# BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024

M.Com. (Computer Applications) – Revised Course Structure under CBCS (For the candidate admitted from the academic year 2008-2009 onwards)

Sem ester	Course	Course Title	Ins. Hrs / Week	Credit	Exam Hrs	Marks		Total
						Int.	Ext.	
I	Core Course – I (CC)	Managerial Economics	6	5	3	25	75	100
	Core Course – II (CC)	Fundamentals of Information Technology (Theory )	6	4	4*	25	75	100
	Core Course – III (CC)	Financial Management	6	5	3	25	75	100
	Core Course – IV (CC)	Marketing Management	6	4	3	25	75	100
	Core Course – V (CC)	Management Information System	6	5	3	25	75	100
II	Core Course – VI (CC)	Quantitative Techniques for Business Decisions	6	5	3	25	75	100
	Core Course – VII (CC)	Human Resource Management	6	4	3	25	75	100
	Core Course – VIII (CC)	E – Commerce	6	5	3	25	75	100
	Core Course – IX (CC)	E – Banking	6	5	3	25	75	100
	Elective Course – I (EC)	Office Programming (Theory & Practical)	4	4	4	25	75	100
III	Core Course – X (CC)	Cost and Management Accounting	6	5	3	25	75	100
	Core Course – XI (CC)	Research Methodology	6	4	3	25	75	100
	Core Course – XII (CC)	Oracle and RDBMS	6	5	3	25	75	100
	Elective Course – II (EC)	Data Base and Desk Top Publishing (Theory & Practical)	6	4	4	25	75	100
	Elective Course – III (EC)	Net Working and Internet (Theory & Practical)	6	4	4	25	75	100
IV	Core Course – XIII (CC)	Securities Analysis and Portfolio Management	6	5	3	25	75	100
	Core Course – XIV (CC)	Enterprise Resource Planning	6	4	3	25	75	100
	Core Course – XV (CC)	Project Work Viva voce 20 marks Dissertation 80 marks	6	5	-	-	-	100
	Elective Course - IV (EC)	Programming in C Language (Theory & Practicals)	6	4	4	25	75	100
	Elective Course - V (EC)	Java Based Business Application (Theory & Practicals)	6	4	4	25	75	100
			120	90				2000

Note: For Elective Courses I, II, III, IV & V Examination Duration: Theory 2 Hours; Practical 2 Hours.

## SEMESTER - I CORE COURSE – I – MANAGERIAL ECONOMICS

Credit Allotted: 5 Max. Marks: 75

Objective: To make the students to realize the usefulness of economic tools,

principles, laws etc. in business decisions.

#### Unit I

Managerial Economics – Meaning, Nature, Scope and Applications – Its Relationships with other disciplines – Role of Managerial Economist – Demand Analysis – Determinants of Demand and Demand forecasting.

#### Unit - II

Production Function – Law of Returns to Scale – Economies of scale – Cost Concepts – Cost function – Cost Output relationship – Cost Control and Cost Reduction.

#### Unit - III

Price and Output decisions under perfect competition, Monopoly, Oligopoly, Monopolistic Competition – Price discrimination – Pricing Objectives, Policies and Practices – Price differentials.

#### Unit - IV

Profit – Concept and Meaning – Theories – Measurement – Economic Profit vs. Accounting Profit – Break even analysis - Profit Planning and Forecasting.

#### Unit - V

Business Cycle – Role of Economic Forecasting in Business - Gross Domestic Product & Gross National Product : Concepts and their relevance in economic growth – Methods of Measurement – Trends in National Income estimates and utility – Concepts related to liberalization, privatisation and globalization.

- 1. Joel Dean, Managerial Economics Prentice Hall
- 2. Mehta P.L. Managerial Economics Sultan Chand and Sons
- 3. Varshney and Maheswari Managerial Economics Sultan Chand and Sons.
- 4. Gupta G.S. Managerial Economics Tata McGraw Hill
- 5. Reddy P.N. and Appannaih Essentials of Managerial Economics Himalaya Publishing House.
- 6. Mithani D.M. Managerial Economics Himalaya Publishing House
- 7. Dwivedi D.N. Managerial Economics Vikas Publishing House P. Ltd.
- 8. S. Sankaran Managerial Economics Margham Publications
- 9. Cauvery, Sudha Nayak and Others Managerial Economics S. Chand and Sons.

# CORE COURSE – II – FUNDAMENTALS OF INFORMATION TECHNOLOGHY

Credit Allotted: 4 Max. Marks: 75

#### Unit I

Managing with Information – Communication and Information Data Vs Information – Types of Information – System concept and Information Systems.

#### Unit II

Introduction to Computer Software – Operating System – Programming Languages – General Software Features and trends.

#### Unit III

Database Management Systems – Data Processing – Introduction to Database Management System – Database design.

