

## **B.Com. THIRD YEAR (2006-2007)**

### **ELECTIVE PAPERS :**

#### **Department of Accountancy & Statistics**

3.1 Management Accounting

3.2 Income Tax

3.3 Indirect Taxes

#### **Department of Business Administration**

3.4 Business Communication

3.5 International Marketing

OR

Information Technology and Its Application in  
Business

OR

Fundamentals of Entrepreneurship

#### **Department of Banking & Business Economics**

3.6 Financial Management

3.7 Banking Law & Practice in India

OR

Fundamentals of Insurance

OR

Business Mathematics

## **Department of Accountancy & Statistics**

### **3.1 MANAGEMENT ACCOUNTING**

#### **Objective**

This course provide the students an understanding of the application of accounting techniques for management.

#### **COURSE CONTENTS**

**UNIT-I** Introduction : Meaning, Definition, Nature and Scope, Difference between Management Accounting, Financial Accounting and Cost Accounting, Objective, Importance and Techniques, Role of Management Accountants.

Fundamentals of Financial Statements : Nature and Subject matter of Profit & Loss Account and Balance Sheet, Limitations of Financial Statements.

**UNIT-II** Financial Statements Analysis : Meaning and Definition, Objective, Importance, Type of Financial Analysis, Tools and Techniques of Financial Analysis Limitations of Analysis, Analysis of Comparative Financial Statements and Common - size Statement.

Ratio Analysis : Meaning and Definition, Forms, Importance, Objective and precaution Limitations, General Safety levels of Ratios,

classification, Calculation and Interpretation of financial Ratios.

**UNIT-III** Analysis of Working Capital : Meaning, Definitions, Concepts, Type, Components, Determinants, Analysis of Working Capital, Estimation of Working Capital requirements, Operating Cycle Method, Forecasting Method, Projected Balance Sheet Method, P&L Adjustment Method and Cash Forecasting Method.

Funds Flow Analysis : Concept, Meaning and Definitions of Funds, Flows and Funds Flow Statement, Objectives, Importance and Limitations of Funds Flow Statement, Difference between Funds Flow Statement and Financial Statements. Sources and Uses of Funds, Preparation and Interpretation of Changes in working capital statement and statement of Sources and uses of Funds. Preparation of cash Flow statement and As-3.

**UNIT-IV** Budgeting and Budgetary Control System : Essentials of Effective System, Installation of Budgetary Control System, Operating and Flexible Budgets and Master Budget, Different Philosophies; Programme Budgeting performance budgeting and Zero Base Budgeting, Preparation of functional budgets, master budget and cash budget.

Capital Budgeting : Comparative study of conventional and discounted cash flow methods.

**UNIT-V** Management Information and Reporting System : Meaning and Definition, Importance, Installation of Management Information System, Principles of a good information system, information and reporting, essential of a good reporting system, Type of accounting reports, Limitations of reporting system.

Business Forecasting : Concept, Meaning, Definition, Objectives, Importance, Steps, Principles and Methods of Business Forecasting and Estimations, Essentials and Precautions.

Analysis of Value Addition : Concept of Value - Addition, Meaning and Definition, Value Added Statement, Calculation of Value Added Ratios, Preparation and Interpretation of Value Added Statement.

Preparation of value added statement under Marginal Costing including preparation of value added Break Even Chart.

**Books Recommended :**

1. Rao N.S., Heda B.L. : Management Accounting & Gupta, S.L. (Hindi), Prakashan, Udaipur.

2. Antont, R.N. : Management Accounting  
(D.B. Taraporewala & Sons Pvt. Ltd. Bombay).
3. Hingorani, N.L., Ramanathan & Grewal, T.S. : Management Accounting (Sultan Chand & Sons, Delhi).
4. Vinayakam & Sinha : Management Accounting (Sahitya Bhawan, Agra).
5. Manmohan & Sinha : Management Accounting (Sahitya Bhawan, Agra).
6. Khandelwal, N. M. : Prabandhkiya Lekhanken (Rajasthan Hindi Granth Academy, Jaipur).
7. Tricker, R.L. : Management Information & Control System (John Wiley & Sons).
8. Keller, I.R. : Management Accounting for Profit Control (McGraw Hill).
9. Garison Ray H. : Managerial Accounting (Business Publications, Inc.)
10. John Dearden & Bhattacharya : Management Accounting (Vikas Publishing House, New Delhi).

