketing.

The consumer research process, quantitative and qualitative research. Market segmentation: Importance and use. Bases of segmentation. Effective targeting and segmentation strategies.

Consumer motivation: Needs, goals and their interdependence. Rational vs emotional motives. Dynamic nature of motivation. Hierarchy of needs. Motivational research.

Personality and consumer behavior : Nature of personality, Freudian, Neo-freudian and trait theories. Role of personality in understanding consumer diversity. Product personality and brand personification. Self-image, Vanity and consumer behavior

#### **Section II**

Consumer perception: Absolute and differential threshold, subliminal perception. Perceptual selection, organisation and interpretation. Product and service positioning. Perceived price, quality and risk. Manufacturer's image.

Consumer learning: Motivation, cues, response and reinforcement. Behavioral learning and cognitive learning theories. Recognition and recall. Attitudinal and behavioral measures of brand loyalty.

Attitude formation and change: What is attitude and its formation. Cognitive dissonance theory and attribution theory.

Communication process and design of persuasive communication.

#### **Section III**

Influence of reference groups - Friendship, Work, Celebrity and family. Impact of social class, culture, subculture and cross-cultural factors on consumer behavior.

The process of opinion leadership and motivation behind opinion leadership. Diffusion and adoption process of innovations. Profile of consumer innovators.

Consumer decision-making process: Routinised response, limited and extensive problem solving behavior. Howard-Sheth, Engell, Kollat-blackwell and Nicosia models of consumer decision-making. Consumer gifting behavior. Relationship marketing.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Meaning and scope of international marketing, difference between domestic and international marketing. Direction & composition of Indian exports.

International marketing tactics, reasons for entering export marketing and organisation of an export department.

Indian export and import policy export promotion organizations, export incentives.

**Section II**

International economic environment, world trade tariff and non-tariff restrictions, role of WTO and trading blocks, international monetary system.

The procedure and practices of processing of an export order, producing for exports, export quality control; export finance, shipment and procedures thereof.

**Section III**

Export documents, processing of an export order, organisation and structure of export and import houses.

The selection of export markets, planning of export marketing strategy-product, pricing, promotion, and distribution channel. International marketing research.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

## **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Rural Marketing: nature, definition, scope & importance in India. Size & structure of rural markets.

Factors influencing rural marketing: Socio-cultural factors, population, occupation, literacy level, land distribution & use, development programmes, infrastructure, communication media, credit availability, local requirements.

Rural Market Index: Thompson index.

### **Section II**

Market strategies & tactics with reference to rural markets. Product marketing & service marketing in rural India: product planning, communication media & message, distribution channels, market research (with special reference to seeds, fertilizers, farm equipments, new techniques, agricultural output & other services.)

Marketing of consumables & durables.

### **Section III**

Marketing of agricultural produce: regulated markets, cooperative marketing & processing societies.

Rural Industry: Marketing of rural industry, cottage industry, artisan products.

Problems in rural marketing. Consumer education & consumer movement in rural India.

Role of government & NGOs in rural marketing.

## **MBA 509      PRODUCT & BRAND MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

## **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

### **Section I**

Product Concepts: Product Mix concepts, Product Classification.

Product Planning: Marketing Plan, Portfolio Analysis, Market Potential and forecasting, Product Market Strategies.

Product Life Cycle: Product Life Cycle Stages and corresponding Strategies, Product Evaluation.

Product Positioning: Concept, Product Differentiation, Positioning Strategies, Preference Analysis, Benefit Segmentation.

### **Section II**

New Products: New Product Categories, Organization for Product Management.

New Product Development Process: Concept Generation, Concept Screening, Concept Testing, Marketing Strategy Development, Product Development, Product Use Testing, Test Marketing & Product Launching.

Designing the Offer: Perceptual Mapping, Conjoint Analysis.

Pricing the Offer: Price Elasticity of Demand, Costs, Pricing Strategies.

Concept of Product Testing.

Test Marketing.

Product Launch.

### **Section III**

Branding Decisions: Branding Brand Name Brand Characteristics, Brand Strategy Decisions.

Brand Image, Brand Identity, Brand Personality.

Brand Positioning and Repositioning, Brand Equity

Brand Building: Brand Building Process.

Brand Licensing and Franchising.

Packaging and Labeling

## **SPECIALIZATION GROUP - FINANCE**

### **MBA 511      FINANCIAL SERVICES**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

**Financial Services** - Meaning, types and their importance.

**Merchant Banking** - Origin and development of merchant banking in India scope, organisational aspects and importance of merchant bankers. Latest guidelines of SEBI w.r.t. Merchant bankers.