#### Unit IV

Communication in IT Age – Computer Networks – IT in Business Communication (Facsimile transmission, Tele fax, Photocopies, Microfilm, Viewdata, CD's DVD's Floppy / zip discs] – Tele conferencing, Video conferencing. Message Handling Services – Voice mail, E-Commerce – impacts of IT:- Positive and Negative aspects of IT on Business organizations – Information Technology Act 2000.

#### Unit V

System Analysis and Design – System planning – System implementation and system maintenance – Computer Based Auditing.

- 1. S. V. Srinivasa Vallaban Introduction to Information Technology
- 2. V.K. Kapoor Information Technology.

#### CORE COURSE III – FINANCIAL MANAGEMENT

Credit Allotted: 5 Max. Marks: 75

**Objective :** To make the students understand the concept and problems of Financial Management.

#### Unit I

Introduction to Financial Management: Objectives, Functions, Scope, Evolution, Interface of Financial Management with other Areas, Environment of Corporate Finance.

Time value of Money: Future Value of Single Cash Flow, Multiple Cash flow, Annuity, Sinking Fund Factor. Present value of single cash flow, Multiple cash flow, Annuity, Annuity Dues, Perpetuities. Comparison of Rates.

#### Unit II

Leverage: Operating Leverage, Financial Leverage, Total Leverage.

Sources of Long-term Finance: Equity, Preference Capital, Debentures, Term Loans and Deferred Credit, Government Subsides, Sales Tax Deferments and Exemptions, Leasing and Hire purchase.

Cost of Capital: Cost of debentures, Term Loans, Equity and Retained Earnings, Weighted Average cost of capital, systems of weighting.

#### **Unit III - Capital Structure**

Introduction, Factors Affecting Capital structure, Features of an optimal capital structure, capital structure theories: Traditional Approach, MM Approach.

Dividend Policy: Traditional Approach, Walter Model, Gordon Model, MM Position, Rational Expectations Model.

#### **Unit IV**

Corporate Valuation: Discounted Cash flow Approach, Adjusted book Value Approach, Approaches to Facilitate Value Based Management: Marakon Approach, Alcar Approach, McKinsey Approach, Agency Consideration and Minimising agency Costs.

#### Unit V

Divisional performance Measurement and Control: Organizational Segmentation by Responsibility, Measures of Performance, Problems of Transfer pricing, Innovative Budgetary Control Systems, Management Reporting Systems.

EVA and Divisional Performance Measurement: EVA and MVA, EVA and NPV, EVA and Executive Compensation, EVA, TQM and Shareholders Wealth, Improving EVA.

(Theory – 30 Marks Problem - 45 Marks)

#### **Reference:**

- 1. Prasanna Chandra, Financial Management: Theory and Practice, 5<sup>th</sup> Ed., Tata McGraw Hill, 2001.
- 2. Ross, Westerfield, Jaffe, Corporate Finance, 5<sup>th</sup> Ed., McGraw Hill, 1999.
- 3. Brigham, Gapenski, Ehrhardt, Financial Management: Theory and Practice, 9<sup>th</sup> Ed., Dryden Press, 1999.
- 4. Pandey, I.M., Financial Management, Vikas Publishing House.
- 5. Vishwanath, S.R. Corporate Finance: Theory and Practice, Response Books, 2000.
- 6. R. Ramachadran & R. Srinivasan Financial Management

#### CORE COURSE IV - MARKETING MANAGEMENT

Credit Allotted: 4 Max. Marks: 75

#### **Objectives:**

#### Unit-I

Definition and Meaning of marketing and Marketing Management-Scope of Marketing Management-Nature and Importance of Marketing Management- Problems of Marketing Management - Difference between Sales Management and Marketing Management - Functions of Marketing Management - Principles of Marketing Management - Marketing Organisation Structure.

#### **Unit-II**

Product Development – New Product Planning and Development – Steps in New Product Development – Management of Product Life Cycle – Product Line and Product Mix Strategies –

Pricing – Objectives of Pricing Decisions – Factors influencing Pricing Decisions – Process of Price determination – Kinds of Pricing.

#### Unit-III

Channels of Distribution – Meaning - Basic channels of distribution - Selection of a suitable channel - Factors Influencing Selection of a channel-middlemen in distribution-Kinds –Functions - Elimination of Middlemen - Arguments in favour of and against.

#### **Unit-IV**

Sales promotion-meaning and definition-objectives and importance of sales promotion Causes for sales promotion activities-types of sales promotion programmes-salesmanship and

personal selling-steps in selling-essentials of salesmanship-importance of salesmanship-qualities

of a good salesman.

#### Unit-V

Meaning and Definition of Advertising - Advertising and Publicity - Objectives of Advertising - Functions - Advantages of Advertising - Advertisement copy - Qualities of a goodcopy - Elements of an Advertising copy - Objections against Advertisement copy - Media of Advertisement - Factors governing the selection of the Media-Advertising Agencies - Meaning

and Definition - Benefits or Services of an Advertising Agency.

