

## BHARATHIAR UNIVERSITY, COIMBATORE – 641 046

### M.Com (Finance & Computer Applications)

[Offered in University Department under CBCS]

SYLLABUS (FROM THE ACADEMIC YEAR 2016 – 2017)

#### COURSE OF STUDY AND SCHEME OF EXAMINATION

### 1. ELIGIBILITY FOR ADMISSION TO THE COURSE

A Graduate in Commerce, Business Management / Administration, Bank Management, Corporate Secretaryship, Corporate Secretaryship & Computer Applications, Business Management / Administration & Computer Applications and Commerce & Computer Applications, E-Commerce or an Equivalent Qualification.

(Or)

A Graduate in Computer Science, Computer Applications, Computer Technology, Information Technology, Computer Engineering, Information Science or an Equivalent Qualification

### 2. DURATION OF THE COURSE

The course shall extend over a period of two years comprising four Semesters, with two Semesters per year. There shall not be less than ninety instructional days for each semester. Examination shall be conducted at the end of each semester for the respective subjects.

### 3. COURSE OF STUDY AND SCHEME OF EXAMINATION

The course of study and scheme of examination for the M.Com (Finance & Computer Applications) course shall consist of the following:

	Subject Title	Hours / Week	University Examination			Credits
			Internal (25%)	External (75%)	Total	
<b>Semester – I</b>						
Core 1	Communicative Skills	4	25	75	100	4
Core 2	Financial Accounting	4	25	75	100	4
Core 3	Quantitative Techniques for Finance	4	25	75	100	4
Core 4	Object Oriented Programming with C++	4	25	75	100	4
Core 5	Financial Instruments and Services	4	25	75	100	4
<b>Elective Paper - Any one of the following</b>						
Elective 1	Oracle and RDBMS	4	25	75	100	4
Elective 2	Management Information Systems	4	25	75	100	4
<b>Supportive</b>	Offered by Other Department	2	12	38	50	2
<b>Total</b>			<b>650</b>			<b>26</b>
<b>Semester – II</b>						
Core 6	Cost and Management Accounting	4	25	75	100	4
Core 7	Visual Basic	4	25	75	100	4
Core 8	Direct Taxes	4	25	75	100	4
Core 9	Modern Banking	4	25	75	100	4
Core10	Investment Analysis and Portfolio Management	4	25	75	100	4
<b>Elective - Any one of the following</b>						
Elective 3	Enterprise Resource Planning	4	25	75	100	4

Elective 4	Insurance and Risk Management	4	25	75	100	4
<b>Supportive</b>	Offered by Other Department	2	12	38	50	2
	<b>Total</b>			<b>650</b>		<b>26</b>
<b>Semester – III</b>						
Core 11	Business Research Methods	4	25	75	100	4
Core 12	E-Commerce	4	25	75	100	4
Core 13	Java Programming and HTML	4	25	75	100	4
Core 14	Financial Management	4	25	75	100	4
Core 15	Financial Derivatives Management	4	25	75	100	4
<b>Elective Paper - Any one of the following</b>						
Elective 5	Software Engineering	4	25	75	100	4
Elective 6	International Financial Management	4	25	75	100	4
<b>Supportive</b>	Offered by Other Department	2	12	38	50	2
	<b>Total</b>			<b>650</b>		<b>26</b>
<b>Semester - IV</b>						
Core 16	Internship & Training		100	-	100	4
Core 17	Software Development / Project & Viva*		-	-	200	8
	<b>Total</b>			<b>300</b>		<b>12</b>
<b>Grand Total</b>				<b>2250</b>		<b>90</b>

\*For Project Report 80% Marks & Viva-Voce 20% Marks

**Supportive Courses offered to other Departments**

Paper – I	Principles of Accounting	2
Paper – II	Principles of Modern Banking	2
Paper – III	Principles of Personal Finance	2
Paper – IV	Principles of Insurance Management	2

***Question Paper Pattern***

**Max: 75 Marks.**

**SECTION A:** Short Answers Type Questions with no choice

(10 Questions)

**10 X 1 = 10**

**SECTION B:** Short answer Questions of either / or type

(10 Questions -2 each from every Unit)

**5 X 5 = 25**

**SECTION C:** Essay type Questions of either / or type

(10 Questions -2 each from every Unit)

**5 X 8 = 40**

## **CORE 1 - COMMUNICATIVE SKILLS**

### **UNIT I**

Business Communication – Objectives, Principles and Scope - Ethics of Communication - Language – Arts - Basics - Punctuation, Grammar and Word usage - Electronic Technology in global business communication: Internet, Fax, e-mail - Work Team Communication - Group Communication - Variables - Solving group problems - Strategies for communicating across culture.