## 3.2 INCOME TAX

### Objective

It enables the students to know the basics of Income Tax Act and its implications.

### COURSE CONTENTS

**UNIT-I** Basic Concepts: Income, agricultural income, casual income, assessment year, previous year, gross total income, total income, person; Tax evasion, avoidance, and tax planning.

**UNIT-II** Basis of Charge: Scope of total income, residence and tax liability, income which does not form part of total income.

**UNIT-III** Heads of Income: Salaries; Income from house property; Profit and gains of business or profession, including provisions relating to specific business; Capital gains; Income from other sources.

**UNIT-IV** Computation of Tax Liability: Computation of total income and tax liability of an individual, H.U.F., and firm; Aggregation of income; Set-off and carry forward of losses; Deduction from gross total income.

**UNIT-V** Tax Management : Tax deduction at source; Advance payment of tax; Assessment procedures. Tax Administration : Authorities, appeals, penalties.

## **Suggested Readings**

1. Singhanai V.K: Students' Guide to Income Tax; Taxmann, Delhi.
2. Prasad, Bhagwati: Income Tax Law & Practice; Wiley Publication, New Delhi.
3. Mehrotra H.C: Income Tax Law & Accounts; Sahitya Bhawan, Agra.
4. Dinker Pagare: Income Tax Law and Practice; Sultan Chand & Sons, New Delhi.
5. Girish Ahuja and Ravi Gupta: Systematic approach to income tax; Sahitya Bhawan Publications, New Delhi.
6. Chandra Mahesh and Shukla D.C.: Income Tax Law and Practice; Pragati Publications, New Delhi.
7. Gupta, Gupta, Modi : Income Tax Law & Practice (Hindi).
8. Goyal, Khatri and Gupta : Ayakar (Hindi)
9. Patel and Choudhary : Ayakar (Hindi)

## **3.3 INDIRECT TAXES**

### **OBJECTIVE**

This course aims at importing basic knowledge about major indirect taxes.

### **COURSE CONTENTS**

**UNIT-I** Central Excise: Nature and scope of Central Excise; Important terms and definitions under the Central Excise Act; General procedures of central excise; Clearance and excisable goods; Concession to small scale industry under Central Excise Act; CENVAT.

**UNIT-II** Customs: Role of customs in international trade; Important terms and definitions under the Customs Act 1962; Assessable value; Baggage; Bill of entry; Dutiable goods; Duty; Exporter; Foreign going vessel; Aircraft goods; Import; Import Manifest; Importer; Prohibited goods; Shipping bill; Store; Bill of lading; Export manifest; Letter of credit; Kinds of duties -basic, auxiliary, additional or countervailing; Basics of levy - advalorem, specific duties; Prohibition of export and import of goods, and provisions regarding notified & specified goods; Import of goods - Free import and restricted import; Type of import - import of cargo, import of personal baggage, import of stores.

Clearance Procedure - For home consumption, for warehousing, for re-export; Clearance procedure for import by post; Prohibited exports; Canalised exports; Exports against licensing; Type of exports, export of cargo, export of baggage; Export of cargo by land, sea and air routes.

**UNIT-III** Central Sales Tax.: Important terms and definitions under the Central Sales Tax Act 1956 - Dealer, declare good, place of business, sale, sale price, turnover, year, appropriate authority; Nature and scope of Central Sales Tax Act; Provisions relating to inter-state sales; Sales in side a state; Sales/ purchase in the course of imports and exports out of India, Determination of turnover, Principles for determining levy of central sales tax; concept of sale or purchase of goods in the course of Central/State trading; when does sales or purchase of goods take place inside the state; when does the sale or purchase of goods takes place in the imports or exports.

**UNIT-IV** Registration of dealers and procedure thereof; Rate of tax; Sales against C and D, W forms; Exemption of subsequent sales.

**UNIT-V** Rajasthan Sales Tax : Important terms and definitions under Rajasthan Sales Tax Act, Incidence of Tax, Exempted Sales, points of

tax, determination of taxable turnover and computation of tax, Registration of Dealers and Procedure of Assessment.

