

MADRAS CHRISTIAN COLLEGE

Department of Commerce

Self-financed Stream



Master of Commerce

Computer Oriented Business Applications

**Department of Commerce (SFS)**  
**MADRAS CHRISTIAN COLLEGE (Autonomous)**  
**MASTER OF COMMERCE (Computer Oriented Business Applications)**

Paper	Subject	Duration of Exam	Marks			Credits	
			C.A	ESE	Total		
<b>Semester – I</b>							
Core 1	Computerized Financial Accounting	3 Hrs	50	50	100	5	P
2	Accounting for Decision making-I	3 Hrs	50	50	100	5	T
3	Marketing Management	3 Hrs	50	50	100	4	T
4	Operating System	3 Hrs	50	50	100	4	T
Elec	Elective 1	3 Hrs	50	50	100	3	P
<b>Semester – II</b>							
Core5	Accounting for Decision Making-II	3 Hrs	50	50	100	5	T
6	Systems Analysis and Design	3 Hrs	50	50	100	4	T
7	Taxation Laws and Practice	3 Hrs	50	50	100	4	T
8	Enterprise Resource Planning	3 Hrs	50	50	100	4	T
Elec	Elective 2	3 Hrs	50	50	100	5	P
<b>Semester – III</b>							
Core9	E-Commerce	3 Hrs	50	50	100	4	T
10	Research Methodology and Data Analysis using Software Package	3 Hrs	50	50	100	4	P
11	Financial Management	3 Hrs	50	50	100	4	T
12	Management Information System	3 Hrs	50	50	100	4	T
Elec	Elective – 3	3 Hrs	50	50	100	5	P
<b>Semester – IV</b>							
Core13	Organisational Behaviour		50	50	100	4	T
14	Banking & Insurance		50	50	100	4	T
15	Project				100	5	
16	Internship				100	5	
17	Soft Skill programme					8	
18	Internship					2	
Elective	Elective – 4	3 Hrs	50	50	100	5	P

***List of Elective Papers:***

i.	RDBMS	Theory
ii.	OOPS & C++	Practical
iii.	JAVA	Practical
iv.	Web Scripting Languages	Practical
v.	Foreign Language – I	Theory
vi.	Operating System	Theory
vii.	Legal Aspects of Business	Theory
viii.	Foreign Language – II	Theory
ix.	Organizational Behaviour	Theory
x.	Managerial Economics	Theory
xi.	Entrepreneurial Development	Theory
xii.	Computerised Auditing	Theory
xiii.	J2EE (Java to Enterprise Edition)	Practical
xiv.	Human Resource Management	Theory
xv.	Software Engineering	Theory
xvi.	Systems Analysis and Design	Theory
xvii.	Management Information System	Theory
xviii.	Marketing Management	Theory

**2. *Internship:***

Internship is an integral part of the Post – Graduate programme. It is essential to expose the students to the real life work situation and to strengthen the conceptual knowledge gained in the classroom. Two months internship shall be in banking, financial institutions, insurance, service sector or any other industrial enterprise or consulting organization involving the use of computers. The candidate should submit a report at the end of the study. The Head of the Department shall issue a certificate to the effect that the student has satisfactorily undergone the internship for the prescribed period. 5 credits will be awarded on successful completion.

**3. *Project Work:***

Project work which is compulsory carries 100 marks. A student should select a topic for the project work in the third semester itself and submit a project report at the end of the fourth semester. Viva voce would be conducted for the project work. The guide and an external examiner shall evaluate the project report and conduct the viva. The project work shall be related to computer applications in business. 5 credits will be awarded on successful completion.

## **COMPUTERIZED FINANCIAL ACCOUNTING**

Semester : I  
Core : I

Total Hours : 90  
Credit : 5

### **Unit – I**

Manual accounting: Introduction to Financial Accounting – Meaning – Accounting Concepts and Conventions – Single Entry System – Double Entry System – Manual Book Keeping Vs Computerized Accounting.

### **Unit – II**

Computerized Accounting: Ledgers – Vouchers – Sales Voucher – Payment Vouchers – Receipt Voucher – Journal Voucher – Contra Voucher.

### **Unit – III**

Account Books: Cash / Bank Book – Sales Register – Purchase Register – Statement of Accounts – Bank Reconciliation Statement.

### **Unit – IV**

Inventory Maintenance – Receipt note – Rejection in – Rejection out – Stock Journal – Physical Stock – Purchase Order – Sales Order – Invoice.

### **Unit – V**

Final Accounts: Trial balance – Profit and Loss A/c – Balance Sheet.

### **Books for Reference:**

1. Nadhani.A.K&Nadhani.K.K, Implementing Tally 6.3
2. NellaiKannan.C, Tally
3. Namarata Agrawal, Financial Accounting on Computers using Tally
4. R.L. Gupta &Radhaswamy, Financial Accounting, Sultan Chand

## **ADVANCED ACCOUNTING**

Semester	: I	Total Hours	: 90
Core	: II	Credit	: 5

### **UNIT I**

Company accounts- Financial statements: Preparation of financial statements- Statutory and Accounting standard requirements- Balance sheet and Profit and Loss account- Adjustments- Deferred taxes, Taxable income and accounting income, Deferred tax assets and liabilities, Divisible profits and Dividends and Issue of Bonus debentures.

### **UNIT II**

Amalgamation – Absorption- External Reconstruction – Internal Reconstruction

### **UNIT III**

Liquidation of Companies- Modes of winding up-Statement of affairs- Liquidator's final statement of account (Theory and Problems)  
Corporate financial reporting- Requirements and forms (Theory only)

### **UNIT IV**

Consolidated financial statements- Consolidation procedure as per Accounting standards- Disclosure requirements as per AS21- - Adjustments: Elimination of Intra- group transactions- Contingent liabilities- Unrealised profits- Revaluation of assets and liabilities- Double entry- Bonus shares- Dividends- Sale of shares- Change in parent company equities.

### **UNIT V**

Value added statements- Format & Contents (Theory only). Segment Reporting- Issues, Primary & Secondary segments, Format-Technical aspects of segment reporting (Problems)

### **BOOKS RECOMMENDED**

1. Gupta and Radhaswamy, Corporate accounting – Sultan chand& sons - 1972
2. Shukla and Grewal, Advanced Accounting - Vikas Publishing house - 1996
3. Jain and Narang, Corporate Accounting, Kalayani publishers - 1997
4. Chakraborti D K, Development of Corporate Accounting in India, Venus Pub House, 1994.
5. S.N.Maheswari – Advanced Accountancy, Sultan Chand & Son

Note: 80% problem and 20% theory.

# ADVANCED STATISTICS

Semester : I  
Core : III

Total Hours : 75  
Credit : 4

## UNIT I

Statistics – Definition, Types. Types of variables – Organising data - Descriptive Measures. Basic definitions and rules for probability, conditional probability independence of events, Baye’s theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions.

## UNIT II

Introduction to sampling distributions, sampling distribution of mean and proportion, application of central limit theorem, sampling techniques. Estimation: Point and Interval estimates for population parameters of large sample and small samples, determining the sample size.

## UNIT III

Correlation analysis, estimation of regression line. Time series analysis: Variations in time series, trend analysis, cyclical variations, seasonal variations and irregular variations. Index Numbers – Laspeyre’s, Paasche’s and Fisher’s Ideal index.

## UNIT IV

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations. ANOVA one and two way – Design of experiments.

## UNIT V

Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes and goodness of fit.