### **UNIT II**

Principles of Business Writing - Planning - Drafting - Revising - Formatting – 3Ps of Business Writing (problem, process, product) for Goodwill messages, Routine Messages and Negative news – Aids to correct writing –Essay writing.

### **UNIT III**

Report writing - Characteristics - Purpose - Types - Periodic reports - Situational report - Proposals - Policies and Procedure - Report structure - Writing research and technical reports.

### **UNIT IV**

Non-verbal communication - Personal appearance posture - Body language – Presentation Techniques – Case Studies - Visual & Audio Visual aids for Communication – Barriers to communication – Overcoming Barriers to communication.

### **UNIT V**

Conducting Meetings: Procedure - Preparing Agenda, minutes and resolutions – Practicals with respect to conduct of meetings – Secretary’s Report – Mock Interviews Conducting seminars and conferences:- Procedure of Regulating speech - Evaluating oral presentation – Interview Skills – Resume preparation, Application letters, Testimonial, Reference - Group Discussion – Presentation Skills.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. Krishnamohan & Meera Bannerjee, “Developing Communication Skills”, Mic Millan, London, UK
2. Woolcott & Unwin, “Mastering Business Communication, Mic Millan, London, UK
3. Anderson & Others, “Assignment & Thesis Writing”, illustrated Publisher, Wiley
4. Rajendra Paul and Koralahalli, “Business Communication”, S.Chand & Sons Publisher, New Delhi.
5. Lesikar and Flatley, “Basic Business Communication”, TMH Publications, New Delhi
6. L.Gartside, “Business English”, Mac Donald & Events Ltd, London

## **CORE 2 - FINANCIAL ACCOUNTING**

### **UNIT I**

Introduction – Definition - Accounting Principles and Conventions - Transaction Processing – Debit and credit classification – Double Entry Book Keeping - Types of Accounts.

### **UNIT II**

Journal – Ledger – IFRS - & INDAS : Opening Accounts – Closing Entries - Day Book – Cash transaction – Entry making - Subsidiary Books of Accounts – Sales Ledger – Purchase Ledger - Cash Book –Cash with Bank transactions – Bank Reconciliation Statement .

### **UNIT III**

Trial Balance – Debit accounts – Credit accounts – Balance - Features of Manufacturing and Trading Account – Preparation of Final Account with all adjustments.

### **UNIT IV**

Income Statement – Preparation with simple adjustments - Assets – Classification – Fixed and Current Assets – Depreciation Methods - Liabilities – Share Capital – Reserves & Provisions – Current Liabilities – Outstanding Expenses – Bank Overdraft .

### **UNIT V**

Accounting for Non – Trading Concerns - Income & Expenditure – Receipts & Payments Account and Balance sheet.

**NOTE:** Question paper shall cover 40% theory and 60% Problems.

### **Books for Reference:**

1. R.L.Gupta & Radhasamy, “Advanced Accounting”, S.Chand & Sons Publisher, New Delhi
2. R.S.N.Pillai, Bagavatahi& S.Uma, “Fundamentals of Financial Accounting”, S.Chand & Sons Publisher, New Delhi
3. S.K.Battacharya, “Accounting for Management”, Vikas Publishing House Pvt Ltd., New Delhi
4. Dr.Ashok Sehgal & Dr.Deepak Sehgal, “Advanced Accounting / Financial Accounting”, Taxmann’s Publications, New Delhi
5. M.A.Arulanandam & K.S.Raman, “Advanced Accountancy”, Himalaya Publishing House, Mumbai.
6. Dr.Kaustubh Arvind Sontakke, “Financial Accounting”, Himalaya Publishing House, Mumbai.

## **CORE 3 - QUANTITATIVE TECHNIQUES FOR FINANCE**

### **UNIT I**

Probability – Definition- Addition and multiplication rules Probability distribution – Theoretical distributions – Binomial poisson and normal – Simple problems applied to finance.

### **UNIT II**

Queuing theory – Applications to Business Decisions – Simulation – Monte Carlo Techniques - Time series – Components of time series – Use of time series data for financial analysis.

### **UNIT III**

Index numbers – concepts – simple and weighted index numbers – Economic and business index numbers published in India

### **UNIT IV**

Network Model – networking – CPM – critical path – Time estimates – critical path – crashing, Resource leveling, Resources Planning. Waiting Line Model – Structure of model.

### **UNIT V**

Inventory Models – Deterministic – EOQ – EOQ with Price Breaks – Probabilistic Inventory Models - Probabilistic EOQ model – Game theory-zero sum games: Arithmetic and Graphical Method.