**Note:** Question paper shall cover 100% theory

- 1. Marketing Management C.B. Mamoria and Joshi
- 2. Marketing management Dr.C.B. Gupta and Dr.N.Rajan Nair
- 3. Marketing Management Philip Kotler
- 4. Modern Marketing R.S.N.Pillai & Bagavathi
- 5. Fundamentals of Marketing William J.Stanton

#### CORE COURSE V – MANAGEMENT INFORMATION SYSTEM

Credit Allotted: 5 Max. Marks: 75

#### **Objectives:**

#### UNIT - I

Fundamentals of information systems – Concept of Information – Concept of System, Sub-system, system approach – Information system – Tools for information System - Meaning and Definition of MIS - MIS design, Development, Implementation and Maintenance.

#### **UNIT - II**

Information Technology – Concepts – Architecture - Computer Hardware & Trends in computer Hardware & Computer peripherals - Computer software – system software – Application software – Database management – File management – Database models, Database management system – Client server computing.

#### **UNIT - III**

Role of communication -Trends in communication - Telecommunications and Networks - communication direction, synchronization, channels and media - Network Technology. - Tele communications Alternatives - DTP - Image processing - Electronic communication system - electronic meeting system.

#### **UNIT - IV**

Information system applications: Information system for management functions – Information system for Business functions- Accounting, Finance, Manufacturing and Inventory control, Marketing - Human resource Information System and Geographic information system – Applications of Information Technology in E-Business.

#### **UNIT-V**

Strategic and managerial implication of Information system – Managing information system resources – Other information system, Information system models - TPS – Office automation – Decision support system – Executive information System – Artificial Information system – Enterprise Resource Planning.

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#### TEXT BOOK

James O'Brien, "Management Information Systems", TataMcGraw Hill Publishing Co.Ltd. **BOOKS FOR REFERENCE** 

- 1. L.M.Prasad & Usha Prasad, "Management Information Systems", Sultan Chand & Sons
- 2. A.K.Gupta, "Management Information Systems", S. Chand & Co. Ltd.
- 3. Kenneth C. Laudon & Jane P. Laudon, "Management Information Systems", Prentice Hall of India (P) Ltd.

# SEMESTER - II CORE COURSE – VI –QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

Credit Allotted: 5 Max. Marks: 75

**Objectives:** To make the students to understand the various techniques of statistics used in business for taking decisions.

#### **Unit - I Concept of probability Distributions:**

Probability meaning & theorem, Types of Probability, Baye's Theorem – Binomial Distribution - Poisson Distribution – Normal Distribution.

#### **Unit - II Testing of Hypothesis**

Definition of Hypothesis – Types of Hypothesis – Type I Error - Type II Error – Testing of Population Mean – Proportion – Difference between Means – Difference between proportions – ANOVA – Chi - square Test.

#### Unit - III

Transportation Problems – Initial Basic Feasible Solutions by North west corner Rule – Matrix Minima method - Vogel's Approximation Method – Optimization test by Modi Method - Assignment problems.

#### **Unit IV – Linear Programming and Theory of Games**

Meaning of Linear Programming – Basic concepts and notation – Linear Programming Model – Formulation – graphic and simple solution – Theory of games – Types of games – Dominance – Rule for Dominance – Solution through graphic Simplex Method. (Simple Problems only)

#### **Unit V - Network Analysis – CPM and PERT**

Introduction to Network Analysis – Preparation of Network Diagram – Critical Path Method (CPM) – Time cost Consideration – Limitation of CPM – Programme Evaluation and Review Technique (PERT) - Advantages and Limitations of PERT – Similarities and Dissimilarities of PERT and CPM.

(Theory: 30 Marks; Problem: 45 Marks)

- 1. Richart I. Levin, and Rubin, Statistics for Management Prentice Hall of India.
- 2. Homy A. Taha, Operations Research An Introduction, McMillan.
- 3. Richard I Levin, Charles A. Kirpathic and David S.Rubin, Quantitative Approaches to Management, McGraw Hill.
- 4. Bunkdick F.S. Et.al. Principles of Operations Research for Management, Richards D. Irwin.
- 5. Anderson, Sweeney, Williams, An Introduction to Management Science: Quantitative Approaches to Decision Making, 7<sup>th</sup> ed. West Publishing Company, 1994.
- 6. Quantitative Methods S.P. Gupta
- 7. Quantitative Methods Gopi Kuttan, Himalaya Publications
- 8. Quantitative Methods Kanthi Swarup Sultan Chand Publications

#### CORE COURSE – VII – HUMAN RESOURCE MANGEMENT

Credit Allotted: 4 Max. Marks: 75

**Objectives :** To enable the students to understand the concepts and practices followed in managing people at work.

#### Unit I

Meaning of HRM – Significance of HRM – Functions of HRM – Objectives of HRM – Evolution and Development of HRM – Human Resource Planning – HRP at Different levels – Process of Human Resource Planning.

#### Unit II

Sources and Techniques of Recruitment – Selection Procedure – Tests – Interviews – Placement – Induction – Training Methods – The Training Procedure.