## BOOKS RECOMMENDED

1. Business Statistics : Gupta S P & Gupta M P, S Chand & Co.
2. Business Statistics : R S Bhardwaj , Excel Books
3. Fundamentals Of Mathematical Statistics : S C Gupta & V K Kapoor, Sultan Chand & Sons.
4. Fundamentals Of Applied Statistics : S C Gupta & V K Kapoor, Sultan Chand & Sons.
5. Statistical Methods In Managerial Decision :Mustafi , Mcmillan
6. Basic Statistics : B L Agarwal, New Age International Publishers

Note: 80% problem and 20% theory.

## ADVANCED EXCEL AND MS ACCESS

Semester: I  
Core :IV

Total Hours:75  
Credits :4

### UNIT I

Overview of excel:- what is excel used for- naming parts of the excel window- defining excel vocabulary – moving around in excel- naming cells, entering data and selecting cells – resizing columns and rows to fit data-formatting cells-auto format number – alignment – font – border – pattern – formatting columns or rows at a time.

### UNIT II

Auto fill data series:- cut, copy, paste, insert – menu bar – toolbar – right clicking – fill handle – inserting, deleting, and moving, rows, columns, sheets – printing, print preview, printing a selected part, page set up – margins – header/footer – print titles(printing and viewing) – scaling. Calculations:- mathematical symbols, autosum, formula bar(NPV,IRR), editing formula – using preset function – order of operation – combination words from different cells into one cell.

### UNIT III

Charting:- charting wizard – selecting objects in a chart – customizing a chart – resizing a chart – printing a chart on a whole page – create column, line, pie, and combination charts – change a chart type and sub type – edit chart text – change legend position.

### UNIT IV

Introduction to database:- starting access and opening a database understanding the access program screen – form:- copying, and pasting data, closing a database and exiting – creating and working with a database – planning a database – creating a database using database wizard – creating a blank database – creating a table using the table wizard – modifying a table and understanding data types – creating a new table from scratch – creating a query in design view – modifying a query, sorting a query using multiple fields – developing AND and OR operators.

### UNIT V

Working with tables and fields – understanding field properties – indexing a field adding a primary key to a table – inserting – deleting and reordering fields – changing a field's data type – using field description, adding a caption – changing the field size, formatting number, currency, and date / time field by hand – formatting text field, setting a default value – requiring data Entry-Validating data.

### BOOKS RECOMMENDED

1. Ruth Maran, Teach yourself visually excel. Publisher-John Willy & sons Edition :I Illustrated edition
2. Curtis Frye, Microsoft Excel plain and simple Publisher :Microsoft Press
3. Kate Shoup, Microsoft Office 2010 simplified Publisher: Visual Edition :1
4. Steve Lambert, M. Dow Lambert: Microsoft office Access 2007 Step by step Publisher :Microsoft Press, Edition 1
5. Roger Jennings Microsoft Access 2010 in Depth Publisher: Que ; I edition

## **ACCOUNTING FOR DECISION MAKING**

Semester	: II	Total Hours	: 90
Core	: V	Credit	: 5

### **UNIT I**

Management Accounting- Definition, Nature and Scope-Functions- Role of Management Accountant- Tools of Financial Analysis and Planning- Ratio, Fund Flow and Cash Flow Analysis.

### **UNIT II**

Cost Concept- Absorption vs Variable costing- Cost center- Profit center-Marginal Costing- Break – even and CVP Analysis and Decision Making- Application of Marginal costing in Managerial Decision Making- Advanced Problems.

### **UNIT III**

Activity based costing (ABC) – Introduction-Concept of ABC- Approaches to ABC- Allocation of overheads under ABC- Characteristics of ABC- Implementation of ABC system, ABC supports to corporate strategy, Pricing Decision- Black flush costing- Life Cycle Costing.

### **UNIT IV**

Standard Costing- Setting Standards- Variance analysis and reporting- Material, Labour, Overhead, Sales and Profit Variances- Reporting and Investigation of Variances.

### **UNIT V**

Budget and Budgetary Control- Forecasting vs Budget- Preparation of Functional Budget- Types of budgets- Zero Base Budgeting- Programme Budgeting and Performance Budgeting.

### **BOOKS RECOMMENDED:**

1. S.N. Maheswari, Management Accounting, Sultan Chand and Sons
2. Khan & Jain, Management Accounting, Tata McGraw Hill
3. N.P. Sreenivasan, , Management Accounting, StosiusInc/Advent Books Division, 1986
4. Man Mohan & S N Goyal, ,Principles of Management Accounting, Wheeler Publisher
5. Saxena&Vashist, , Advanced Cost and Management Accounting, Sultan Chand & Sons, 2000

Note: 80% problem and 20% theory.



## **ENTERPRISE RESOURCE PLANNING**

Semester : II  
Core : VI

Total Hours : 90  
Credit : 4

### **UNIT – I**

Introduction: Introduction to ERP – The Enterprise – Benefits of ERP – ERP and Related Technologies – BPR – Data Warehousing – Data Mining – OLAP – Supply Chain Management.

### **UNIT – II**

ERP Implementation: ERP Implementation lifecycle – Implementation Methodology – Not all package are created equal – Package Selection – ERP Implementation – The Hidden Costs – Organizing the Implementation – Vendors – consultants and users – Contracts with Vendors – consultants and employees – Project Management & Monitoring – After ERP implementation.

### **UNIT – III**

The Business Modules: Business Modules of an ERP Package – Finance – Manufacturing – Human Resources – Plant Maintenance – Materials Management – Quality Management – Sales & Distribution.

### **UNIT – IV**

The ERP Market: ERP Marketplace – SAP AG – PeopleSoft – Baan Company – J – D – Edwards – Oracle Corporation – QAD – SSA.

### **UNIT V**

ERP – Present and Future: Turbo charge the ERP system – Enterprise Integration Applications (EIA) – ERP and E-commerce – ERP and Internet – Future Directions in ERP.

### **Books for Reference:**

1. Alexis Leon, ERP Demystified, Tata McGraw Hill, 2000
2. Clewett, Network Resource Planning for SAP R\3, BAANIV & People Soft, Tata McGraw Hill
3. Ghosh, SAP Project Management, Tata McGraw Hill
4. Hernandez, The SAP R\3 Hand Book, Tata McGraw Hill
5. Hester, J.D Edwards Oneworld: A Developer's Guide writing 003 SAP ABAP\4 Programs, Tata McGraw Hill
6. Hoffman, Writing 003 SAP ABAP/4 Programs, Tata McGraw Hill
7. Miller, Peoplesoft Integration Tools, Tata McGraw Hill
8. Williams, Implementing SAP R\3 Sales & Distribution, Tata McGraw Hill
9. Alexis Leon, Enterprise Resource Planning, Tata McGraw Hill

## **VISUAL BASIC**

Semester : II  
Core : VII

Total Hours : 75  
Credit : 4

### **UNIT – I**

Introduction to Visual Basic – GUI – Integrated Development Environment – Introduction to Forms, Common Properties, Methods and Events – Introduction to Visual Basic Programming – Variables, Constants and Operators.

### **UNIT – II**

Intrinsic Controls: Pointer, Label, Frame, Command button, Option button, Check box, Combo box, HScroll bar, Timer, Dir List box, Shape, Image, Picture box, Text box, List box, VScroll bar, Drive list box, File list box, Line controls -OLE Adding new controls to the form.

### **UNIT – III**

Control structures: If/Then, If/Then/Else, Select case – Looping structure: Do.. While, Do.. Until, For.. Next. Arrays - Multidimensional array –control arrays – Sub procedures and function procedures – Strings, Dates and Times.