**NOTE:** Question Paper shall cover 40% Theory and 60% Problems.

### **Books for Reference:**

1. U.K. Srivastava, G.V. Shenoy & S.C. Sharma, “Quantitative Techniques for Managerial Decision”, Prentice Hall Pvt Ltd, New Delhi.
2. C.R.Kothari, “Quantitative Techniques”, Vikas Publications, New Delhi.
3. Sancheeti & Kapoor, “Advanced Statistical Methods”, S.Chand & Sons Publisher, New Delhi.
4. S.P. Gupta, “Statistical Methods”, S.Chand & Sons Publisher, New Delhi.
5. Kanti Swarup, Gupta & Man Mohan, “Operations Research”, S.Chand & Sons Publisher, New Delhi.

## **CORE 4 - OBJECT ORIENTED PROGRAMMING WITH C++**

### **UNIT – I**

Evaluation of Programming Paradigm – Elements of Object oriented programming - Merits and demerits of OOP – Popular OOP languages – C++ at a glance – Applications of C++ - C++ statements – Structure of C++ program. Data types – Character set: Token, Identifiers and Keywords – Variables – Operators and Expressions.

### **UNIT – II**

Control flow statements: IF, IF... Else, Nested If... Else, switch statement, For loop, While.. loop, do.. while loop, break statement, continue statement and go to statement. Arrays: operations on arrays – Multidimensional arrays – strings – string manipulations. Functions: Function components – Library functions – Inline functions.

### **UNIT – III**

Classes and objects – Class specification – Declaring class objects– Defining member functions – Data Hiding – Friend functions and Friend classes. Constructor – parameterized constructors – constructor overloading – destructors –order of constructor and destructor – copy constructor.

### **UNIT – IV**

Operator overloading – Overloadable operators – Rules for overloading operators – Data Type conversion - Inheritance: Forms of inheritance – single, multiple, multilevel, multipath, hierarchal and hybrid inheritance – when to use inheritance – Benefits of Inheritance.

### **UNIT – V**

Pointers – Virtual functions – Abstract classes – Data file operations: Opening of file – closing of file – reading/writing from a file – Structures – Exception Handling - Classes and file operations.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. K.R.Venugopal, Raj kumar, T.Ravishanker, “Mastering C++”, Tata McGraw Hill Publishing Company Ltd, Noida, UP
2. E.Balagurusamy, “Object Oriented Programming with C++”, Tata McGraw Hill Publishing Company Ltd, Noida, UP
3. D.Ravichandran, “Programming with C++”, Tata McGraw Hill Publishing Company Ltd, Noida, UP
4. Herbert Schildt, “C++: The Complete Reference”, Tata McGraw-Hill Publishing Company Ltd, Noida, UP

## **CORE 5 - FINANCIAL INSTRUMENTS AND SERVICES**

### **UNIT I**

Financial Market in India - Financial Sector Reforms - Money Market – Capital Market. Mutual Funds in India - An Overview – Mutual Fund Industry in India – Features of Mutual Funds – Classification of Mutual Funds- Advantages of Investing in Mutual Funds.

### **UNIT II**

Merchant Banking - Meaning and Definition – Origin – Services and Qualities of Merchant Bankers. Venture Capital – Definition- Characteristics – Venture Capital Investment Process- Advantages - Venture Capital Industry in India - International Experiences in Venture Capital Financing.

### **UNIT III**

Factoring – concept of factoring – Types of factoring – Factoring mechanism – Factoring in India – Cost and benefit of factoring – Issues involved in factoring business.

### **UNIT IV**

Credit Rating - Objectives – Rating Methodology – Rating Process. Credit cards – concept – Evolution of credit cards – Varieties of credit cards – operational procedure – Acceptability of credit cards from the point of view of bankers, customers, members – Establishments. Hire purchase Vs. Leasing.

### **UNIT V**

Advisory Financial Services :- Issue Management :Intermediaries – Lead manages – Underwriters – Debenture Trustees – Portfolio Managers- Issue Management : Activities – Eligibility norms – Pricing of Issues – Promoters’ Contribution and Lock-in Requirements – Issue of Debenture Instruments.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. Nalini Prava Tripathy, “Financial Instruments and Services”, Prentice Hall Pvt Ltd, New Delhi.
2. Nalini Prava Tripathy, “Financial Services”, Prentice Hall Pvt Ltd, New Delhi.
3. Dr.S.Gurusamy, “Financial Services and Markets”, Vijay Nicole Imprints Pvt Ltd, Chennai.
4. M.Y.Khan, “Financial Services”, Tata McGraw Hill Publishing Company Limited, Noida, UP
5. Dr. D.Joseph Anbarasu & Others, “Financial Services”, S.Chand & Sons Publisher, New Delhi

## **ELECTIVE 1 - ORACLE AND RDBMS**

### **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.

### **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.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. Nilesh Shah, “Database Systems Using Oracle”, Prentice Hall Pvt Ltd, New Delhi
2. Abraham Silberschatz Henry F.Korth S.Sudarshan, “Database System Concepts”, Tata McGraw Hill Publishing Company Limited, Noida, UP
3. Alexis Leon, Mathews Leon, “Essentials of Database Management Systems”, Vijay Nicole Imprints Pvt Ltd, Chennai
4. Raghu Ramakrishnan & Johannes Gehrke, “Database Management Systems”, Tata McGraw Hill Publishing Company Limited, Noida, UP



## **ELECTIVE 2 - MANAGEMENT INFORMATION SYSTEMS**

### **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: OS, DAMS, OOPS – Application software: spread sheet – graphic packages. Database management – File management – Database models - Database management system.