#### **Unit III**

Significance of Human Resource Development – Management Development Programmes – Techniques of Management Development – Performance Analysis and Development – Performance Appraisal – Counselling – Managerial Appraisal.

#### **Unit IV**

Career Planning – Succession Planning – Career Development – Counselling – Absenteeism – Managing Change – Resistance to change – Approaches to Organisational Change – Organisation Development – The OD Process – Job Evaluation Methods / Techniques – Advantages of Job. Evaluation – problems of Job Evaluation.

#### Unit V

Reward System – Wage and Salary administration – Bonus – Objectives of Fringe Benefits – Types of Fringe Benefits – Non Monetary Rewards – Motivation and Motivation Theories – Leadership – Team Building – Morale – Communication – Job Satisfaction.

- 1. Essentials of Human Resource Management and Industrial Relations P.Subba Rao Himalaya Publishing House.
- 2. Personnel Management and Human Resources C.S. Venkata Ratnam and B.K.Srivastava TMH.
- 3. Personnel Management and Industrial Relations P.C. Tripathi Sultan Chand & Sons.
- 4. Human Resource Management B.S.Bhatia and G.S.Batra Deep & Deep Publications.

#### CORE COURSE – VIII – E – COMMERCE

Credit Allotted: 5 Max. Marks: 75

#### UNIT I

Introduction to E-Commerce – Electronic Commerce Frame work – Electronic commerce and Media convergence – The anatomy of E-Commerce Applications – Components of the IWay– Network Access Equipment – Global Information Distribution Networks – Internet Terminology – NSFNET: Architecture and Components - National Research and Educational Network.

#### **UNIT II**

Electronic Commerce and World Wide Web: Architectural Frame work for E-Commerce – WWW Architecture – Hypertext Publishing – Consumer Oriented Applications – Mercantile Process Models – Consumer's Perspective – Merchant's Perspective – Electronic Payment Systems (EPS) – Types - Designing EPS - Smart Cards and EPS – Credit Cards and EPS.

#### **UNIT III**

Electronic Data Interchange (EDI): Applications – Security and Privacy Issues – Software Implementations – Value Added Networks – Internal Information System – Work-flow Automation and Coordination – Customization – Supply Chain Management.

#### **UNIT IV**

Marketing on the Internet: Advertising on the Internet – Charting the On-Line Marketing Process – E-Commerce Catalogs or Directories – Information Filtering – Consumer-Data Interface: Emerging Tools.

#### **UNIT V**

Multimedia and Digital Video: Concepts – Digital Video and E-Commerce – Video Conferencing – Frame Relay – Cell Relay – Asynchronous Transfer Mode – Mobile Computing Frame Work – Wireless Delivery Technology – Mobile Information Access Devices – Cellular Data Communication Protocols – Mobile Computing Applications.

**Note:** Question paper shall cover 100% theory

- 1. Frontiers of Electronic Commerce Ravi Kalakota, Andrew Winston
- 2. E-Commerce- A Managerial perspective P.T.Joseph
- 3. Designing Systems for Internet Commerce- G. Winfield Treese & Lawrence C. Stewart
- 4. E-Commerce The Cutting Edge Of Business Kamelesh K Bajaj, Debjani Nag
- 5. E Business Road Map for Success Dr.Ravi Kalakota, Marcia Robinson
- 6.E-Commerce Srinivasa Vallabhan, S.V.

#### CORE COURSE – IX – E – BANKING

Credit Allotted: 5 Max. Marks: 75

**Objective**: To make the students to understand the e-banking transactions.

#### Unit I

Networking of computers – Types – LAN – WAN – Internet and Intra net – E-mail – rise of on-line – banking technology in banking services.

#### Unit II

Electronic payment system: Automatic teller machine merits and demerits – installation and security aspects a of ATM, MICR equipment – precautions in handling MICR instrument – benefits and limitations.

#### **Unit III**

e-cash: features – benefits of e-cash – limitations of electronic data interchange – electronic fund transfer credit card – debit card – payment through bank network – payment by smar card – electronic pass book – home banking.

#### Unit IV

Electronic clearing services – SWIFT – types of message in SWIFT (society for world wide interbank financial telecommunication) – message format in SWIFT – bank information code – message flow in SWIFT system – advantages and structure of SWIFT.

#### Unit V

E-Banking challenges and opportunities – services offered through e-banking – strengths of e-banking – weakness of e-banking – opportunities – theories of e-banking.

- 1. Knowledge based system in banking sector R.V. Kulkarni
- 2. Computer Application in Business and, Commerce and Banking R.S. Viramani.
- 3. Computer Application in Business R.Parameswaran.

#### ELECTIVE COURSE – I – OFFICE PROGRAMMING

Credit Allotted: 4 Max. Marks: 75

**Internal Assessment Theory – 15 Marks**; **Practical – 10 marks** 

Univ. Exam. Theory - 45 marks Practical - 30 marks

#### Unit I

Introduction to computers – Meaning and Characteristics of Computers – Components of computer – I-P-O Cycle – Memory and control units – Input and Output devices – Hardware and software – Operating Systems – Areas of Application – Benefits to society.