### **UNIT – IV**

Menus, Sub-Procedures and Sub-functions:Defining / Creating and Modifying a Menu, Using common dialog box, Creating anew sub-procedure, Passing Variables to Procedures, Passing Argument ByValByRef, Writing a Function Procedure,Multiple Forms,Creating , adding, removing Forms in project, Hide, Show Method, Load, UnloadStatement, Me Keyword, Referring to Objects on a Different Forms.

### **UNIT - V**

Database Programming: Accessing Database FileCreating the database files for use by Visual Basic ( Using MS-Access), Using the Data Control ,setting its property, Using Data Control with forms, navigating the database in code ( the recordset object using the movenext,moveprevious, movefirst&movelast methods , checking for BOF & EOF, usinglistboxes&comboboxes as data bound controls, updating a database file (adding, deleting records) . Advanced data handling Displaying data in grids (grid control, properties of grid ) .

### **BOOKS RECOMMENDED**

1. H.M.Deitel., P.J.Deital and T.R.Nieto, “Visual Basic 6 – How to Program”
2. Francesco Balenda, “Programming Microsoft Visual Basic”, WP Publications and Distributors.
3. Gary Cronell, “Visual Basic 6”, Tata McGraw Hill Publishing Company Ltd.
4. Julia Case Bradley & Anita C.Millspaugh, “Programming in Visual Basic 6.0”, Tata McGraw Hill Publishing Company Ltd.

## **INCOME TAX LAW & PRACTICE**

Semester : II  
Core : VIII

Total Hours : 75  
Credit : 4

### **Unit – I**

Introduction to Tax – Basic Concepts – Residential Status of Individuals – Agricultural Income.

### **Unit – II**

Salary: Meaning – Computation – Allowances – Perquisites – Profit-in-lieu of Salary – Deductions u/s 16.

Income from House Property: Computation – Annual Value – Let out House Property – Self Occupied House – Deductions.

### **Unit – III**

Income from Business or Profession: Computation of Profits and Gains – Deductions Expressly Allowed – Expenses Expressly Disallowed – Expenses Allowable under Certain Restrictions – Deemed Incomes.

### **Unit – IV**

Capital Gains: Computation – Capital Asset – Transfer – Cost of Acquisition – Exemption.

Income from other sources: Computation – Grossing Up – Deductions and Other provisions.

Deductions: u/s 80, 80CCC, 80DD, 80DDB, 80E, 80G, 80GG, 80GGA  
(Deductions – Theory only).

### **Unit – V**

Practical Exposure through Computer of different types of forms, Income tax Challan, TDS Certificate, TDS Return, Form 15G, 26, 27 etc – Returns – Manually & Electronically.

### **Books for Reference:**

1. V.K. Singhania, Direct Taxes & Practice, Taxman Publications, New Delhi
2. T.N. Manoharan, Direct Tax Laws, Snowwhite Publications (P) Ltd.
3. Girish Ahuja & Ravi Gupta, Professional Approach to Direct Taxes, Bharat Law House Pvt. Ltd., New Delhi
4. Dinkar Pagare, Law and Practice of Income – Tax, Sultan Chand & Sons
5. V.P Gaur & D.B. Narang, Income – Tax Law & Practice, Kalyani Publishers

Note: 80% problem and 20% theory.

## RESEARCH METHODOLOGY AND DATA ANALYSIS USING SOFTWARE PACKAGE

Semester : III  
Core : IX

Total Hours : 90  
Credit : 5

### **Unit – I**

Research in Management – Introduction – Nature, Scope, Objectives of Research – Types of Research – Process of Selection & Formation of Research Problem – Hypothesis – Research Design – Meaning, Types.

### **Unit – II**

Date Collection – Methods – Sampling Techniques – Types – Questionnaire – Observations – Interview.

### **Unit – III**

Data Handling: Data Entering – Variable View – Data View.

Data Menu: Insert Variable – Insert Vase – Goto Case – Sort Cases – Split File – Select Cases.

Chart: Bar – Pie – Histogram

### **Unit – IV**

Transform Menu: Computer – Count – Recode – Automatic Recode – Categorize Variables.

Univariable: Frequency – Description Statistics – Explore.

### **Unit – V**

Compare Mean: Single Sample T Test – Independent Sample T Test – Paired Sample T Test – ANOVA.

Crosstabs: Contingency Table – Chi-square.

Correlation: Bivariable – Partial.

### **Books for Reference:**

1. G.R. Kothari, Research Methodology & Techniques, Wiley Eastern, 1994
2. Ferser, Research Methods in Economics & Business, Verdo MacMillan
3. R.K Dwiredi, Research Methods in Behavioural Services, MacMillan
4. John W. Best & James V. Khan, Research in Education, Prentice Hall of India, 2000
5. A.N Sadhu & Amarjit Singh, Research Methodology in Social Sciences, Himalaya Publishing House, 1992
6. William Giles Campbell, Form & Style in Thesis Writing, Houghton Mifflin Company, 1954 (Latest Edition)
7. LokeshKoul, Methodology of Educational Research, Vikas Publishing House Pvt. Ltd.
8. O.R.Krishna Swami, Methodology of Research in Social Sciences, Mumbai, Himalaya Publications, 2002
9. Alistall, Doing Statistics with SPSS, Saga Publication, New Delhi, 2002

## **FINANCIAL MANAGEMENT**

Semester : III  
Core : X

Total Hours : 75  
Credit : 4

### **Unit – I**

Introduction – Financial Management an Overview – Evolution of Financial Managements – Financial Decision in a Firm – Goal of Financial Management – Organization of the Finance Function – Emerging Role of the Financial Manager in India.

### **Unit – II**

Techniques of Financial Analysis – Break–Even Analysis and Leverages.  
Long–Term Investments Decision – Capital Budgeting – Nature – Process – Techniques – NPV – Benefit Cost Ratio – IRR – Pay–Back Period – ARR.

### **Unit – III**

Cost of Capital: Capital Structure and Dividend Decision: Capital Structure – Net Income Approach – Net Operating Income Approach – Modigliani & Miller Poseter Dividends: Introduction – Dividend Theories.

### **Unit – IV**

Working Capital Management: Introduction – Need for Working Capital – Computation of Working Capital – The Concept of Zero Working Capital – Cash Management – Receivables Management – Inventory Management.

### **Unit – V**

Multinational Financial Management: What is Multinational Corporation – Multinational vs. Domestic Financial Management – Inflation, Interest Rates and Exchange Rates – Purchasing Power Parity – International Capital Structure – Multinational Working Capital Management.

### **Books for Reference:**

1. Van Horne & C. James, Financial Management, Prentice Hall of India Pvt. Ltd
2. S.N Maheshwari, Management Accounting & Financial Analysis, Sultan Chand & Sons
3. M.Y Khan & P.K Jain, Financial Management Text & Problems, Tata McGraw Hill Publishing Co. Ltd.
4. S.C. Kuchhal, Financial Management – An Analytical & Conceptual Approach, Chaitanya Publishing House
5. Prasanna Chandra, Financial Management – Theory & Practice, Tata McGraw Hill Book Co.
6. I.M. Pomdey, Financial Management, Vikas Publishing House Pvt. Ltd.
7. T.S Reddy & Y. Hari Prasad Reddy, Financial Management & Accounting, Kargham Publishing

Note: 80% problem and 20% theory.

## **E – COMMERCE**

Elective: III  
Core : XI

Total Hours : 75  
Credit : 4

### **Unit – I**

Basic in E-Commerce – Introduction to E-Commerce Modules – B2B, B2C – Impact of E – Commerce on Business – Growth of Internet and Web – Opportunities in E-Commerce.