### **UNIT – III**

Telecommunications and Networks: Trends in Telecommunication– Telecommunication Network Model – Types of telecommunication networks – Telecommunication Media – Processors – Network Topologies – Network Architectures and protocols.

### **UNIT – IV**

Information system applications: Information system for Business functions- Accounting, Finance, Manufacturing and Inventory control, Marketing - Human resource Information System.

### **UNIT – V**

Strategic and managerial implications of Information system: Managing information system resources – TPS – Office automation – Decision support system – Executive Information System – Artificial Information system.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. James O'Brien, "Management Information Systems", Tata McGraw Hill Publishing Company Limited, Noida, UP
2. L.M.Prasad & Usha Prasad, "Management Information Systems", S.Chand & Sons Publisher, New Delhi
3. A.K.Gupta, "Management Information Systems", S.Chand & Sons Publisher, New Delhi
4. Kenneth C.Laudon & Jane P.Laudon, "Management Information Systems", Prentice Hall Pvt Ltd, New Delhi
5. Dr.Sushila Madan, "Management Information and Control Systems", Taxmann's Publications, New Delhi
6. Waman S Jawadekar, "Management Information Systems", Tata McGraw Hill Publishing Company Limited, Noida, UP
7. D.P.Goyal, "Management Information Systems", Mc Millan, London, UK.

## **SEMESTER - II**

### **CORE 6 - COST AND MANAGEMENT ACCOUNTING**

#### **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 – Back flush costing – Life cycle costing.

#### **UNIT – IV**

Standard Costing – Setting standards – Variance analysis and reporting – Material, Labour, Overhead – Sales and Profit Variance - 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.

**NOTE:** Question Paper shall cover 40% Theory and 60% Problems.

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

1. S.P.Jain & R.L.Narang, “Advanced Cost Accounting”, Kalyani Publishers, Ludhiana.
2. V.S.P.Rao, “Cost Accounting”, Vrinda Publications (P) Ltd, New Delhi.
3. Dutta, “Cost Accounting: Principles and Practice”, Pearson Education, New York.
4. B.M.Lall Nigam, “Cost Accounting Principles and Practices”, Himalaya Publishing House, Mumbai.
5. J.Made Gowda, “Advanced Cost Accounting”, Himalaya Publishing House, Mumbai.
6. B.S.Khanna, I.M.Pandey, “Practical Costing”, S.Chand & Sons Publisher, New Delhi.
7. Dr. S.N.Maheswari, “Advanced Cost Accounting”, S.Chand & Sons Publisher, New Delhi.
8. Atkinson, “Management Accounting”, Pearson Education, New York.

## **CORE 7 - VISUAL BASIC**

### **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, HS Scroll bar, Timer, Dir List box, Shape, Image, Picture box, Text box, List box, VS Scroll 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**

Enterprise controls: Menu editor – SDI and MDI forms – Introduction to database: Visual database Tools – Creating tables in access – Data bound controls – DAO, RDO, ADO – Validating data.

### **UNIT - V**

Database Programming: SQL basics – Tables and reports – Data Grid control – Flex Grid control – Data report designer.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

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

## **CORE 8 - DIRECT TAXES**

### **UNIT – I**

Income Tax Act – Definition – Income – Agricultural Income – Assessee – Previous year – Assessment year – Residential Status – Scope of Total Income – Capital and Revenue – Receipts and Expenditure – Exempted Incomes.

### **UNIT – II**

Computation of Income from Salaries and Income from House Property.

### **UNIT – III**

Computation of Profits and Gains of Business or Profession – Calculation of Capital Gain.

### **UNIT – IV**

Computation of Income from Other Sources – Set-off and carry Forward of Losses - Deduction from Gross Total Income – Assessment of Individuals.

### **UNIT – V**

Income Tax Authorities – Procedure for Assessment – Tax Deducted at Source (TDS) – Residents and to Non – Residents – Tax collected at Source. International Taxation – Basic concepts (Section 90, 91 & 92).

### **NOTE:**

Question Paper shall cover 40% Theory and 60% Problems.

### **Books for Reference:**

1. Gaur & Narang, “Income Tax Law & Practice”, DP Kalyani Publishers, Latest Edition, New Delhi.
2. Dr.H.C.Mehorotra, “Income Tax Law & Practice”, Prentice Hall Pvt Ltd, New Delhi.
3. Dingar Pagare, “Tax Laws”, S.Chand & Sons Publisher, New Delhi.
4. Bhagavathi Prasad, “Income Tax”, Wishwa Prakashan, New Delhi.