**Mutual funds and AMCs**- concept, origin and growth of mutual funds, constitution & management of MFs – Sponsors, Trustees, AMCs, and custodians. Classification of mutual fund schemes, advantages and disadvantages in mutual fund schemes, NAV and pricing of mutual fund units. State of mutual funds in India.

**Leasing**-concept and development of leasing, business difference between leasing & hire purchase, types of leasing business, advantages to lessor and lessee.

#### **Section II**

**Factoring** - development of factoring types & importance, procedural aspects in factoring, financial aspects, prospects of factoring in India.

**Plastic Money** – Concept and different forms of plastic money – credit and debit cards, pros and cons. Credit process followed by credit card organisations. Factors affecting utilisation of plastic money in India.

**Credit rating** - the concept and objective of credit rating, various credit rating agencies in India and International credit rating agencies, factors affecting credit rating & procedural aspects.

**Venture capital** - concepts and characteristics of venture capital, venture capital in India, guidelines for venture capital.

#### **Section III**

**Call money market**: introduction, meaning, participation, location, volume of call loans, call rates, recent developments.

**Treasury bill market**-introduction, 91 days, 182 days treasury bill market, Commercial bill market - introduction, bills of exchange, size of market, schemes, rates, factors behind underdevelopment. Market for CPs and CDs : introduction, interest rate determination, Discount market and market for financial guarantees.

**Depository:** Introduction, Concept, depository participants, functioning of depository systems, demat, remat, process of switching over to depository systems, benefits, depository systems in India, SEBI regulation.

## **MBA 512      SECURITY ANALYSIS & PORTFOLIO MANAGEMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Investment management: objective, investment opportunities, and philosophy of individual & institutional investors.

Fundamental analysis: concept & significance of economic analysis, industry analysis: introduction, need for industry analysis, alternative classification of industry, industry life cycle analysis, economic factors & industry analysis, SWOT analysis for industries.

#### **Section II**

Company analysis – nature and style of management, key role of financial analysis, ratio analysis.

Technical analysis – different techniques of analysis, DOW theory, volume indicators, market sentiment indicators, confidence indicators, points & figure charting, bar charting.

Efficient market theory random walk: weak form, semi-strong, strong form of market. Empirical tests. Comparison of random walk, technical & fundamental analysis.

#### **Section III**

Portfolio analysis selection: portfolio theory, return portfolio risk, efficient set of portfolios, optimum portfolio, capital asset pricing theory (CAPM), capital market line, security market line, corporate or folio management in India, portfolio revision techniques, constant value & constant ration plan, formula plan, dollar cost averaging.

Options & futures: concept of derivatives, option trading, option contracts settlement, pricing of option futures, concept of futures, characteristics of future contract, its types, difference between future, options, forwards & badla contracts.

## **MBA 513 MANAGEMENT OF FINANCIAL INSTITUTIONS**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Financial Institutions: Definition, Types, and Role of Financial Institution in Economic Development.

Commercial Banks: Evolution, Management and Organizational setup, Assets & Liabilities, Theories of Liquidity Management, Management of Primary & Secondary Reserve, Management of Loans.

#### **Section II**

Reserve Bank of India: Organisation, Management, Role & functions, Credit Control.

Development Banks in India: Types, functions, growth, structure & working of development banks.

#### **Section III**

Mutual Funds: Evaluation, SEBI regulations, & different types of schemes.

Deposit Insurance: Concept & working of Deposit Insurance Introduction to DICGC

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Working Capital Management: introduction, concept of working capital ;importance of working capital, factors influencing W.C. requirements, operating cycle and cash cycle, levels of working capital investment, optimal level of W.C. investments. Overall W.C. policy. Planning of working capital investment: introduction, need, determinants, computation of working capital.

Financing and control of working capital-introduction, sources of finance including accruals, trade credit, W.C. advance by commercial banks, regulation of bank finance, public deposits, ICDs, short term loans from FIs, right debentures for W.C., commercial papers and factoring. W.C. & banking policy (Tandon, Chore, Marathe committee reports.)

**Section II**

Cash management system: introduction, motives for holding cash and marketable securities; factors determining the cash balance, the cash system; managing the cash flow; types of collection systems, mailed payment collection system, other collection systems. Cash concentration strategies; disbursement tools, investment in marketable securities; types of marketable securities.

Forecasting cash flows: introduction, methods of financial forecasting, forecasting daily cash flows, sources of uncertainty in cash forecasting, hedging cash balance uncertainties, hedging via interest rate, futures & options on futures.

**Section III**

Receivable management: introduction, objectives, costs, benefits, credit policies, evaluation of the credit applicant, credit terms, collections from accounts receivable.