### **Unit – II**

Client – Server – Emerging Client Server – World Wide Web as the Architect – Web Background – Hyper Text Publishing – Technology behind Web – Security Threats – Network Security – Data and message Security and the Web.

### **Unit – III**

Purchase Procedure – Supply Chain Management – Sales Procedure – Web as an Advertising and Marketing Channel – Payment Security – Authentication of Payment – Modes of Payment – Electronic Cash – Electronic Wallets – Smart Cards – Credit and Change Cards – Digital Signature.

### **Unit – IV**

Risk Associated with Internet Transaction – Risk Management – Disaster Recovery Plans – Electric Data Interchange – EDI Legal Security and Privacy Issues – Type of Digital Documents – Issues behind Documents – Insurance – Corporate Data Warehousing.

### **Unit – V**

Web Based Marketing: Four PS Applied in Internet Marketing – Fifth “P” Personalization – Internet Marketing Techniques – Online Advertising Mechanism – Website Design Issues – Intelligent Agents and their impact on Marketing Techniques.

### **Books for Reference:**

1. Marilyn Greenstein & Todd M. Feinman, Electronic Commerce, Tata McGraw Hill, 2000
2. Gary P. Schneider & James T. Perry, Electronic Commerce
3. Pete Loshin & Paul A. Murphy, Electronic Commerce
4. Ananthi Sheshasaayee & Sheshasaayee, Computer Application in Business and Management
5. Awad, Electronic Commerce, Prentice hall of India
6. David Kosiur, Understanding E-Commerce
7. Kosiur, Understanding Electronic Commerce, PHI / Microsoft Press
8. P. T Joseph, Electronic Commerce, Prentice Hall of India

# SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Semester : III  
Core : XII

Total Hours : 75  
Credit : 4

## UNIT I

Investment setting: Securities - Securities Market - Sources of investment information - Security market indicators - Security Contract regulation Act.

## UNIT II

Valuation of Securities: Equity - Preference shares - Debt instruments - Hybrid securities - derivatives - Asset pricing theories - CAPM - APT - Portfolio theory - Option pricing theory.

## UNIT III

Economic Analysis: Economic forecasting and stock Investment Decisions - Forecasting techniques. Industry Analysis - Industry classifications. Economy and Industry analysis. Industry life cycle - Evaluating Industry relevant factors - External industry information sources.

## UNIT IV

Company Analysis: Measuring Earnings - Forecasting Earnings - Applied valuation techniques - Graham and Dodds investor ratios value investing. Technical Analysis : Fundamental Analysis Vs Technical Analysis - Charting methods - Market Indicators - Trend - Trend reversals - Patterns - Moving Average - Exponential moving Average - Oscillators - ROC - Momentum - MACD - RSI - Stoastics.

## UNIT V

Portfolio: Portfolio Construction - Diagnostics Management - Performance Evaluation - Portfolio revision.

## BOOKS RECOMMENDED

1. Investment Management and Portfolio Analysis - Reilly.
2. Fundamentals of Investing - Gitman
3. Security Analysis - Graham and Dodd
4. Management of Investments - Clark Francis
5. Modern of Security Analysis and Portfolio Management - Fuller and Farvell.
6. Investment Management - Balla and Tuteja.

## **INSURANCE AND RISK MANAGEMENT**

Semester : IV  
Core : XIII

Total Hours : 75  
Credit : 4

### **UNIT I**

Insurance Industry: Growth & Development of Indian Insurance Industry – Regulations of Insurance Business and The Emerging Scenario – Introduction to Life & General Insurance – Life Insurance: Features of Life Insurance – Essentials of Life Insurance Contract – Kinds of Insurance Policies – Premium determination – Life Policy Conditions.

### **UNIT II**

Fire Insurance: Fire Insurance Contracts – Fire Insurance Coverage – Policies for stocks – Rate Fixation in Fire Insurance – Settlement of Claims. Marine Insurance: Marine Insurance Contract – Types of Marine Insurance – Marine Cargo Losses and Frauds – Settlement of claims.

### **UNIT III**

Miscellaneous Insurance: Motor Insurance – Employers Liability Insurance – Personal Accident and sickness Insurance – Aviation Insurance – Burglary Insurance – Fidelity Guarantee Insurance – Engineering Insurance – Cattle Insurance – Crop Insurance.

### **UNIT IV**

Introduction to risk management: The Concept of Risk – Risk Vs. Uncertainty – types of Risks: Market Risk, Credit Risk, Operational Risk, interest risk, business risk, systematic risk - Classifying pure risks – methods of handling pure risks – risk management process – Risk financing techniques – Risk management objectives – Risk Management Information System (RMIS) – Risk Control.

### **UNIT V**

Risk Management by Individuals: Factors effecting individual demands for insurance – Risk Management by Corporations: Corporate Risk Management Process – Types of Risk Managing firms.

### **BOOKS RECOMMENDED**

1. Dr. P.K. Gupta: Insurance and Risk Management, 1<sup>st</sup> edition, Himalaya Publishing House.
2. Dr.P.K. Gupta: Fundamental of Insurance, 1<sup>st</sup> edition, Himalaya Publishing House.
3. C. Gopala Krishnan: Insurance Principles & Practice, Sterling Publishers Pvt. Ltd., New Delhi.
4. George G.R. Lucas, Ralph H. Wherry: Insurance, Principles and Coverages, U.S.A.
5. Prof. K.S. N. Murthy and K.V.S. Sarma: Modern Law of Insurance in India, N.M. TripathiPvtLtd., Bombay.
6. P.S. Palande, R.S. Shah, M.L. Lunawat: Insurance in India, Sage Publications, New Delhi.



## **BANKING AND FINANCIAL SERVICES**

Semester : IV  
Core : XIII

Total Hours : 75  
Credit : 4

### **UNIT I**

Commercial banking- Functions of commercial banks- Investment policy of a commercial bank- Techniques of credit creation – private banks- Regional Rural banks- Co-operative banks – Scheduled Banks – RBI – Constitution – Functions – Central Banking functions – Regulatory and supervisory functions- promotional and developmental functions.

### **UNIT II**

Advisory Financial Services: Merchant Banking – Registration – Obligation and Responsibilities of Merchant Bankers – code of conduct for Merchant bankers- Restriction on Business – Disclosure to SEBI – Suspension and Cancellation of Registration – Default by merchant bankers.

### **UNIT III**

Mutual Fund-Concept and origin of mutual fund – Mutual Fund Schemes – Institutions involved in mutual fund business.

### **UNIT IV**

Asset/Fund based financial services : Leasing-Concept and classification-significance- Advantages and Limitations- RBI NBFCs Directions toward Leasing- Financial evolution of leasing-Tax aspects of leasing- Factoring: Concept- Mechanism- Functions of a Factor – Forms of Factoring-Legal Aspects of factoring – Forfeiting: Advantages- Evaluation- RBI Guidelines.

### **UNIT V**

Venture Capital financing : Features – Selection of investment – Financial analysis- Financial instruments – Investment Nurturing – Techniques – Credit Rating – objectives – institutions engaged in credit rating – purpose and procedure of rating – Role of CRISIL and ICRA

#### **Books for Reference:**

1. Sundaram, Varshney, Banking and Financial System, Sultan Chand & Sons, New Delhi, 2004.
2. S.N.Maheshwari, theory and Practice of banking, Kalyani Publishers, 2005.
3. Radhaswamy, Vasudeven.S.V., A text book of Banking, S.Chand& Co. Ltd., new Delhi, 2004.
4. M.L.Tannon, Banking Law and Practice in India, Tracker Co.Ltd, Mumbai, 2004
5. HoomanEstelami, Marketing Financial Services, Dog ear publishing.
6. Evelyn enrich &DukFanelli, the financial services handbook, boomer press
7. M.Y.Khan, Financial Services, tataMcGraw Hill.