## **CORE 9 - MODERN BANKING**

### **UNIT – I**

Banking – Definition – Banking System – Role of Banks in Economic Development – Central Bank – Functions – Credit Control Measures – Role of RBI in Regulatory and Controlling Banks.

### **UNIT – II**

E-Banking – meaning – E-Banking and Financial Services – Risk Management for E-Banking – Internet Banking – Mechanics of Internet Banking – Drawbacks of Internet Banking – Future outlook.

### **UNIT – III**

Mobile Banking – meaning – Services – Security Issues – Telephone Banking – Mechanism – Telephone Banking System – Call Centers.

### **UNIT – IV**

ATM – Features – Mechanism – Benefits – Shared ATM Network in India – Electronic Money – Mode of Issue and Implications – E-Money and Monetary Policy – Policy issues of RBI – Electronic Funds Transfer System.

### **UNIT – V**

Indian Financial Network – Features – Application – Recent trends in Indian Banking – Payment Banking– Negotiable Instruments – Characteristics – Types – Paying Banker – Collecting Banker – Rights and Duties.

**NOTE:** Question Paper shall cover 100% Theory.

### **Books for Reference:**

1. K.C. Shekhar and Lakshmy Shekhar, “Indian Banking System”, Vikas Publishing House Pvt Ltd, New Delhi.
2. Muraleedhran, “Modern Banking Theory and Practice”, PHI Learning Pvt Ltd, New Delhi.
3. S. Nataraj and R. Parameswaran, “Indian Banking”, S.Chand & Sons Publisher, New Delhi.
4. O.P.Agarwal, “Modern Banking of India”, Himalaya Publishing House, Mumbai
5. P.N.Varshney, S.L.Gupta and T.D.Malhotra, “Principles of Banking”, S.Chand & Sons Publisher, New Delhi.
6. P.Chellasamy, “Modern Banking Management”, Himalaya Publishing House, Mumbai

## **CORE 10 - INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT**

### **UNIT I**

Investment Analysis: Nature-scope-Elements of Investment Risk & return objective of investment Approaches to investment analysis. Securities - types - Features.

### **UNIT II**

Investment alternatives and strategies: Financial investment - Non financial investment - Inbound and outbound investments – Sources of Investment Information - valuation of fixed income securities and variable income securities (excluding Derivatives).

### **UNIT III**

Fundamental Analysis: Economic – Industry and company analysis – Sources of information for analysis.

### **UNIT IV**

Technical Analysis – Types of charts – Dow Theory, Elliott wave theory, Odd-lot Theory, Breadth of Market, Relative Strength Analysis – Moving Average analysis - Efficient Market Hypothesis.

### **UNIT V**

Portfolio analysis & Management: Portfolio risk and return – Diversification - Markowitz model – Sharpe model: Single index model – CAPM –Arbitrage pricing theory.

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

### **Books for Reference:**

1. S. Kevin “Security Analysis and Portfolio Management” PHI Learning Pvt Ltd, New Delhi.
2. V.A. Avadhani, “Security Analysis and Portfolio Management”, Himalaya Publishing House, Mumbai.
3. Punithavathy Pandian, “Security Analysis and Portfolio Management”, Vikas Publishing House Pvt Ltd, New Delhi.
4. M. Ranganatham & R. Madhumathi, “Investment Analysis and Portfolio Management”, Pearson Education (India) Pvt Ltd, New Delhi.
5. Bhalla, Tuteja, “Investment Management”, S. Chand & Sons Publisher, New Delhi.
6. Preeti Singh, “Investment Management”, Himalaya Publishing House, Mumbai.

### **ELECTIVE 3 - ENTERPRISE RESOURCE PLANNING**

#### **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 – Pre-evaluation screening – Project Planning – Gap Analysis – Reengineering – Configuration – Implementation – Testing – Training – Maintenance. Vendors, Consultants and Users: Inhouse Implementation-Pros and Cons – Vendors – Consultants – End-users.

#### **UNIT - V**

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

**NOTE:** Question paper shall cover 100% Theory

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

1. Alexis Leon, “Enterprise Resource Planning”, Tata McGraw Hill Publishing Company Limited, Noida, UP
2. Rahul V. Altekhar, “Enterprisewide Resource planning-Theory and Practice”, Prentice Hall Pvt Ltd, New Delhi
3. Vinod Kumar Garg & N.K.Venkitakrishnan, “Enterprise wide Resource”, Prentice Hall Pvt Ltd, New Delhi
4. Dr.Subodh Kesharwani, “ERP Systems – Application, Experiences” Upsurg, Pragati Prakathan Publication, Meerut.