### **Suggested Readings**

1. Central Excise Act.
2. Customs Act.
3. Central Sales Tax Act.
4. Ahuja Girish & Gupta Ravi: Practical Approach to Income Tax, Wealth Tax and Central Sales Tax (Problems and Solutions with Multiple Choice Questions); Bharat Law House Pvt.Ltd., New Delhi.
5. V.S. Datey : Indireet Taxes : Taxman publications.
6. Gupta B.L. Kandria and Rajasthan Bikri Kar (Hindi)
7. Patel & Choudhary : Bikri kar (Hindi)

## Department of Business Administration

### 3.4 BUSINESS COMMUNICATION

#### Objective

The objective of this course is to develop effective business communication skills among the students.

#### COURSE CONTENTS

**UNIT-I** Introducing Business Communication. Basic forms of communicating Communication models and processes, Effective communication; Theories of communication; Audience analysis.

Self-Development and Communication: Development of positive personal attitudes; SWOT analysis; Vite's model of interdependence; Whole communication.

**UNIT-II** Corporate Communication: Formal and informal communication networks; Grapevine; Miscommunication (Barriers); Improving communication.

Practices in business communication; Group discussions; Mock interviews; Seminars; Effective listening exercises; Individual and group presentations and reports writing.

Principles of Effective Communication

**UNIT-III** Writing Skills: Planning business messages; Rewriting and editing; The first draft;

Reconstructing the final draft; Business letters and memo formats; Appearance request letters; Good news and bad news letters; Persuasive letters; Sales letters; Collection letters; Office memorandum.

**UNIT-IV** Report Writing : Introduction to a proposal, short report and formal report, report preparation.

Oral Presentation: Principles of oral presentation, factors affecting presentation, sales presentation, training presentation, conducting surveys, speeches to motivate, effective presentation skills.

**UNIT-V** Non-Verbal Aspects of Communicating.

Body language: Kinesics, Proxemics, Para language.

Effective listening: Principles of effective listening; Factors affecting listening exercises; Oral, written, and video sessions.

Interviewing Skills: Appearing in interviews.' Conducting interviews; Writing resume and letter of application.

Modern Forms of Communicating: Fax; E-mail; Video conferencing; etc.

International Communication : Cultural sensitiveness and cultural context; Writing

and presenting in international situations;  
Inter-cultural factors in interactions;  
Adapting to global business.

### **Suggested Readings**

1. Bovee and Thill: Business Communication Today; Tata McGraw Hill, New Delhi.
2. Ronald E. Dulek and John S. Fielder: Principles of Business Communication; Maemillan Publishing Company, London.
3. Randall E. Magors; Business Communication: Harper and Row New York.
4. Webster's Guide to Effective Letter Writing; Harper and Row, New York.
5. Balasubrarnanyam: Business Communications; Vikas Publishing House, Delhi.
6. Kaul: Business Communication; Prentice Hall, New Delhi.
7. Kaul: Effective Business Communication: Prentice Hall, New Delhi.
8. Patri VR: Essentials of Communication; Greenspan Publications, New Delhi.
9. Senguin J: Business Communication; The Real World and Your Career, Allied Publishers, New Delhi.
10. Robinson, Netrakanti and Shintre: Communicative Competence in Business English; Orient Longman, Hyderabad.

## **3.5 INTERNATIONAL MARKETING**

### **Objective**

This course. aims at acquainting student with the operations of marketing in international environment.

### **COURSE CONTENTS**

**UNIT-I** International Marketing: Nature, definition, and scope of international marketing; Domestic marketing vs. international marketing; International marketing environment -external and internal..

Identifying and Selecting Foreign Market: Foreign market entry mode decisions.

**UNIT-II** Product Planning for International Market: Product designing; Standardization vs adaptation; Branding, and packaging; Labeling and quality issues; After sales service.

**UNIT-III** International Pricing : Factors influencing international price; Pricing process - process and methods; International price quotation and payment terms.

**UNIT-IV** Promotion of Product/Services Abroad: Methods of international promotion; Direct mail and sales literature; Advertising; Personal selling; Trade fairs and exhibitions.