## **PROJECT**

Semester: IV  
Major: XIV

Total Hours : 90  
Credit : 5

A Student should select a topic for the project work in the third semester itself and submit report at the end of the fourth semester. Viva Voce would be conducted for the project work. The guide and an external examiner shall evaluate the project report and conduct the Viva. The project work shall be related to Computer application in business.

### **Assessment:**

- The Projectwork will be assessed for 75 marks.
- There will be external viva voce for 25 marks.
- The total for the project will be 100 and the credit awarded will be 5.

## **INTERNSHIP**

Semester : IV  
Major: XIV

Total Hours : 90  
Credit : 5

Internship is an integral part of the post graduate programme. It is essential to expose the students to the real life work situation and to strengthen the conceptual knowledge gained in the classroom. Two months internship shall be in banking, financial institutions, insurance, service sector or another industrial enterprise or consulting organization involving the use of computers. The candidate should submit a report at the end of the study. The Head of the Department shall issue a certificate to the effect that the student has satisfactorily undergone the internship for the prescribed period. The guide and an external examiner shall evaluate the project and conduct the viva.

### **Assessment:**

- The internship report will be assessed for 75 marks.
- There will be external viva voce for 25 marks.
- The total for the internship will be 100 and the credit awarded will be 5.

## **RDBMS**

### **UNIT – I**

Elective :I

Total Hours : 60  
Credit : 5

Database concepts:– Database Management Systems (DBMS) , Purpose of Database Systems, Views of data, Data Models, Database language, Transaction Management, Storage management, Database Administrator, Database Users, Overall System Structure, Different types of Database Systems:–E-R Model: Basic Concepts, E-R Diagram, Weak Entity set, Extended E-R features, Design of an E-R Database Schema, Reduction of an E-R schema to Tables.

### **UNIT – II**

Relational Database Design- Pitfalls in Relational-Database Design, Decomposition, Normalization Using Functional Dependencies, and Normalization Using Multivalued Dependencies, Normalization Using Join Dependencies, Domain-Key Normal Form and Alternative Approaches to Database Design Relational Database Design:

### **UNIT – III**

Relational Algebra: -Database management and security Data organization and storage, Transaction Processing.

### **UNIT IV**

Concurrency Management: Introduction – Serializability – Concurrency Control – Locking Schemes – Timestamp Based Order – Optimistic Scheduling – Multiversion Techniques – Deadlock and its Resolutions – Atomicity, Concurrency and Recovery.

### **UNIT – V**

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

#### **BOOKS RECOMMENDED**

1. Abraham silberschatz Henry F.Korth S.Sudarshan, “Database System Concepts”, McGraw – Hill Companies., Fifth edition.
2. Raghuram Krishnan & Johannes Gehrke, “Database Management Systems”, McGraw Hill International Editions.
3. C.J. Date:- An Introduction to Database Systems Addison Wesley; 8<sup>th</sup> edition
4. Alexis Leon, Mathes Leon, “Essentials of Database management, Systems”, Vijay Nicole Imprints Pvt Ltd.

## OOPS & C++

Elective: II

Total Hours : 60

Credit : 5

### Unit – I

Basic concepts in object oriented methodology – benefits of object oriented methodology – finding classes and object Definitions – How to determine the objects and classes – where to look – what to look for what to consider and challenge – examples – Identifying structures and definitions – How to determine the structures – examples.

### Unit – II

C++ programming concepts: program construction – output using cout – preprocessor directives – comments – Integer variables – character variables – cin – float type – manipulators – type conversion – arithmetic operators – library functions – Loops and decisions – relational operators – loops decisions – logical operators and other control structures.

### Unit – III

Structures enumerated data types – functions – simple functions passing arguments – returning values – reference arguments – overload functions – inline functions storage classes – return by reference – object and classes–class – objects and data types – constructions – objects as function arguments – structures and classes static class data.

### Unit – IV

Arrays: arrays as class members – arrays of objects strings – operators overloading: overloading – unary operators – binary operators – data conversion – pitfalls – Inheritance: derived and base classes – derived class constructors – over riding – class hierarchies – public and private inheritance – multiple inheritance – container ship.

### Unit – V

Pointers: Pointers and array functions – string objects – memory management virtual functions: friend functions – copy constructors – File and streams – stream – string I/O – character I/O object I/O – file pointers – opening and closing files – redirection.

### Books for Reference:

1. Hubbard John , Programming with C++ – Schamum’s Outline Series, Tata McGraw Hill International Editions, 2000
2. BjarneStroustrup, The C++ Programming Language, Addison Wesley Publication Co., 2000
3. Herbert Schildt, C++ – The Complete Reference – 3<sup>rd</sup> Edition, Tata McGraw Hill, 1999
4. J.P Cohoon& J.W David Son, C++ Program Design – An Introduction to Programming & Object Oriented Design – 2<sup>nd</sup> Edition, McGraw Hill, 1999

# JAVA

Elective: III

Total Hours : 60  
Credit : 5

## UNIT I

Introduction to Java Applications:-Fundamental Programming Structures in Java, The History of Java. Java's Key Features. The Java Virtual Machine, Basic Identifiers, Comments, Keywords. Variables, assignment expressions, Using Operators.

## UNIT II

Java language constructs :- Branches -The 'If-Else' Statements. Selecting with 'Switch' statement. Loops -Using 'While', do-while, for loop. Arrays:- Creating an Array, Array Initialization, Working with Arrays, Using Multi-dimensional Arrays. , math, strings

## UNIT III

Object oriented programming:-Classes and objects, Classes & Packages, The 'import' Statement, The Importance of Encapsulation, Java Constructors, Access Modifiers (private, default and public).  
Method Overloading.

## UNIT IV

Polymorphism and Inheritance:-The 'Protected' Modifier, Using 'this' and 'super', The 'final' keyword, Static Members & Methods., Interfaces & Abstract Classes, The Complete Construction Process, The Class 'Object', Nested Classes, Enums in Java.

## UNIT V

Exceptions and Exception Handling in Java:-The 'try-catch-finally', Compile-time Exceptions, Describing Common Exceptions, Creating Custom Exceptions.

## BOOKS RECOMMENDED

1. Balagurusamy , Programming with Java , II Edition , Tata Mc.Graw-Hill, publishing company Ltd .
2. Herbert Schildt - JAVA 2 ( The Complete Reference)- Fourth Edition, TMH ,Fifth, Reprint 2002, BPB Publications
3. Deitel H.M. -java How to Program, Publisher: Prentice Hall, Seventh Edition
4. Bruce Eckel – Thinking in Java, prentice hall (2006), Fourth edition.

## WEB SCRIPTING LANGUAGES

Elective : IV

Total Hours : 60  
Credit : 5

### Unit – I

HTML: Basic – WWW – Introduction – Elements – Basic Tags – Formatting – Entities – Links – Frames – Tables – Lists – Forms – Images – Background.

### Unit – II

JavaScript: Introduction – Variables – Operators – Functions – Conditional – Looping – Guidelines – Objects – Array – Boolean – Date – Math – String.

### Unit – III

VB HOME: Introduction – Variables – Procedures – Conditional – Looping – Functions – Keywords.

### Unit – IV

DHTML: Introduction – DHTML CSS – DOM – Events.