## **ELECTIVE 4 - INSURANCE AND RISK MANAGEMENT**

### **UNIT – I**

Introduction to Insurance: Role of Insurance – Characteristics of an Insurable Risk – Principles of Insurance – Reinsurance – Double Insurance – IT in Insurance

### **UNIT – II**

Indian Insurance Industry – Reforms – Private Players to Indian Insurance Market – IRDA Regulations: For Licensing of Insurance Agents – For Protection of Policy Holders' Interest. Actuary – Meaning – SOA

### **UNIT – III**

Insurance Contract: Life Insurance Contract – Features, Policy Conditions and Products; Non – Life Insurance: Fire and Marine - Features, Policy Conditions and Products. Group, Health and Social Insurance – Schemes.

### **UNIT – IV**

Introduction to Risk Management – Concept of Risk – Types of Risk – Principles of Risk Management – Risk Management process – Objectives of Risk Management

### **UNIT – V**

Risk management and control – Methods of Risk management – Risk management by individuals and corporations – Tools for Controlling Risk

**NOTE:** Question Paper shall cover 100 % Theory.

### **Books for Reference:**

1. Dr. P.K.Gupta, “Insurance and Risk Management”, Himalaya Publishing House, Mumbai.
2. Alka Mittal and S.L Gupta, “Principles of Insurance and Risk Management”, S.Chand & Sons Publisher, New Delhi.
3. Nalini Prava Tripathy and Prabir Pai, “Insurance – Theory and Practice”, Prentice Hall Pvt Ltd, New Delhi
4. Mark S. Dorfman, “Introduction to Risk Management and Insurance”, Prentice Hall Pvt Ltd, New Delhi



## **SEMESTER - III**

### **CORE 11 - BUSINESS RESEARCH METHODS**

#### **UNIT – I**

Business Research – Meaning – Scope and Significance – Utility of Business research – Qualities of good researcher – Types of research – Research process – Identification, Selection and formulation of research problems – Hypothesis – Research design.

#### **UNIT – II**

Sampling – Methods and techniques – Sample size – Sampling error – Fieldwork and data collection. Tools of data collection – Interview schedule - Questionnaire – Observation, interview and mailed questionnaire – pilot study and final collection of data.

#### **UNIT – III**

Measurement and scaling techniques – Reliability and validity Processing and analysis of data – Editing – Coding - Classification – Tabulation – Interpretations. Report writing – Steps-Types of reports.

#### **UNIT – IV**

Measures of Central tendency – Standard deviation – Correlation- simple, partial and multiple correlation – Path analysis – Auto correlation – Regression models – Ordinary Least Square methods – Multiple regression.

#### **UNIT – V**

Test of significance – ‘t’ Test - large sample and ‘f’ Test, test of significance for attributes, analysis of variance (ANOVA) – Chi-square test.

**NOTE:** Question paper shall cover 60% Theory and 40% Problems.

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

1. Cooper, “Business Research Method”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
2. J.K.Suchdeva, “Business Research Methodology”, Himalaya Publishing House, Mumbai
3. S.P. Gupta, “Statistical Methods”, S.Chand & Sons Publisher, New Delhi.
4. C.R. Kothari, “Research Methodology”, Himalaya Publishing House, Mumbai
5. R.S.N. Pillai & V. Bagavathi, “Statistics”, S.Chand & Sons Publisher, New Delhi.
6. O.R.Krishnaswami & M. Ranganathan, “Methodology of Research in Social Science”, Himalaya Publishing House, Mumbai

## **CORE 12 - E-COMMERCE**

### **UNIT - I**

Introduction to E-Commerce – Benefits of Electronic Commerce – Impact of Electronic commerce Classification of Electronic Commerce – Applications of Electronic Commerce Technologies. Business Models. Architectural Framework.

### **UNIT - II**

Network Infrastructure: Local Area Networks – Wide Area Network – Intranet, Extranet and Internet – TCP/IP Reference Model – Domain Name Systems – Internet Industry Structure. Information Distribution and Messaging: File Transfer Protocol Applications - Electronic Mail – World Wide Web Server – HTTP – Web servers Implementations.

### **UNIT - III**

Information Publishing Technology: Information publishing – Web browsers – Hyper Text Markup Language – Common Gateway Interface – Multimedia Content – Other Multimedia Objects – Virtual Reality Modeling Language. Securing the Business on Internet: Security policy, Procedures and practices – Site security – Protecting the Network – Firewalls – Securing the Web service.

### **UNIT - IV**

Securing Network Transactions: Transaction Security – Cryptology – Cryptology Algorithms – Public Key Algorithm – Authentication Protocols – Digital Signatures – Electronic Mail Security – Security Protocols for Web Commerce.