#### Unit II

Word – Creating Word Documents – Business Letters using wizards – Editing – Inserting Objects – Formatting – Spelling and grammar check – Word Count, Thesaurus, Auto Correct – Working with tables – Mail Merge – Introduction to Spread Sheet (MS – Excel) – Introduction to spread sheets – entering and editing text, numbers and formulae – Inserting rows and columns Building Worksheets – Creating and formatting charts – Application of Financial and Statistical functions.

#### Unit III

MS Power Point Creating a simple presentation – Creating, inserting and deleting slides – Saving a Presentation.

(Practicals 40 marks)

#### **Unit IV**

Word – Personal, Official letters – Circulars and templates – Use of Wizards – Resumes – Preparation of Bio data – Creating Greetings – Clip Art – Bullets and Numbering – Insertion of charts and diagrams - Tables – Mail merge – Excel – Entering information in worksheet – Sum functions - Align data cells – Changing column width and row height – Pay bill – mark sheet – Electricity bill – Pay slip.

#### Unit V

PowerPoint – Simple presentations – creating slide show – animation – inserting and deleting slides.

- 1. Microsoft Office for Windows E.D. Jones and Derek Sutton Publication.
- 2. MS Office 2000 Sanjay Saxena, Vikas Publishing House.
- 3. Computer Applications in Business S.V. Srinivasa Vallabhan, Sultan Chand and Sons, New Delhi.
- 4. Computer Applications in Business TD Malhotra, Kalyani Publications.
- 5. PC Software for Windows made simple Taxali, Tata Mcgraw Hill Publishing Company Limited.

## SEMESTER III CORE COURSE – X – COST AND MANAGEMENT ACCOUNTING

Credit Allotted: 5 Max. Marks: 75

#### UNIT – I

Cost Accounting – meaning – objectives – Nature and Scope – methods of costing – techniques of costing - classification and coding of costs - inventory control – stock levels – inventory systems - methods of pricing material issues.

#### UNIT – II

Labour costs – Direct and indirect – importance –Remuneration method – labour performance reports – labour turnover and stability – Overheads – Importance – allocation and apportionment of overheads - overhead cost control - absorption costing.

#### UNIT - III

Job and batch costing – accounting system under job costing – treatment of spoilages, defectives under job costing

#### UNIT - IV

Management Accounting – Nature & Scope – Tools and Techniques - Ratio analysis – marginal costing– cost-volume profit analysis – Break-even analysis – utility and limitations of cost volume profit analysis – Financial and profit planning – objectives.

#### UNIT - V

Budget administration – types of budget – advantages – budgeting and budgetary control.

Note: Question Paper Shall covers 50% Theory and 50% Problems

- 1. M.E. Thukaram Rao, "Cost and Management Accounting", New Age International (P) Ltd.
- 2. M. N. Arora, "Cost and Management Accounting", 8th Edition, Vikas Publishing House (P) Ltd.
- 3. Hilton, Maher and Selto, "Cost Management", 2nd Edition, Tata McGraw-Hill Publishing Company Ltd.
- 4. B.M. Lall Nigam and I.C. Jain, "Cost Accounting", Prentice-Hall of India (P) Ltd.

#### CORE COURSE XI – RESEARCH METHODOLOGY

Credit Allotted: 4 Max. Marks: 75

**Objective :** To make the students know the Research Methods in social science as applicable to computer application in commerce.

Theory only

#### UNIT – I

Research in Management: An Introduction – Definition, meaning and nature – Scope and objects of Research. Types of Research : Experimental Research – Survey Research – Case Study methods – Ex Post Facto Research.

#### UNIT - II

Research Design – Defining Research Problem and Formulation of Hypothesis – Experimental Designs.

#### UNIT - III

Research Process – Steps in the process of Research, Data Collection and Measurement: Sources of Secondary data – Methods of Primary data collection – Questionnaire construction - Attitude measurement and Scales – Sampling and Sampling Designs – Pilot Study & Pretesting

#### UNIT - IV

Data presentation and Analysis – Data Processing – Methods of Statistical analysis and interpretation of Data – Testing of Hypothesis and theory of inference

#### UNIT - V

Report writing and presentation –steps in Report writing – Substance of Reports – Formats of Reports – Presentation of a Report.

- 1. V.P.Michael : Research Methodology in Management, Kitib Mohan Publications, Alahabad.
- 2. C.R.Kothari: Research Methodology, Wiley Eastern Ltd, New Delhi
- 3. P.Saravanavel, Research Methodology, Kitab Mahal, Alahabad.
- 4. O.R. Krishnaswami: Methodology of Research in Social Science
- 5. D.Amarchend: Research Methods in Commerce.