Inventory management : introduction, type of control required, cost of holding inventories, inventory control models, inventory control responsibility, other control devices, inventory management & evaluation.



## **MBA 517      CAPITAL BUDGETING**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

**Capital Budgeting:** An Introduction, Types of Investment Decisions, Objectives of Capital Budgeting, Estimating Project Characteristics. Cost of Capital.

#### **Section II**

**Method of capital Budgeting:** Payback method. Average Return Average Investment, Net Present Value, Internal Rate of Return, Capital Rationing, Reinvestment Rate, Assumptions of NPV and IRR & Conflicting Rankings. Multiple Internal Rate of Return, Inflation & Capital Budgeting.

**Risk Analysis:** Return & Opportunity Cost of Capital, Single Product Analysis Under Risk.

#### **Section III**

**A Project Is Not A Black Box;** Simulation, Sensitivity Analysis & Decision Free Analysis, CAPM Model, Arbitrage Pricing Theory, Comparison Between CAPM & APT. Leasing, Leveraged Leases. Alternative Investment. Measures, Project Abandonment Analysis, Multiple Project Capital Budgeting.

## **MBA 518      MANAGEMENT CONTROL SYSTEM**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Management Control System: Basic concepts, nature and scope. Control environment – Concept of goals and strategies. Behavioral considerations.

Responsibility Centers: Revenue and expense centers, Profit centers, Investment centers.

#### **Section II**

Transfer Pricing: Objectives and methods.

Budgeting: Budget preparation, Types of budgets. Behavioral aspects of budgets.

#### **Section III**

Variance analysis and reporting. Performance analysis and measurement. Impact on management compensation.

Modern control methods: JIT, TQM and DSS. Control in service organisations.

## **SPECIALIZATION GROUP – HUMAN RESOURCE MANAGEMENT**

### **MBA 531      ORGANISATION DEVELOPMENT**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Introduction to OD: Definitions & its distinguishing characteristics.

Historical background: various stages, second-generation OD and extent of application, values, assumptions and beliefs in OD.

Foundations of OD: Models and theories of planned change, Systems theory, Participation and empowerment, Teams and teamwork, Parallel learning structures, A normative-reductive strategy of changing, Applied behavioral science, Action research

Managing OD Process: Diagnosis, The Six-Box Model, Third Wave Consulting, Nature of OD intervention, Analysis of discrepancies, Phases of OD program, Model of Managing change, creating parallel learning structures.

#### **Section II**

OD Interventions: An overview, team interventions, intergroup and third party peace making interventions, comprehensive interventions, structural interventions.

Training Experience: T-groups, Behavioral Modeling and Career anchors.

Issue in Consultant-Client Relations: Entry and contracting, defining the client system, trust, the nature of the consultant's expertise, diagnosis and appropriate interventions, depth of intervention, on being absorbed by the culture, the consultant as a model, the consultant team as a microcosm, the dependency issue and terminating the relationship, ethical standards in OD, implications of OD for the client.

#### **Section III**

Action Research and OD

Action research: a process and an approach

Power, Politics and OD: Power defined and explored, theories about the sources of social power, Organisational politics defined and explored, the role of power and politics in the practice of OD.

Research on OD: Some issues and problems, Positive developments in research on OD.

The future of OD: Fundamental strengths of OD, OD's future: Leadership & value, Knowledge about OD, OD training, inter-disciplinary nature of OD, diffusion of technique, integration practice.

OD in Indian Organisations.

## **MBA 532      HUMAN RESOURCE DEVELOPMENT**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

HRD: concept, benefits, pre-requisites, its distinction from HRM, HRD as a total system, modern HRD mechanisms, HRD in India.

Development: Analyzing the role for development.

Management development: concept, need, and management development methods.

Training: Meaning, role, assessing needs for training, organizing training programmes. Training methods, evaluation of training.

#### **Section II**

Performance appraisal: Concept, need, objectives, methods, obstacles, designing effective appraisal system, performance appraisal in Indian organisations.

Potential appraisal: Concept, need, procedures, requirements of a good appraisal system.

Job enrichment: Concept, principles, Steps for job enrichment, Job and Work redesign.

#### **Section III**

Quality of work life (QWL): Meaning, origin, development, and various approaches to QWL, techniques for improving QWL.

Quality Circles: concept, structure, role of management, quality circles in India.

HRA: introduction, scope, limitations, methods.

Management of careers.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Introduction: Nature, Scope, and Problems & Objectives.

Individual Differences and their Evaluation, Role of Heredity, Environment, Types of Individual Differences.