Electronic Payment systems: Introduction to payment Systems – Online Payment Systems – Prepaid Electronic Payment Systems – Post paid Electronic Systems – Requirements Metrics of a Payment Systems.

### **UNIT - V**

Search Engines and Directory Services: Information Directories – Search engines – Internet Advertising: Emergence of the Internet as a Competitive Advertising Media – Models of Internet Advertising – Sponsoring Content – Screensavers and Push Broadcasting – Corporate Web site – Interstitials – Superstitials – opt-in's – weakness in Internet Advertising – Agents in E-Commerce: Need for agents – Types of Agents – Agent Technologies - Agent standards and Protocols – Agent Applications - Field of study pertaining to e-commerce – career opportunities in e-commerce.

**NOTE:** Question Paper shall cover 100% Theory

### **Books for Reference:**

1. Bharat Bhasker, “Electronic Commerce: Framework, Technologies and Applications”, Tata McGraw Hill Publishing Company Limited, Noida, UP
2. Dr.C.A.Rayudu, “E-Commerce & E-Business”, Himalaya Publishing House, Mumbai
3. Ravi Kalakotoa & Andrew B. Whinston, “Frontiers of Electronic Commerce”, Addison-Wesley – An Imprint of Pearson Education, United States.
4. Jeffvey F. Rayport & Bernard J. Jaworeski, “Introduction to E-Commerce”, Tata McGraw Hill Publishing Company Limited, Noida, UP.

## **CORE 13 - JAVA PROGRAMMING AND HTML**

### **UNIT – I**

HTML: History of HTML – Features – Advantages – Components of HTML document – Formatting text using HTML – Adding images using HTML.

### **UNIT – II**

Overview of Java Language – Simple Java Program – Use of math functions – Application with two classes – Java program structure – Java Tokens – Implementing a Java program – Java Virtual Machine – Command line arguments - Constants – Variables – Data types.

### **UNIT – III**

Operators and Expressions – Decision making and Branching – Decision making and looping.

### **UNIT – IV**

Classes – Objects and methods – Arrays – Strings and Vectors. Interfaces: Multiple inheritance – Multi Threaded Programming.

### **UNIT – V**

Managing Errors and Exceptions – Applet programming – Graphics programming.

**NOTE:** Question Paper shall cover 100% Theory

### **Books for Reference:**

1. E.Balagurusamy, “Programming with Java”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
2. Herbert Schildt, “Java 2 – The Complete reference”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
3. S.S.Khandare, “Programming in Java”, S.Chand & Sons Publisher, New Delhi.
4. C.Xavier, “World Wide Web Design with HTML”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
5. Vishnu P.Singh, “HTML (With Dynamic HTML)”, Computech Publications Limited, New Delhi.

## **CORE 14 - FINANCIAL MANAGEMENT**

### **UNIT – I**

Nature and scope of financial management – objectives – Financial decisions – Relationship between Risk and Return – Role and functions of financial manager – Time value of money – concept of value and return.

### **UNIT – II**

Cost of Capital – Meaning and importance – Cost of debt, preference, equity and retained earnings – weighted average cost of capital – capital budgeting – Techniques – ROI, payback period and discounted cash flow.

### **UNIT – III**

Financial leverage – measures – EBIT, EPS Analysis – operating leverage – financial - business and operating risks – Theories of capital structure – net income approach – Net – operating income Approach. MM Hypothesis – Determinants of capital structure – leasing – Nature & Types of leasing – Advantages and disadvantages of leasing – Financial evaluation of leasing.

### **UNIT – IV**

Dividend Theories – Walter’s model – Gordon and MM’s models – Dividend policy – forms of Dividend – Determinants of dividend policy.

### **UNIT – V**

Management of working capital – concept – importance – Determinants and computation of working capital – Management of cash, inventory and receivables – Regulations of Bank credit to industry - – Credit Monitoring and Assessment (CMA) formats.

**NOTE:** Question Paper shall cover 60% theory and 40% Problem

### **Books for Reference:**

1. Prasanna Chandra, “Financial Management”, Tata McGraw Hill Publishing Company Limited, Noida, UP
2. S.N Maheswari, “Financial Management”, S.Chand & Sons Publisher, New Delhi.
3. L.J.Gitman & Dr.M.Manickam, “Principles of Managerial Finance”, Pearson Education, New York
4. I.M. Pandey, “Financial Management”, Vikas Publication, New Delhi.
5. Khan & Jain, “Financial Management”, Tata McGraw Hill Publishing Company Limited, Noida, UP
6. James C. Van Horne, “Financial Management and Policy”, Pearson Education, New York

## **CORE 15 - FINANCIAL DERIVATIVES MANAGEMENT**

### **UNIT I**

Introduction: meaning –origin –Types of Derivatives –significance –Derivatives Trading in India. Mechanics of financial futures market – origin of futures markets – procedures for opening a futures account – Role and operation of clearing houses- concepts pertaining to delivery, margin, leverage and liquidity.