International Distribution: Distribution channels and logistics decisions; Selection and appointment of foreign sales agents.

**UNIT-V** Export Policy and Practices in India: Exim policy - an overview; Trends in India's foreign trade; Steps in starting an export business; Product selection; Market selection; Export pricing; Export finance; Documentation; Export procedures; Export assistance and incentives.

**Suggested Readings**

1. Bhattacharya R.L. and Varshney B: International Marketing Management; Sultan Chand, New Delhi.
2. Bhattacharya B: Export Marketing Strategies for Success; Global Press, New Delhi.
3. Keegan W.J: Multinational Marketing Management; Prentice Hall, New Delhi.
4. Kriplani V: International Marketing; Prentice Hall New Delhi.
5. Taggart J.H and Moder Mott M.C: The Essence of International Business; Prentice Hall New Delhi.
6. Kotler Phillip: Principles of Marketing; Prentice Hall New Delhi.
7. Fayer Weather John: International Marketing; Prentice Hall, NJ.
8. Caterora P.M. and Keavenay S.M: Marketing an International Perspective; Erwin Homewood, Illinois.
9. Paliwala, Stanley J: The Essence of International Marketing; Prentice Hall, New Delhi.

**OR**

**INFORMATION TECHNOLOGY AND ITS APPLICATION IN BUSINESS**

**Objective**

The objective of the course is to familiarize the students with the innovations in information technology and how it affects business. An understanding of the ground rules of these technologies will enable the students to appreciate the nitty-gritty of E-commerce.

**COURSE CONTENTS**

**UNIT-I** Information Revolution and Information Technology (IT) : Deployment of IT in Business; Basic features of IT; Impact of IT on business environment and social fabric; Invention of writing; Written books; Printing press and movable type - Gutenberg's invention; Radio, telephone, wireless and satellite communication; Computing and dissemination of information and knowledge and convergence of technologies (Internet with Wireless - WAP).

**UNIT-II** Fundamentals of Computers, Data information and EDP : Data, information, need and concept of data and information; levels of information from data; Data processing; Electronic data processing; Electronic machines.



Number Systems and Codes; Different number systems - binary, octal, decimal, hexagonal, and their conversion codes used in computers; BCD, EBCDIC, ASCII; Gray and Conversions.

Computer Arithmetic and Gates : Binary arithmetic, complements, addition and subtraction; Conversion from one system to another; logic Gates, their truth table and applications minimisation and K-maps.

Computer Processing System : Definition of Computer; Hardware/Software concepts; Generation of Computers; Types of computers; Elements of digital computer; CPU and its functions; Various computer systems.

I/O devices; Basic concepts of I/O devices; Various input devices - Keyboard, mouse; MICR, OCR, microphones.

Various output devices : VDU, printer, plotter, spooling, LS.

Storage Devices : Primary and Secondary memory; Types of memories; Memory capacity and its enhancement; Memory devices and their comparisons; Auxiliary storage, tapes disks (magnetic and optical); Various devices and their comparison. System Software - Role of Software,

Different System Software; O.S., Utilities, Element of O.S. - its types and variations, DOS and windows, Computer and Networks, Need of Communication; Data Transmission; Baud; Bandwidth; Communication Channel; Multiplexing; Basic network concepts; OSI model; Types of topologies; LAN, WAN; Client server concept.

### **UNIT-III** Computer-based Business Applications.

Word Processing; Meaning and role of word processing in creating of documents, editing, formatting and printing documents, using tools such as spelling check, thesaurus, etc. in word processors (MS-Word).

Electronic Spreadsheet: Structure of spreadsheet and its applications to accounting, finance and marketing functions of business Creating a dynamic/sensitive worksheet; Concept of absolute and relative cell reference; Using built-in functions; Goal seeking and solver tools; Using graphics and formatting of worksheet; Sharing data with other desktop applications; Strategies of creating error-free worksheet (MS-Excel, lotus 123). Practical knowledge of Wings Accounting (Software), Tally etc.

Programming under a DBMS environment; The concept of data base management

system; Data field, records and files. Sorting and indexing data; Searching records, Designing queries and reports; Linking of data files; Understanding programming environment in DBMS; Developing menu driven applications in query language (MS-Access).