Psychological tests in industries, their Utility, Reliability and Validity

**Section II**

Attitudes: Meaning, Characteristics, Factors that Influence Development of Attitudes, Implication for organization.

Industrial Morale : Meaning, Characteristics, Factors that Influence Morale, Measures of Improving Morale.

Monotony: Fatigue and Stress: Meaning, Impact, Causative Factors.

**Section III**

Motivation: Meaning, Types, Applications in industry - MBO, Job design.

Work Environment: The Arousal Hypothesis - Noise, Illumination, Color, Vibration, Miscellaneous Factors.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Industrial Relations -Concepts, Theories and Evolution.  
Systems approach to IR - Actors, Context, Web of Rules & Ideology.  
Trade unionism.  
Tripartite and bipartite bodies.  
Anatomy of industrial disputes.

**Section II**

Conciliation, arbitration and adjudication.  
Impact of collective bargaining and workers participation in management on IR.  
Industrial relations in USA, UK, Japan and Russia.  
Payment of wages Act, 1936  
Minimum Wages Act, 1948

**Section III**

Payment of Bonus Act, 1965  
Factories Act (excluding welfare provisions)  
The Trade Unions Act, 1926.  
The industrial Disputes Act, 1947.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Collecting Bargaining: Concept, historical introduction, meaning and purpose, features of CB. Approaches, techniques and strategies of CB.  
Issues in collective bargaining, Breakdown of CB.

#### **Section II**

Determination of bargaining unit, the bargaining agent, the process of negotiation, preparation for bargaining : procedure & tactics.  
Contract administration, Collective bargaining & technological change, CB in India.

#### **Section III**

Collective bargaining exercises.  
The concept of wages, Theories of wage, the minimum wage, fair wage, living wage, relative wages and wage differentials, productivity linkages, the dilemma of dearness allowance, the bonus issues, national wage policy.

#### **MBA 537      INTERNATIONAL HUMAN RESOURCE MANAGEMENT**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

## **Section I**

Managing Human Resources in a foreign subsidiary : Cultural & behavioral differences in different countries, cross cultural studies of Hofstede, Kluckhohn & Stoodbeck; Ethical relativity versus ethical absolutism.

IHR planning & staffing: Practice & problems

## **Section II**

Compensation Systems: Multinational compensation systems, factors affecting compensation systems.

Training & development: General practices, approaches & short-comings.

Appraising performance of subsidiary staff: Appraisal systems, acceptance & resistance.

## **Section III**

Expatriates: Determination of needs, selection process, attributes contributing to success & failure, special issue of female expatriates, expatriate re-entry.

Accommodating & training of the family members: Education & vocational guidance, amenities & facilities.



## **SPECIALIZATION GROUP – INFORMATION TECHNOLOGY**

### **MBA 541      PROGRAMMING IN C/C ++**

---

#### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

#### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Introduction to programming: Programming basics, flow charts, and pseudo code.

C: Origin & development of C Language, concepts of variables, constants and data types, Operators & expressions.

Input and Output statement: Control structures: if, if. else, multiple if... then...else, switch, sequencing, alteration, iteration.

Functions: Declaring, user- defined functions, return statement, break and continue, Recursion.

#### **Section II**

Arrays: one-dimensional, two-dimensional, String and string functions.

Structures, enumerated data type, structures as functions parameters.

Pointers, pointer and arrays, pointers to structures. File and data management.

#### **Section III**

Concepts of Object oriented programming: class, object, abstraction, encapsulation, inheritance, and polymorphism

Brief introduction to C++, difference between C and C++, stream input/output, constructors and destructors, operator overloading, inheritance, and virtual functions.

Data Structure: Simple programs on linked lists, stacks & queues.

Practical Lab. – Various programs on all the above aspects of C/C++.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Basic Concepts : Entities and their attributes, Relationship, Records and files, Abstraction and Data integration. Three Level architecture proposal for DBSM, data independence, components of DBMS, advantages & disadvantages of DBMS.

Data Models: Relational, Network and Hierarchical.

**Section II**

Relational Data Model: Relational Databases - Codd's rules for rational databases. Attributes & domain, tuples, relations & their schemes Relation representation, relation operations, integrity rules, relational algebra.

Relation Database Manipulation: SQL Database manipulation, Data Definition, view & queries.

Data Protection: Recovery, Concurrency, security, integrity & Control.

**Section III**

Distributes databases: Networks, concept, types, data distribution, distributed query processing, DBA.

Introduction to Object Oriented Databases.

Practical Lab - Create an application in ORACLE/SQL Server.