### **UNIT II**

Forwards: Basics –determination of forward Prices –advantages –disadvantages.

### **UNIT III**

Options: Introduction –types –Call option –put option –currency option –option pricing -Black – scholes model –binomial model –over the counter options etc. Execution and delivery process.

### **UNIT IV**

SWAPS –interest rate swaps –currency swaps –interest rate swaps –bond swaps – substitution swaps –gains from swaps –international swaps –evaluation of swaps – International Swap Dealers Association (ISDA).

### **UNIT V**

Hedging – designing the Hedge strategy, setting hedge objectives and evaluating interest rate –determining hedgability, structuring the hedge-Hedge management process. Evaluating and monitoring the hedge position.

**NOTE:** Question paper shall cover 100% Theory.

### **Books for Reference:**

1. Cox & Rubinstein, "Options Market", Prentice Hall Pvt Ltd, New Delhi
2. Hull, John, "Introduction to futures & Options", Prentice Hall Pvt Ltd, New Delhi
3. V.K.Bhalla, "Investment Management", S.Chand & Sons Publisher, New Delhi.
4. Somanthan, "Derivatives", Tata McGraw Hill Publishing Company Limited, Noida, UP.
5. Kevin's, "Commodity and Financial Derivatives", Prentice Hall Pvt Ltd, New Delhi
6. Marshall, John and V.K. Bansal, "Financial Engineering - A Complete Guide to Financial innovation", Prentice Hall Pvt Ltd, New Delhi

## **ELECTIVE 5 - SOFTWARE ENGINEERING**

### **UNIT – I**

Product: Evolving role of software – software characteristics – software applications – software crisis - software myths. The Process: software engineering: A layered technology – software process – software process models.

### **UNIT – II**

Project management concepts: The management spectrum – people – Product – Process – Project – W<sup>3</sup>HH principle. Software process and project metrics: Software Measurement – Metrics for software quality – Integrating metrics. Software Project Planning: objectives - Scope – Resources – Decomposition techniques – Make / Buy decision.

### **UNIT – III**

Software Quality Assurance: Quality concepts – SQA – Formal Technical Reviews – software reliability – SQA Plan - Software Configuration Management: SCM process – change control – version control.

### **UNIT – IV**

Analysis, concepts and Principles: Requirements Analysis – Analysis principles – Software prototyping – Specification. Analysis modeling: Data modeling – Functional modeling – Behavioral modeling.

### **UNIT – V**

Software Testing Techniques: Testing Fundamentals – White box testing – Black-box testing. Software testing strategies: Unit testing – Integration testing – Validation testing – System testing.

**NOTE:** Question Paper shall cover 100% Theory

### **Books for Reference:**

1. Roger S. Pressman, “Software Engineering”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
2. Carlo Ghezzi, Mehdi Jazayeri, Dino Mandrioli, “Fundamentals of Software Engineering”, Prentice Hall Pvt Ltd, New Delhi
3. Richard Fairley, “Software Engineering Concepts”, Tata McGraw Hill Publishing Company Limited, Noida, UP
4. Ian Sommerville, “Software Engineering”, Pearson Education, New York

## **ELECTIVE 6 - INTERNATIONAL FINANCIAL MANAGEMENT**

### **UNIT – I**

International Financial Management – An overview – Importance – Nature and Scope – International flow of Funds – Balance of payments – International Monetary System.

### **UNIT – II**

Markets for Foreign Exchange – Foreign Exchange market – Feature – Spot and Forward market – Exchange Rate Mechanism – Exchange rate determination in the Spot and Forward markets – Factors Influencing Exchange Rate – Market for currency futures and currency options – Hedging with currency future and options.

### **UNIT – III**

International Investment decision – Foreign Direct Investment – International Capital Budgeting – International Portfolio Investment – meaning – Benefits – Problem of International Investment.

### **UNIT – IV**

International Financial decisions – Overview of the International Financial Market – Channels for International flow of funds – Role and functions of Multilateral Development banks – International banking – Functions – Credit Creation – Control of International Banks.

### **UNIT – V**

International Financial Market Instruments – Short-term and Medium-term instruments – Management of short-term funds – Management of Receivables and Inventory – Factors behind the Debt Crisis.

**NOTE:** Question Paper shall cover 100% Theory

#### **Books for reference:**

1. V. Sharan, “International Financial Management”, Prentice Hall Pvt Ltd, New Delhi.
2. A.K. Seth, “International Financial Management”, Galgotia Publishing Company, New Delhi.
3. P.G. Apte, “International Financial Management”, Tata McGraw Hill Publishing Company Limited, Noida, UP.
4. R.L. Varshney & S. Bhashyam, “International Financial Management”, S.Chand & Sons Publisher, New Delhi.