### Unit – V

XML: Basic Introduction – Syntax – Elements – Attributes – Validation – Browsers – Viewing – CSS Display – XSL Display – Data Islands – Parser – XML in Real Life.

### Books for Reference:

1. Bayross, Web Enabled Commercial Application Development using HTML, DHTML, Javascript, Pearl, CGI, BPB Publications, 2000
2. J. Jaworski, Mastering Javascript, BPB Publications, 1999

**FOREIGN LANGUAGE – I**  
**(French – I)**

Elective : V

Total Hours : 60  
Credit : 5

**Unit – I**

Les alphabets avec leur prononciation – Les articles devant les noms: définis, indéfinis

**Unit – II**

Les pronoms personnels – Les verbes et leur classifications – La conjugaison des verbes réguliers en particulier des verbes avec des terminations "er" – L'emploi de la conjugaison des verbes dans des phrases simples.

**Unit – III**

Les formes des phrases: la forme affirmative, la forme négative, La forme d'interrogation – Les adjectives et leur changements en genre.

**Unit – IV**

Les chiffres et les nombres – Les heures.

**Unit – V**

Les présentations – Les pays du monde – Les métiers.

**Texte prescrit:**

Café Crème–I Méthode de français. (Unité 1 et Unité 2)



## **OPERATING SYSTEM**

Elective: VI

Total Hours : 60

Credit : 5

### **Unit – I**

General Overview of UNIX system kernel – Architecture of UNIX OS – Kernel Data structures – System administration – Buffer cache: Operation – Advantages & Disadvantage.

### **Unit – II**

Internal Representation of file – inodes – structures & directories – Super Block – Allocation of Disk Blocks – System calls for the file system in UNIX.

### **Unit – III**

Processors: States & transitions – Layout of system memory – Context switch – Process control in UNIX – Process Scheduling & Time.

### **Unit – IV**

UNIX Memory Management: Policies – Swapping – Demand paging – Hybrid systems – I/O subsystems – Drivers & streams – Device interfaces – Disk drivers – Terminal drivers.

### **Unit – V**

Interprocess Communication: Process tracing – system V IPC – Network communications – Sockets.

### **Books for Reference:**

1. A.S Godbole, Operating System, Tata McGraw Hill, 1999
2. Deitel H.M, Introduction to Operating System, Addison Wesley Publishing House Co., 1990
3. Silberschatz & P.B Galvin, Operating Systems Concepts, Addison Wesley Publishing Co.
4. Crowley, Operating System – A Design Oriented Approach, Tata McGraw Hill
5. Mibenkovic, Operating System – Concepts & Design – 2<sup>nd</sup> Edition

## LEGAL ASPECTS OF BUSINESS

Elective: VII

Total Hours : 60

Credit : 5

### **Unit – I**

Sale of Goods Act, 1930 – Sale and Agreement to Sell – Conditions and Warranties – Passing of Property – Performance – Remedies for breach – Rights of unpaid seller – Auction Sale.

### **Unit – II**

Companies Act, 1956 – Definition – Formation – Memorandum of Association – Articles of Association – Prospectus – Share Capital – Shares.

### **Unit – III**

Foreign Exchange Maintenance Act, 1999 – Introduction – Objectives of the Act – Definition: Person of Indian Origin, Residential Status of a Person, Current, Capital and Current Account Transaction, Export, Imports, Foreign Exchange and foreign currency – Authorised dealer: his responsibilities.

### **Unit – IV**

The consumer Protection Act, 1986 – Definition – Consumer Protection Council (State and Central) – Consumer Disputes Redressal Agencies – Consumer Disputes Redressal Forum – State Consumer Disputes Redressal Commission – National Consumer Disputes Redressal Commission.

### **Unit – V**

Cyber Law and the Information Technology Act, 2000 – Objectives of the Act – Definitions – Digital Signatures (Sec 3) – Electronic Governance (Sec 4 – 10) – Attribution, Receipt and Despatch of Electronic Records – Regulations Regarding Certifying Authorities – Digital Signature Certification – Duties of Subscribers – Penalties – Cyber Regulations Appellate Tribunal – Cyber Regulations – Advisory Committee.

### **Books for Reference:**

1. N.D. Kapoor, Mercantile Law, Sultan Chand & Sons
2. N.D. Kapoor, Company Law, Sultan Chand & Sons
3. K.K Jindal, Letter of Credit & EXIM Finance, Skylark Publishing
4. P. Saravanavel& S. Sumathi, Legal Aspects of Business, Himalaya Publishers 2004
5. Krishnakumar, Cyber Laws: Intellectual Property & E – Commerce Security, Dominant Publishers & Distributors
6. Kamlesh. N Agarwala&Murli D Tiwari, IT and the Indian Legal System, MacMillan Publishers
7. N.A. Vajaya Shankar, Cyber Law for every Netizen in India.

**FOREIGN LANGUAGE – II**  
**(French – II)**

Elective: VIII

Total Hours : 60  
Credit : 5

**Unit – I**

Les verbes irréguliers: avoir, être, aller, prendre – Les pronoms d'interrogation (où, quand, comment).

**Unit – II**

Les adjectifs possessifs – Les articles contractés avec la préposition "à "et "de"

**Unit – III**

Les expressions avec du verbe "avoir": âge, les sentiments – Les expressions avec du verbe "faire": le temps – L'impératif: la forme affirmative et la forme négative.

**Unit – IV**

Les salutations – Les jours de la semaine – Les saisons – Les mois – La famille.

**Unit – V**

Les conversations au téléphone – La civilisation françaises de la page 44 à 46

**Texte prescrit:**

Café Crème–I Méthode de français. (Unité 3 et Unité 4)

## **ORGANISATIONAL BEHAVIOUR**

Elective:IX

Total Hours : 60

Credit : 5

### **Unit – I**

Introduction to Organisational Behaviour – Concept of Organisational Behaviour – Foundation of Individual Behaviour – Organisational Behaviour Mod – Values and attitudes.

### **Unit – II**

Motivation – Early Theories – Contemporary Theories – Motivation at work – Designing motivation jobs.

### **Unit – III**

Interpersonal Behaviour – Transactional Analysis – Self Awareness – Ego States – Life Scripts – Life Positions – Stroking – Uses of Transactional Analysis  
Groups Dynamics & Behaviour – Concept of group dynamics – Types of Groups – Group Behaviour – Groups Decision Making – Inter group Relations.

### **Unit – IV**

Leadership – Trait – Behavioural – Contingency – Theories – Power Authority & Politics – Power Relationship – Bases of Power – Organisational Politics – Corneous – Reasons of Organisational Policies.

### **Unit – V**

Organisational Structure & design – Organisational change & Development – Organisational Culture & climate – Organisational Conflict & career – types – conflict management.

### **Books for Reference:**

1. Stephen P. Robbins, Organisational Behaviour – 3<sup>rd</sup> Edition, Prentice Hall
2. Fred Luthans, Organisational Behaviour – 2<sup>nd</sup> Edition, McGraw Hill
3. J.R Schermerhom, James G. Hunt & Richard N. Oshom, Organisational Behaviour, John Wiley & Sons, 1997
4. Joseph E. Champoux, Organisational Behaviour: Integrating Individuals, Groups & Process, West Publishing Company, New York, 1996

## **MANAGERIAL ECONOMICS**

Elective: X

Total Hours : 60

Credit : 5

### **Unit – I**

Nature & Scope of Managerial Economics – Role of Managerial Economics – Demand Analysis – Demand Forecasting

### **Unit – II**

Production Function – Economies & Diseconomies of Scale – Cost Concepts – Classification – Cost – Output Relationship.