#### **UNIT-IV** Electronic Data Interchange (EDI).

Introduction to EDI, Basics of EDI; EDI Standards; Financial EDI (FED); FED for international trade transaction; Applications of EDI; Advantages of EDI; Future of EDI.

#### **UNIT-V** The Internet and its Basic Concepts.

Internet-concept, history, development in India : Technological foundation of internet; Distributed computing; Client-server computing; Internet protocol suite; Application of distributed computing; Client-server computing; Internet protocol suite in the internet environment; Domain Name System (DNS); Generic top-level domain (GTLD); Country code top-level domain (ecTLD) - India; Allocation of second-level domains; IP addresses; Internet protocol; Applications of internet in business, education, governance, etc.

Information System Audit.

Basic idea of information audit; Difference with the traditional concepts of audit; Conduct and applications of IS audit in internet environment.

#### **Suggested Readings :**

1. Agarwala Kamlesh, N. and Agarwala Deeksha: Business on the Net-Introduction to E-commerce; Macmillan India, New Delhi.
2. Agarwala Kamlesh, N. and Agarwala Deeksha: Bulls, Bears and The Mouse: An Introduction to Online Stock Market Trading : Macmillan India, New Delhi.
3. Agarwala Kamlesh, N. and Agarwala Prateek Amar: WAP the Net: An Introduction to Wireless Application Protocol; Macmillan India, New Delhi.
4. Bajaj Kamlesh K. and Nag Debjani: E-commerce: The Cutting Edge of Business; Tata McGraw Hill, New Delhi.
5. Edwards, Ward and Bytheway: The Essence of Information Systems; Prentice Hall, New Delhi.
6. Garg & Srinivasan : Work Book on Systems Analysis & Design; Prentice Hall, New Delhi.
7. Kanter : Managing with Information; Prentice Hall, New Delhi.

8. Minoli Daniel, Minoli Emma : Web Commerce Technology Handbook; Tata McGraw Hill, New Delhi.
9. Minoli Daniel : Internet & Intranet Engineering : Tata McGraw Hill, New Delhi.
10. Yeats, Systems Analysis & Design : Macmillan India, New Delhi.
11. Goyal : Management Information System, Macmillan India, New Delhi.
12. Timothy J O'Leary : Microsoft Office 2000; Tata McGraw Hill, New Delhi.

**OR**

## **FUNDAMENTALS OF ENTREPRENEURSHIP**

### **Objective**

It provides exposure to the students to the entrepreneurial culture and industrial growth so as to preparing them to set up and manage their own small units.

### **COURSE CONTENTS**

**UNIT-I** Introduction: The entrepreneur; Definition; Emergence of entrepreneurial class; Theories of entrepreneurship; Role of socioeconomic environment; Characteristics of entrepreneur; Leadership; Risk taking; Decision-making and business planning.

**UNIT-II** Promotion of a Venture: Opportunities analysis; External environmental analysis - economic, social, and technological; Competitive factors; Legal requirements for establishment of a new unit, and raising of funds; Venture capital sources and documentation required.

**UNIT-III** Entrepreneurial Behaviour: Innovation and entrepreneur; Entrepreneurial behavior and Psycho-Theories, Social responsibility.

**UNIT-IV** Entrepreneurial Development Programmes (EDP): EDP, their role, relevance and

achievements; Role of Government in organizing EDPS; Critical evaluation.

**UNIT-V** Role of Entrepreneur: Role of an entrepreneur in economic growth as an innovator, generation of employment opportunities, complimenting and supplementing economic growth, bringing about social stability and balanced regional development of industries; Role in export promotion and import substitution, forex earnings, and augmenting and meeting local demand.

#### **Suggested Readings**

1. Tandon B.C: Environment and Entrepreneur; Chugh Publications, Allahabad.
2. Siner A David: Entrepreneurial Megabuks; John Wiley and Sons, New York.
3. Srivastava S. B: A Practical Guide to industrial Entrepreneurs; Sultan Chand and Sons, New Delhi.
4. Prasanna Chandra: Project Preparation, Appraisal, Implementation; Tata McGraw Hill, New Delhi.
5. Pandey I.M: Venture Capital - The Indian Experience; Prentice Hall of India.
6. Holt: Entrepreneurship-New Venture Creation; Prentice Hall of India.