#### CORE COURSE XII – ORACLE AND RDBMS

Credit Allotted: 5 Max. Marks: 75

#### UNIT – I

Database concepts: A relational Approach – Database Management Systems(DBMS) – Relational Database Model – Integrity rules – Theoretical Relational Languages - Database Design: Data Modeling and Normalization .

#### UNIT – II

Oracle 8: An overview - Personal Databases - Client / Server Databases - Table Creation & Modification: Data types - Constraints - Creating an Oracle Table - Working with tables: Data Management and retrieval.

#### UNIT – III

Multiple Tables: Join – Set Operators - Sub-Query - Advanced Features: Objects, Transactions and Control – Views – Sequences – Synonyms – Index – Controlling Access – Object privileges.

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#### UNIT - IV

PL/SQL : Programming Language Basic – History of PL/SQL – Fundamentals of PL/SQL – Data types – Variable declaration - SQL and Control structures in PL/SQL.

#### Unit - V

Cursors and Exceptions – Procedures, Functions and Packages.

#### **TEXT BOOK:**

1. Nilesh Shah, "Database Systems Using Oracle", Prentice – Hall of India private Ltd.

- 1. Abraham silberschatz Henry F.Korth S.Sudarshan, "Database system concepts", McGraw Hill companies.
- 2. Alexis leon , Mathews leon , "Essentials of Database Management systems", Vijay Nicole imprints pvt Ltd.
- 3. Raghu Ramakrishnan & Johannes Gehrke, "Database management systems", McGraw Hill –International editions.

#### ELECTIVE COURSE II – DATA BASE & DESK TOP PUBLISHING

#### (THEORY AND PRACTICALS)

Credit Allotted: 4 Max. Marks: 75

Internal Assessment Theory – 15 Marks; Practical – 10 marks

Univ. Exam. Theory - 45 marks Practical - 30 marks (Theory 60 marks)

#### Unit I

Database – importance of Database – MS Access – MS Access – Introduction – Parts of Access Window, Creating a Database, Relationships, Creating Table through Design view – Relationship – Query – Form – Reports.

#### **Unit II**

Importance of Desktop publishing – Page Maker – DTP – Menu – File, Edit, Utilities, Layout, Story, Type, Element, Window, Help – Working with Page Column – Indent.

#### Unit III

Importance of Photo creation and editing – Photoshop – The Photoshop Screen – Using the Toolbox – Document and Scratch Sizes – The Info Palettee – Saving and loading custom settings – Opening and saving files – Images – Layers – Channels and Mask – Colour Correction Techniques – Animation.

#### Practical – (40 marks)

#### **Unit IV**

Access – Creation of Database – Creation of relationships – Creating tables through design view – Database for salary, mark sheet, inventory, Form creation.

#### Unit V

Creating files – Photoshop – Saving and loading custom settings – Creating new file – Use of painting tools – Copying and pasting selections – Moving selections – Grow and Similar command – Editing Points – Use of Colour Balance Dialogue box.

#### **Reference Books:**

- 1. Photoshop 6 in easy steps Robert Shufflebotham, Dreamtech Press.
- 2. Page Maker 6.5 Vishnu Priya Singh, Meenakshi Singh, Asian Publications Limited.
- 3. MS Office 2000 (Access only), Sanjay Sexana, Vikas Publishing House.
- 4. Computer Applications in Business, (Access only) Srinivasa Vallabhan, Sultan Chand & Sons, New Delhi.
- 5. Desk Top Publishing, SK Yadava, Yatin Publishers, Delhi.

# ELECTIVE COURSE III – NETWORKING AND INTERNET (THEORY AND PRACTICALS)

Credit Allotted: 4 Max. Marks: 75

Internal Assessment Theory – 15 Marks; Practical – 10 marks

Univ. Exam. Theory - 45 marks Practical - 30 marks (Theory - 60 marks)

#### Unit I

Networking – Type of networking – Importance – components of network – Network Protocol – TCP/IP – Internet Service Providers – Dialer Programs and Internet Programs – Internet Explorer – Netscape.

#### Unit II

Introduction to Internet – A Brief History of Internet – Uses of Internet – The connection to the Internet – Web pages – Web Pages come from the Web server – Web sites – The normal Modem – ISDN, ADSL, CABLE Modems – Animation – Frames: Several Web pages at once – Several Windows simultaneously – Printing.

#### **Unit III**

Internet Basics: Evolution – Basic Terminology – Getting into the net – Browsers – Applications of Internet – Introduction to internet protocols – Language of Internet – Email and Voice mail – Creating mail address – Meaning of Net Meeting and Chatting – Tool bar.

#### (Practical – 40 marks)

#### Unit IV

E-mail address – creation – browsing – search engines – downloads.

#### Unit V

Visiting business places, libraries, Railway and Airline reservation centers online, online chatting.