### **Unit – III**

Price Policies – Pricing Under Perfect Competition – Oligopoly – Monopoly – Monopolistic Competition – Pricing Methods – Pricing Problems – Price Discounts and Differentials.

### **Unit – IV**

Profit Management – Nature & Measurement of Profit – Profit Policies – Profit Planning & Forecasting

### **Unit – V**

Macro – Economics & Business Decision – Business Cycle – Business Policies – Economic Forecasting for business – National Income – Theory of Income Distribution.

### **Books for Reference:**

1. Mehta. P.L, Managerial Economics, Sultan Chand
2. Mehta. P.L, Managerial Economics for Company Secretaries, Sultan Chand
3. R.L Varshney& K.L Maheshwari, Managerial Economics, Sultan Chand
4. K.P.M Sundharam& E.N Sundharam, Economic Analysis, Sultan Chand
5. Cauvery. R, Managerial Economics, Sultan Chand & Company, 2002
6. Gupta, Managerial Economics, Tata McGraw Hill
7. Mote & Paul, Managerial Economics, Tata McGraw Hill
8. Gitman, Principles of Managerial Finance, Pearson Education

## **ENTREPRENEURIAL DEVELOPMENT**

Elective: XI

Total Hours : 60

Credit : 5

### **Unit – I**

Introduction to Entrepreneurship: Definition – Concept – Theories of Entrepreneurship – Classification and Types of Entrepreneurs – Entrepreneurial Traits – Entrepreneurial Motivation.

### **Unit – II**

Preparation: Project Identification – Project Design – Appraisal – Network Analysis – PERT and CPM – Selection – Location – Implementation.

### **Unit – III**

Procedure – Sources of Finance – Project Finance – Institutional Finance – SIDBI – TIIC – Government Procedures – Directorate of Industries and Commerce – Export Import Procedure – Pollution Control Board – ISO – BIS.

### **Unit – IV**

Marketing: Brand Development – Strategic Marketing – CRM – Institutional Support – ECGC – Sustaining the Project – Crisis Management – Time Management.

### **Unit –V**

Problems of Entrepreneurship: Problems of Entrepreneurship – Globalization and Challenges before the Indian Entrepreneurs – Steps to face global Challenges.

### **Books for Reference:**

1. Vasant Desai, Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, 2001
2. Gupta.C.B&Srinivasan.N .P, Entrepreneurial Development, Sultan Chand, 1999
3. Peter F. Drucker, Innovation & Entrepreneurship – Affiliated East West Practice and Principles, Press Ltd. Publication pf SISI, Govt. of India
4. Vasant Desai, Small Scale Industries and Entrepreneurship, Himalaya Publishing House, 2001
5. Ghallan R.G & Sandra L. Mchee, Practical Profit Management, Pearson Education Asia, India, 2001
6. Kharta S.S, Entrepreneurial Development, Sultan Chand & Company, New Delhi, 2000
7. Dr.Balu, Entrepreneurship & Management of Small Business, Sri Venkateswara Publications, Chennai, 2001

## COMPUTERISED AUDITING

Elective: XII

Total Hours : 60  
Credit : 5

### Unit – I

Introduction – Need for Control – Effects of Computers on internal controls and auditing – Foundations of Information System auditing – Nature of Controls – Types of audit procedures – Steps in an audit – Auditing around or through the computer.

### Unit – II

Auditing Systems Development – Evaluating Planning, Organising, Leading & Controlling functions – Approaches to auditing systems development – The programming groups – Data Resource Management Controls – Operations Management Controls.

### Unit – III

Audit Software – Generalised and Specialised Audit Software – Utility Software – Control of Audit Software – Auditing Techniques – Performance Measurement Tools.

### Unit – IV

Nature of Global Evaluation Decision – Audit Technology to assist the evaluation decision – Evaluating System effectiveness & Efficiency.

### Unit – V

Managing Information System Audit function – Towards Information System Audit Professionalism – Future of Information System Auditing.

### Books for Reference:

1. Ronweber, Information System Control and Audit, Pearson Publishers
2. Andrew D. Chamber, Computer Auditing, Jack Chamlin, Auditing & Information System
3. James Hunton, Core Concept of IT Audit
4. Weber, EDP Auditing, Tata McGraw Hill
5. Bhatia Mohan, Auditing in Computerised Environment, Tata McGraw Hill

**J2EE**  
(Java – JSP – Servlets – EJB)

Elective: XIII

Total Hours : 60  
Credit : 5

**Unit I**

Enterprise Java Overview: J2EE overview – WebSphere Application Developer Introduction – SQL Overview – JDBC classes and interfaces – JDBC drivers – Connecting to a database – Processing ResultSets.

**Unit II**

Servlets: What is a Servlet? – Lifecycle methods – The service() method – Creating servlets – HTTP servlets – Responding to requests – Logging Servlets and threads – Storing session data – URL rewriting – Cookies Redirection – Errors and unavailability – Testing and deploying in WSAD.

**Unit III**

JavaServer Pages: What is a JSP? – How JSPs work – Directives – Actions – Scriptlets – Standard actions – Standard directives – Conditional and looping – execution – JSPs and JavaBeans – Standard variables in JSPs – Defining variables and methods – Including other documents – Redirection.

**Unit IV**

RMI Overview: Remote Procedure Calls (RPC) – Remote Method Invocation (RMI) – Remote interfaces – Building a remote object.

**Unit V**

EJB Overview: What are EJBs? – Session beans – Entity beans – Message beans – EJB architecture – Example EJB – Naming Containers and servers – Using the WSAD JNDI Test client – Using the WSAD EJB Test client – EJB Transactions and Security.

**Books for Reference:**

1. J2EE – Complete Reference
2. W. Clay Richardson. Donald Avondolio., Dr. Joe Vitale. Scot Schrager, Wrox Series Professional Java – JDK 5 Edition
3. Mark W. Mitchell. Jeff Scanlon, Rod Johnson, Wrox Series Expert One-on-One J2EE Design and Development
4. Paul Perrone. Venkata S.R. "Krishna" R, Chaganti. Tom Schwenk, J2EE Developer's Handbook
5. James L. Weaver, Beginning J2EE 1 – 4: From Novice to Professional (Apress Beginner Series)



## **HUMAN RESOURCE MANAGEMENT**

Elective: XIV

Total Hours : 60

Credit : 5

### **Unit I**

Frame work for HRM: Concept – Functions – Importance - Organisation of Personnel Department.

### **Unit II**

Acquiring Human Resources: HR planning – Job Analysis – Job Description & Specification – Sources of Recruitment – Selection Process – Test – Interview – Induction.

### **Unit III**

HR Development : Concept and Importance – Training of Operatives – Identifying Training Needs – Methods of Training – Designing a Training Programme.

Executive development: concept – methods of Executive Development – On the Job – Off the Job.

### **Unit IV**

Performance Appraisal: Concept – Objectives – Methods – Limitations.

Compensation: Job Evaluation – Wages and Salary Administration – Incentive Plans and Profit Sharing.

### **Unit V**

Maintaining HR: Health and Safety – Employee Welfare.

Integrating HR: Work Environment – Discipline and Grievance – Morale – Workers Participation in Management.