## **MBA 543 SOFTWARE ENGINEERING**

---

### **INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

### **INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

#### **Section I**

Basic Concepts of System: Definition, Characteristics, Elements & Types of System, Introduction to Software Engineering: Definition, Goals and Software Development Process Models – Waterfall, spiral, prototyping, fourth generation techniques.

Software Requirements Specification: Role of SRS, Problem Analysis, Requirement Specification and Validation, Characteristics of a good SRS.

Planning & Software Project: Cost Estimation, Project Scheduling, Staffing and Personnel Planning, Team Structure, Quality Assurance Plans, Risk Management.

#### **Section II**

System design: Design Objectives, Principles, and Techniques Specification. Detailed Design, DFD, ER Diagram, Data dictionary.

Coding : Programming Practice : Top-Down & Bottom-up, Structured Programming, Information Hiding, programming Style & internal Documentation ; Coding Verification.

Testing: Fundamentals, Test case & expected output, functional & structural testing, testing process, Bug fixing, Software maintenance.

#### **Section III**

Introduction to Object Oriented Software Engineering

A complete Case Study for Problem Analysis. Requirements Specification Document, Planning, Structured Design, Detailed Design, Coding & Testing.

Software Quality Assurance: Quality, Quality Plan, Quality Metric, Validation & Verification, Introduction to ISO-9000 and CMM levels for SQA.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Decision-making: Concept, Process, Simon's model, Programmed versus non-programmed decisions, quantitative tools.

Decision models: Decision making under assumed certainty, risk & uncertainty.

Introduction to DSS: Characteristics and Objectives: Comparison with EDP/MIS.

Levels of Decision Support System: Specific, Generator and tools – Forecasting packages, Statistical packages; Relationship.

**Section II**

Role of Decision Support Systems and its application.

Components of Decision support Systems : Data Subsystem, Model Subsystem, and User-interface,. DBMS, Quantitative models and modeling in DSS.

Group Decision support Systems, Expert system and its integration with DSS. Executive Support System.

**Section III**

Create Applications Using EXCEL

Data Warehousing: Concepts, database structure, getting data into the data warehouse.

Data Mining: Automated Analysis, constructing a data warehouse system.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Computer Networks: Uses of Computer Network, Network Hardware, Network Software, Goals and Applications of Computer networks, Computer Network structure and Architecture.

Reference Models: OSI Reference Model, TCP/IP reference Model, Comparison of OSI and TCP Reference Model.

Local Area Network: IEEE standards 802 for LANs and MANS (802.2, 802.3, 802.4, 802.5 and 802.6)

**Section II**

Introduction to Internet & WWW (World Wide Web)

Internet Protocols: Internet Protocol, Internet message control protocols, Internet Routing Protocols, Internet group management protocols.

WWW: Advantages, terminology, designing a web page using HTML & MS FrontPage, Web browser, Search engines.

**Section III**

Internet Applications: Domain Name System, Electronic mail, The World Wide Web, Multimedia – Audio, Video, File Transfer Protocol, Simple Mail Transfer protocol, Telnet, HTTP.

Network Security – Security Threats, Firewall, Encryption, Authentication.

**INSTRUCTIONS FOR PAPER-SETTER**

The question paper will consist of Two parts, A and B. Part A will have 15 short answer questions (40-60 words) of 2 marks each. Part B will have 12 long answer questions of 5 marks each.

The syllabus of the subject is divided into 3 sections I, II and III. The question paper will cover the entire syllabus uniformly. Part A will carry 5 questions from each section and Part B will carry 4 questions from each section.

**INSTRUCTION FOR CANDIDATES**

Candidates are required to attempt all questions from Part A and 9 questions of Part B out of 12.

---

**Section I**

Electronic Commerce Framework, Electronic Commerce and media Convergence, The anatomy of E-commerce Applications, Market Forces Influencing the I-Way, Components of the I-Way, network Access Equipment, Global Information Distribution networks, public policy Issues Shaping the I-Way.

**Section II**

Architectural Framework for Electronic Commerce, World Wide Web (WWW) as the Architecture, Web Background: Hypertext publishing, Technology Behind the Web, Security and the Web.

Types of Electronic Payment Systems, Digital Token – Based Electronic Payment Systems, Smart Cards and Electronic payment Systems, Credit Card-Based Electronic Payment Systems, Risk and Electronic payment Systems, Designing Electronic Payment Systems.

**Section III**

Electronic Data Interchange, EDI Applications in Business, EDI: Legal, Security and Privacy Issue, EDI and Electronic Commerce.

IT Act 2000: Laws related to IT security, data communication, digital signatures etc.

IT Enabled Services: Call Centre, Medical Transcription, technical writing, tele-marketing.