- 1. The Internet Instance Reference Paul E Hoffman, BPB Publications.
- 2. Internet for Everyone Alexis Leon Mathews, Leon Techworld, UBS Publications.
- 3. Computer Applications in Business (Internet only), Srinivasa Vallabhan, Sultan Chand & Sons, New Delhi.
- 4. Internet Programming and Web Design S.Aarathi, Kalaikathir Achagam.
- 5. Internet & E-mail Yatin Publications, Delhi.
- 6. Internet Complete BPB Publications.

# SEMESTER - IV CORE COURSE – XIII – SECURITY ANALYSIS AND PROTFOLIO MANAGEMENT

Credit Allotted: 5 Max. Marks: 75

#### UNIT – I

Nature and scope of Investment Management Investment Objectives – Investment Process –Investment Media Security and Non-security forms of Investment gilt edged securities – Sources of Investment information.

#### UNIT – II

New Issues Market – Methods of Issuing – Parties involved in the new issue market – Secondary market – Stock Exchanges – NSE and BSE – Trading mechanism – online trading – SEBI and Investors production.

#### UNIT – III

Security Analysis – Risk and Return – Fundamental Analysis – Technical Analysis – Dow Theory – Market Indicators - Efficient Market Hypothesis.

#### UNIT - IV

Portfolio Construction – Traditional and Modern approach – Rationale of Diversification of Investments – Markovitz theory – Sharpe Index Model - Capital Asset Pricing Model.

#### UNIT - V

Investment companies in India – Types Mutual Fund Operations in India – UTI – SEBI and RBI Guidelines for Mutual Funds.

**Note: Theory only** 

#### **BOOKS FOR REFERENCE:**

1. Punithavathy Pandian : Security Analysis and Portfolio Management (Vikas Publishing

House)

2. Gupta L.C. : Return of Equities – The Indian Experience

(New Delhi OXFORD).

3. Bhalla V.K. : Investment Management and Portfolio Management

(S.Chand & Co. Delhi).

Fisher & Jordon
 Preeti Singh
 Avadhani V.A.
 Security Analysis and Portfolio Management.
 Security Analysis (Himalaya Publishing House).
 Investment and Securities Markets in India.

7. SEBI : Guidelines 1992.

8. Jack dark Francis Investment: Analysis and Management (McGraw Hill 1990).

9. Gara.K.L : Stock Exchanges in India.10. Yasasway : Equity Investment Strategy.

#### CORE COURSE – XIV – ENTERPRISE RESOURCE PLANNING

Credit Allotted: 4 Max. Marks: 75

#### UNIT – I

Introduction to ERP – Conceptual model of ERP – Evolution of ERP – Structure of ERP - Reasons for Growth – Advantages of ERP – Enterprise: An overview. ERP and Related Technologies: Business Process Re-engineering – Management Information System – Decision Support System – Executive Information system – Data Warehousing – Data Mining – OLAP – Supply Chain Management.

#### UNIT- II

ERP – Manufacturing Perspective – Materials Requirement Planning – Distribution Requirements Planning – JIT – CAD/CAM – Product Data Management – ERP Modules: - Plant Maintenance – Quality Management – Materials Management.

#### UNIT - III

Benefits of ERP: Reduction of Lead Time – Reduction of Cycle Time – Improved Resource Utilization – Reduced Quality Costs – Increased Flexibility – Improved Information accuracy and Decision making capability.

#### **UNIT - IV**

ERP Implementation Lifecycle: Introduction – Per-evaluation screening – Project Planning – Gap Analysis – Reengineering – Configuration – Implementation – Testing – Training – Maintenance. Vendors, Consultants and Users: Inhouse Implementation-Pros and Cons – Vendors – Consultants – Endusers.

#### UNIT - V

Future Directions in ERP: New Markets – New Channels – Faster Implementation Methodologies – Business Models – Application Platforms – new business segments – Web-enabling – Market Snapshot.

- 1. Alexis Leon, "Enterprise Resource Planning", Tata McGraw Hill Publishing Company Ltd.
- 2. Rahul V. Altekar, "Enterprisewide Resource planning-Theory and practice", Prentice Hall of India Pvt Ltd.
- 3. Vinod kumar garg and N.K. Venkitakrishnan, "Enterprisewide Resource Prentice Hall of India Pvt Ltd.
- 4. Dr.Subodh Kesharwani, "ERP systems Application, Experiences & Upsurg", Pragati prakathan publication Meerut.
- 5.Balasubramanian, Enterprise Resource Planning

# **CORE COURSE XV – PROJECT WORK**

Credit Allotted: 5 Max. Marks: 100

**Project Dissertation - 80 Marks;** 

(2 Reviews - 20 + 20 = 40 Marks)

**Report Evaluation = 40 Marks)** 

Viva – 20 Marks

# ELECTIVE COURSE IV – PROGRAMMING IN C LANGUAGE (THEORY & PRACTICALS)

Credit Allotted: 4 Max. Marks: 75

**Internal Assessment Theory – 15 Marks**; **Practical – 10 marks** 

Univ. Exam. Theory - 45 marks Practical - 30 marks

THEORY 2 hours

#### Unit I

C Language – Features – Compilers – Character Sets – Identifiers – Reserved Words – Concept of Data Types – Qualifiers – Specifiers – constant – Escape sequences – C – Program structure - Type of Operators – Arithmetic – Relational – Logical – Bitwise – Assignment – Type conversion – Operator precedence and associativity.