## **Department of Banking and Business Economics**

### **3.6 FINANCIAL MANAGEMENT**

#### **Objective**

The objective of this course is to help students understand the conceptual framework of financial management.

#### **COURSE CONTENTS**

**UNIT-I** Financial Management: Financial goals; Profit vs wealth maximization; Financial functions - investment, financing, and dividend decisions; Financial planning. Capital Budgeting: Nature of investment decisions, investment evaluation criteria, payback period, accounting rate of return, net present value, internal rate of return profitability index., NPV and IRR comparison

**UNIT-II** Cost of Capital: Significance of cost of capital Calculating cost of debt; Preference shares, equity capital, and retained earnings; Combined (weighted) cost of capital. Operating and Financial Leverage: Their measure; Effects on profit, analyzing. alternate financial plans, combined financial and operating leverage.

**UNIT-III** Capital Structure: Theories and determinants.

**UNIT-IV** Dividend Policies: Issues in dividend policies; Walter's model; Gordon's model; M.M.

Hypothesis, forms of dividends and stability in dividends, determinants.

**UNIT-V** Management of working capital : Cash, receivables, and inventories.

### **Suggested Readings**

1. Van Home J.C: Financial Management and Policy; Prentice Hall of India, New Delhi.
2. Van Home J.C: Fundamentals of Financial Management; Prentice Hall of India, New Delhi.
3. Khan M.Y.and Jain P.K: Financial Management, Text and Problems; Tata McGraw Hill, New Delhi.
4. Prasanna Chandra: Financial Management Theory and Practice; Tata McGraw Hill, New Delhi.
5. Pandey I.M: Financial Management: Vikas Publishing House, New Delhi.
6. Brigham E.F, Gapenski L.C., and Ehrhardt M.C: Financial Management -Theory and Practice; Harcourt College Publishers, Singapore.
7. Bhalia V.K.: Modern Working Capital Management, Anmol Pub, Delhi.
8. Agrawal & Agrawal : Financial Management (Hindi).

## **3.7 Banking Law & Practice in India**

### **Objective**

This course enables the students to know the theory and practical of Banking Law.

### **COURSE CONTENTS**

**UNIT-I Banking Legislations in India :** Reserve Bank of India Act, 1934; Banking (Regulation) Act, 1949; Banking Companies (Acquisition of Undertaking and Transfer) Act, 1970.

**UNIT-II Banker Customer Relationship :** Definition of the term Banker and Customer : general and special relationship, termination of relationship, pass-book, Types of Accounts and their operations, Types of customers (practical problems)

**UNIT-III Negotiable Instruments :** Concepts and elements, types; cheque, Bills, Promissory notes, crossing, Endorsement, presentation (Elementary knowledge) paying and collecting banks (rights, duties, protections and precautions; Practical problems)

**UNIT-IV Investments & lending of bank Funds-Non-profitable and profitable investment in funds; (cash reserve, statutory reserve, Securities) secured and unsecured loans-lien, pledge hypothecation, cash credit, overdraft,**

discounting of bills and clean advances, appraisal of loan applications; Tandon Committee and Chore Committee Reports, Narshimam Comrnitte Report.

**UNIT-V** Meaning, Characterisities, nature, personal or Travellers letters of credit, circular letters of credit, circular notes, circular cheques, Travellers' cheque, parties to letter of credit. Procedure of opening a letter of credit. Advantages of letters of credit, Precautions in, making payments of letters of credit, Fraud, and its, prevention.

#### **Books Recommended**

1. Davar S.R. : Banking Law & Practice (Vikas Publishing House, Delhi)
2. Tandon M. L. : Banking Law & Practice
3. Varshne P.N. : Banking Law & Practice
4. Sharma H.C. : Banking Vidhi Evam Vyavhar (Sahitya Shawan Agra)
5. Trivedi, I.V.& Jain, Raj Kumari : Banking Vidhi Evam Vyavhar
6. Nigam B.M.L. : Banking Law & Practice
7. Shrivastava P.K. : Banking Law & Practice (Himalaya Publishing House, Bombay)

**OR**

## **FUNDAMENTALS OF INSURANCE**

### **Objective**

This course enables the students to know the fundamentals of insurance.