### **Books for Reference:**

1. ArunMonappa&Saiyuddin, Personnel Management, Tata McGraw Hill
2. PramodVerma, Personnel Management in Indian Organisation, Oxford & IBM
3. Mckenna, The Essence of Human Resource Management, Prentice Hall of India
4. Monappa&Saiyadain , Personnel Management, Tata McGraw Hill
5. Mirza&Saiyadain, Human Resource Management, Tata McGraw Hill
6. Keith Davis, Human Behaviour at Work, Tata McGraw Hill, 2000
7. Luthams S. Fred, Organisational Behaviour, Tata McGraw Hill, 2002
8. Robbins & Stephens, Organisational Behaviour, Prentice Hall, 1996
9. S.S. Khomka, Organisational Behaviour, Sultan Chand & Company Ltd.

## SOFTWARE ENGINEERING

Elective: XV

Total Hours : 60

Credit : 5

### Unit – I

Introduction: Software products – process – spiral model – Computer based systems Engineering – systems procurement – architecture modelling – reliability engineering; Project Management: Planning – organising and scheduling.

### Unit – II

Requirement Engineering: Process – requirement documents – requirement validation & evolution; requirement analysis: various methods & issues – System models: Data-flow – semantic & object models – data dictionaries – Requirement definitions & specification – and Cost Estimation.

### Unit – III

Software Design: Design process – strategies and quality – Architectural Design : System structuring – control models – modular decomposition – domain-specific architectures – Object-oriented design : Objects – classes – inheritance – identification – example – concurrent objects.

### Unit – IV

Function-Oriented Design: Data flow design – structural decomposition – Detail design & comparison – Real-time systems design – state machine modelling – real-time executives – DAS – User interface design : Principles – user-system interaction – information presentation – user guidance – interface evaluation.

### Unit – V

Verification & Validation – Software testing process – test planning & test strategies – black-box testing – structural testing – interface testing – Program inspection – verification & static analysis tools – CASE life cycle.

### Books for Reference:

1. R.S Pressman, Software Engineering – A Practitioner's Approach – 5<sup>th</sup> Edition, Tata McGraw Hill
2. R.S Pressman, Software Engineering – 4<sup>th</sup> Edition, Tata McGraw Hill International Edition, 1987
3. Ian Sommerville, Software Engineering – 5<sup>th</sup> Edition, Addison Wesley
4. R. Fairley, Software Engineering Concepts, Tata McGraw Hill
5. Kishore & Nair, Software Requirements & Estimation, Tata McGraw Hill

## SYSTEM ANALYSIS AND DESIGN

Elective: XVI

Total Hours : 60

Credit : 5

### Unit – I

Introduction to Information System Development – System Analyst –Categories of Information System – System Development Strategy – Classical System Development Life cycle – Structured Analysis – Development Method – Tools for system development.

Managing the application development portfolio – Information Systems planning methodologies – Managing Project review and selection – Preliminary Investigation – Selecting the project development strategy.

### Unit – II

Requirements Analysis and Determination: Activities and requirement determination – Basic requirements – User transaction requirements – User Decision requirements – Organisation wide requirements – Fact finding techniques – Tools for documenting procedures and decisions.

Structures Analysis development strategy – Features of data flow strategy – Tools of data flow strategy – Developing data flow diagrams – Features of data dictionary – Application prototype development strategy – computer aided system tools

### Unit – III

System Design: Analysis – to – design transition – Specifying application requirements – Objectives in designing an information system – output design – design of input and control – design of on-line dialogue – design of files and use of auxiliary storage devices – Design of database interaction – Design for Data Communication.

Structured Design: Basic Principles – Objectives of structured design – the structure of computer programs – structure and procedure – coupling – cohesion.

### Unit – IV

Implementation, Development management and selection of hardware and software: System Engineering and Quality assurance – Managing System Implementation – Managing information system development – Hardware and software selection.

### Unit – V

Case studies to illustrate the theory covers in an educational Institution / Manufacturing Firm.

### Books for Reference:

1. Kendall & Kendall, System Analysis & Design – 5<sup>th</sup> Edition, Prentice Hall of India
2. Whitten, System Analysis & Design – 5<sup>th</sup> Edition, Tata McGraw Hill
3. Rajaraman, Analysis & Design of Information Systems, Prentice Hall of India
4. Rambaugh, Tawbson&Booch, The United Modelling Language, Reference Manual
5. HawryszKiewycz, Introduction to System Analysis & Design

## **MANAGEMENT INFORMATION SYSTEM**

Elective: XVII

Total Hours : 60

Credit : 5

### **Unit – I**

Introduction to Management System – Definition of MIS – Elements of MIS – Features – Requirements – Benefits of MIS – Challenges – Ethical Issues related to MIS – Levels of MIS – Structure of MIS – Information Planning – System and Models.

### **Unit – II**

Transaction Process System – Functions – Transaction Processing Cycle – Transaction Process Subsystems – Management Reporting System (MRS) – Properties – Types of Reports – Structure.

### **Unit – III**

Decision Support System (DSS) – Components – Task Performed – Knowledge Based Systems – Artificial Intelligence – Office Automation.

### **Unit – IV**

Functional Management Information System – Production Information System – Marketing Information System – Accounting Information System – Financial Information System – Personnel Information System – Interrelationship of Functional Management Information System.

### **Unit – V**

Database Management System – Information as a Resource – Meaning of Database – Components – Types of Database – Benefits & Limitations of Database.

### **Books for Reference:**

1. G.M Scoh, Principles of Management Information System, McGraw hill Education
2. Davis and Olson, Management Information System, McGraw hill Education
3. Lucan, The Analysis, Design and Implementation of Information System, McGraw Hill Education
4. Rog Anderson, Management Information System and Computers – An Introduction, Mac Millan Co.
5. Jerome Kanter, Management Information System – EEE Edition, Prentive Hall of India, New Delhi
6. Landon, C.K & Landon, J.P, Management Information System, Mac Million, New York.
7. J. Grabam George, System Analysis in Business, Allen and Unwin Ltd, London

## MARKETING MANAGEMENT

Elective: XVIII

Total Hours : 60

Credit : 5

### **Unit – I**

Introduction – The Marketing Concept – Marketing Mix – Marketing Planning – Marketing Strategy – Buyer Behaviour – Market Segmentation.

### **Unit – II**

Managing the Product – Product Differentiation & Positioning – Managing Brands and Brand Equity – New Product Decision – Product Life Cycle.

### **Unit – III**

Managing Distribution – Physical Distribution and Marketing Logistics – Marketing Channels – Retailing – Distribution Strategy – Direct Marketing – Marketing on the Web.

### **Unit – IV**

Pricing & Promotion – Pricing – Market Communication – Advertising Management – Sales Promotion – Sales Management.

### **Unit – V**

Supporting & Controlling – Controlling the Marketing Effort – Marketing Information System – Marketing Research.

### **Books for Reference:**

1. Kenneth Bernharot, Marketing Management, Tata McGraw Hill & McGraw Hill International Editions, 1997
2. Harper W. Boyd, Marketing Management, Tata McGraw Hill & McGraw Hill International Editions, 1998
3. Ramaswamy & Vamahumari, Marketing Management, MacMillan Publication
4. Philip Kotter, Marketing Management, Prentice Hall of India
5. Rajan Nair, Marketing, Sultan Chand
6. Vasrshney R.L & Gupta S.L, Marketing Management

## **PATTERN OF QUESTION**

The details of the question paper patterns for End of Semester Examination (ESE) for PG under credit system are as follows:

**Part A:** Eight questions are to be set and students to answer FIVE out of EIGHT. Each question will carry EIGHT marks.  
Total:  $5 \times 8 = 40$  marks.

**Part B:** FIVE questions are to be set and students to answer THREE out of FIVE. Each question will carry TWENTY marks.  
Total:  $3 \times 20 = 60$  marks.

(The maximum mark for a paper is 100 and the duration of each paper is 3 hours)