#### Unit II

Simple Input / Output Facilities – Header Files – Functions – Formatted I/O functions – Scanf() – Printf() – Writing C Program.

#### **Unit III**

Control constructs – If – else – if else if – do while – while – nested loops – break statement – continue, switch case – storage classes – Arrays – Functions – Pointers – Structure – Union – Files.

## **Practical Programs**

#### **Unit IV**

Program to print pay bills; Result processing – Electricity bill preparation; Telephone bill preparation – Bank Transactions; Income Tax Calculations – Admission list preparation; Driving License Application – Medical Diagnosis.

#### Unit V

Calculation of simple interest and compound interest – Reverse a float; string; If, Else if, Do while, While loops – Nested loops; Property Tax Calculation – Profit and Loss Account; Balance Sheet.

#### **Books Recommended:**

- 1. Programming in C Balagurusamy.
- 2. C for All S Thamarai Selvi and R Murugesan.

# ELECTIVE COURSE V – JAVA BASED BUSINESS APPLICATION (THEORY & PRACTICAL)

Credit Allotted: 4 Max. Marks: 75

Internal Assessment Theory – 15 Marks; Practical – 10 marks

Univ. Exam. Theory - 45 marks Practical - 30 marks

Theory Time: 2 hrs

#### Unit – I

Fundamentals of object oriented programming – Java Evolution – Java Tokens – Constants, Variables and Data types – Operators and Expressions – Branching and Looping Statements – Arrays – Call by Reference and Value.

#### Unit - II

Classes – Objects and Methods – Define a class – Create a class – Constructors – Function overloading – Inheritance – String Handling and Vectors

#### Unit – III

Interfaces: Implementing Multiple Inheritance – Packages – Creating and Accessing Packages – Threads – Creation of threads, thread methods – Exceptions – Types of Exceptions – Try, catch, throw, throws statements – Managing Input/Output statements

Practical Time: 2 hrs.

#### Unit – IV

Branching and Looping statements – Classes and objects – Arrays – String and Vectors – Interfaces and Packages

#### Unit - V

Exceptions – Try catch statements – Graphics Programming – Input and Output files – Abstract Window Toolkit (AWT) – Applet

#### **Reference Book:**

- 1. C. Xavier Programming with Java 2 SCITECH Publications
- 2. E. Balagurusamy Programming with Java Second Edition
- 3. John R. Hubbard Programming with Java McGraw Hill International Edition

#### JAVA PROGRAMMING LAB

#### **List of Practicals:**

- 1. Biggest among the 3 numbers using if., else statement
- 2. Factorial of the given number
- 3. nCr value of the given numbers
- 4. Count the number of vowels, consonants and words in a given sentence
- 5. Arrange the set of names in Alphabetical order
- 6. Define a class Circle and find out the area and circumference of a circle (use overloaded Constructors and static constant value of Pl)
- 7. Inheritance, Interfaces and Packages
  - a. Program using single Inheritance
  - b. Program using Multiple Inheritance
  - c. Prepare a student information system using set of classes in a package

#### 8. Exception Handling

Write Java Programs to handle the following Exceptions

- i. Divide by Zero Exception
- ii Number Format Exception
- 9. Write a Program to concatenation of two files
- 10. An Applet program to prepare a BIO-DATA format

## BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024

## **M.Com.** (Computer Applications)

## **Core Course VI - Quantitative Techniques for Business Decisions**

# (For the candidate admitted from the academic year 2009-2010 onwards)

Credit Allotted: 5 Max. Marks:75

Unit I: Meaning of Quantitative Techniques – Role of Quantitative techniques – Advantages and limitations of Quantitative Techniques Correlation analysis – simple – partial and multiple, Regression analysis – Time Series.

Unit II: Probability – Elements of probability – Theorems of probability – theoretical distributions – Binomial – poison – Normal distribution – Normal distribution.

Unit III: Definition of Hypothesis – Types of Hypothesis – Type I Error – Type II Error – t test – F test – ANOVA – Chi – Square test.

Unit IV: Transportation problem – Initial Basic feasible solutions by North West Corner rule – Minimization method – Maximize method – Vogel's approximation method – optimization test by Modi method – Assignment methods.

Unit V: Linear programming – Basic Concepts and notation – Linear programming formulation – solution through graphic methods, Simplex Method (Simple problem)

Note: 80 % Problem 20 % Theory

#### **Book for Reference:**

- 1 Quantitative Technique C.R. Kothari
- 2. Statistical Methods S.C. Gupta
- 3.Statistical Methods S.P. Gupta
- 4. Advanced Statistics D.L. Enclave

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