### **COURSE CONTENTS**

**UNIT-I** Introduction to Insurance: Purpose and need of insurance; Insurance as a social security tool; Insurance and economic development.

Fundamentals of Agency Law: Definition of an agent; Agents regulations; Insurance intermediaries; Agents' compensation.

**UNIT-II** Procedure for Becoming an Agent: Pre-requisite for obtaining a sense; Duration of license; Cancellation of license; Revocation or suspension/termination of agent appointment; Code of conduct; Unfair practices.

**UNIT-III** Functions of the Agent: Proposal form and other forms for grant of cover; Financial and medical underwriting; Material information; Nomination and assignment; Procedure regarding settlement of policy claims.

**UNIT-IV** Company Profile: Organizational set-up of the company; Promotion strategy; Market share;

Important activities; Structure; Product; Actuarial profession; Product pricing - actuarial aspects; Distribution channels.

**UNIT-V** Fundamentals/Principles of Life Insurance/ Marine/Fire/Medical General Insurance: Contracts of various kinds; Insurable Interest.

### **Suggested Readings**

1. Mishra M.N: Insurance Principles and Practice; S. Chand and Co, New Delhi.
2. Insurance Regulatory Development Act 1 999.
3. Life Insurance Corporation Act 1956.
4. Gupta OS: Life Insurance; Frank Brothers, New Delhi.
5. Vinayakam N., Radhaswamy and Vasudevan SV; Insurance - Principles and practice, S.Chand and Co., New Delhi.
6. Mishra MN: Life Insurance Corporation of India, Vols 1, 11 & 111; Raj Books, Jaipur.

**OR**

## **BUSINESS MATHEMATICS**

### **Objective**

The objective of this course is to enable the students to have such minimum knowledge of Mathematics as is applicable to business and economic situations.

### **COURSE CONTENTS**

**UNIT-I** Calculus (Problems and theorems involving trigonometrical ratios are not to be done).

Differentiation: Partial derivatives up to second order; Homogeneity of functions and Euler's theorem; Total differentials; Differentiation of implicit function with the help of total differentials.

Maxima and Minima; Cases of one variable involving second or higher order derivatives; Cases of two variables involving not more than one constraint.

Integration: Integration as anti-derivative process; Standard forms; Methods of integration-by substitution, by parts, and by use of partial fractions; Definite integration; Finding areas in simple cases; Consumers and producers surplus; Nature of Commodities Learning Curve; Leontiff Input-Output Model.

**UNIT-II** Matrices and Determinants: Definition of a matrix; Types of Matrices; Algebra of matrices; Properties of determinants., Calculation of varies of determinants upto third order-, Adjoint of a matrix, elementary row or column operations; Finding inverse of a matrix through adjoint and elementary row or column operations; Solution of a system of linear equations having unique solution and involving not more than three variables.

**UNIT-III** Linear Programming-Formulation of LPP: Graphical method of solution; Problems relating to two variables including the case of mixed constraints, Cases having no solution, multiple solutions, unbounded solution and redundant constraints.

**UNIT-IV** Simplex Method - Solution of problems up to three variables, including cases of mixed constraints; Duality; Transportation Problem.

**UNIT-V** Compound Interest and Annuities: Certain different types of interest rates; Concept of present value and amount of a sum; Types of annuities; Present value and amount of an annuity, including the case of continuous compounding; Valuation of simple loans and debentures; Problems relating to sinking funds.

### **Suggested Readings**

1. Alien R.G.D.: Basic Mathematics; Maemillan, New Delhi.
2. Dowling, E.T.: Mathematics for Economics; Schaum Series, McGraw Hill London.
3. Loomba, Paul: Linear Programming; Tata McGraw Hill, New Delhi.
4. Vohra, N.D.: Quantitative Techniques in Management; Tata McGraw Hill New Delhi.
5. Soni, R.S.: Business Mathematics; Pitarnber Publishing House.
6. Kapoor, V.K.:Business Mathematics; Sultan Chand & Sons, Delhi.
7. Holden: Mathematics for Business and Economics; Macmillan India, New Delhi.