#### ARULMIGU PALANIANDAVAR ARTS COLLEGE FOR WOMEN

(AUTONOMOUS)

(Re-accredited with 'A' grade by NAAC)

(Affiliated to Mother Teresa Women's University, Kodaikanal)

PALANI



# SYLLABUS FOR MASTER OF COMMERCE (CA)

2014 Onwards

#### 1. OBJECTIVES

The course is intended for the students who have completed the first degree programme at university level, to impart theoretical and skill based knowledge in the area of Commerce and Computer Application. The course content is designed suitably so as to provide core knowledge in Commerce. Further, to meet the needs of globalised competitive world, skill development in the application of computer is provided by offering two computer papers in each semester. Moreover, realizing the importance of the research in higher education, project is included in the curriculum.

#### 2. ELIGIBILITY FOR ADMISSION OF THE COURSE

Admission to M.Com(CA)., course is open to candidates with a Bachelor Degree in Commerce, Management, Corporate Secretaryship, Computer Application and Economics of Mother Teresa Women's University or any other University.

Minimum percentage of marks:

SC/ST Candidates - 50%

Other Candidates - 55%

#### 3. DURATION OF THE COURSE

The course covers a period of two years comprising of four semesters with two semesters per year. For each semester, there is 90 instructional days and examination shall be conducted at the end of each semester for the respective subjects.

#### 4. MEDIUM OF THE INSTRUCTION: English

#### 5. SUBJECT OF THE STUDY : As given in Appendix – A

#### 6. SCHEME OF THE EXAMINATION

Examination for each subject includes both Internal and External. Internal Examination will be for 40 marks and External Examination will be for 60 marks. Examination for each subject has a duration of three hours.

#### 7. ELIGIBILITY FOR P.G. DEGREE

- ➤ Candidates will be eligible for M.Com(CA)., degree, if they secure the passing minimum of 50 per cent.
- ➤ Candidates require 75 per cent of attendance to attend the semester exam.
- ➤ Three internal examinations will be conducted and the average of best two will be considered for consolidation.
- ➤ Project work is compulsory which carries 100 marks. A student should select a topic for the project work in the beginning of the fourth semester and submit the report at the end of that semester. Project report shall be valued and Viva-voce examination will be considered by an external examiner.

#### 8. EVALUATION

Evaluation of the candidates shall be made through internal and external assessment. The ratio of internal and external assessment should be 40:60.

The break-up of internal assessment shall be follows.

Test - 25

Seminar - 10

Assignment - 5

#### 9. PASSING REQUIREMENT

- ➤ The passing minimum is 50 per cent (both internal and external) in each paper.
- ➤ To complete the course, the students should secure the prescribed credits i.e., 90 credits.

#### 10.PROVISION FOR DISSERTATION WORK

Evaluation:

Report = 80: Viva-voce = 20.

#### 11. QUESTION PAPER PATTERN

Туре	No. of questions to be answered	Marks
Objective	24 questions to be answered (no choice)	24 x 1= 24
	30% plus 10% logical questions	
Paragraph about 1 ½	4 out of 6 questions	$4 \times 3 = 12$
pages		
Essay Type – about 3	3 out of 5 questions	$3 \times 8 = 24$
pages		
	60	

### ARULMIGU PALANIANDAVAR ARTS COLLEGE FOR WOMEN, PALANI PG AND RESEARCH DEPARTMENT OF COMMERCE

### Course Structure As Per TANSCHE Guidelines For PG Program M.COM(CA)

SEMESTER		PAPER NAME	CODE	TEACHING HOURS	CREDIT	MARKS		
SEM						INTERNAL	EXTERNAL	TOTAL
	Core Paper 1	Business Environment		6	5	40	60	100
	Core Paper 2	Business Research Methods		6	5	40	60	100
	Core Paper 3	Relational Database Management System		6	5	40	60	100
I	Core Paper 4	Relational Database Management System and Tally-		6	5	40	60	100
		Lab						
	Elective	Applied Statistics		6	5	40	60	100
		Total		30	25			500
	Core Paper 5	Marketing Management		6	5	40	60	100
	Core Paper 6	Advanced Corporate Accounting		6	5	40	60	100
II	Core Paper 7	Human Resource Development		6	5	40	60	100
	Core Paper 8	E-Commerce and Web Technology		6	5	40	60	100
	Elective	Web Designing and Visual Basic - Lab		6	5	40	60	100
		Total		30	25			500

SEMESTER		PAPER NAME	CODE	TEACHING HOURS	CREDIT	MARKS			
						INTERNAL	EXTERNAL	TOTAL	
	Core Paper 9	Financial Management		6	5	40	60	100	
	Core Paper 10	Financial Markets and Institutions		6	5	40	60	100	
	Core Paper 11	Object Oriented Programming with C++		6	5	40	60	100	
III	Core Paper 12	Object Oriented Programming with C++ - Lab		6	5	40	60	100	
	Elective	Operations Research		6	5	40	60	100	
		Total		30	25			500	
IV	Core Paper 13	Income Tax		6	5	40	60	100	
	Core Paper 14	Electronic Banking		6	5	40	60	100	
	Project Work			18	5	40	60	100	
		Total		30	15			300	
	<u> </u>	Grand Total		120	90			1800	

# I SEMESTER CORE PAPER 1 BUSINESS ENVIRONMENT

Sub Code: 6 hrs/Week

90 hrs/Semester

Credit: 5

#### **Objectives**:

1. To make the students familiar with the changing business environment.

2. To have a clear idea about the global business environment and the factors affecting such environment.

UNIT I (18 hrs)

Business Environment - Meaning - Importance - Factors affecting business environment - Economic, political, legal, social, competitive and technological factors.

UNIT II (18 hrs)

Liberalization of economic policies – Privatization of public sector undertaking – Forms of Privatization – Arguments for and against privatization - Disinvestments – Foreign Exchange Management Act (FEMA).

UNIT III (18 hrs)

Small Scale Sector – Definition – Problems of Small Scale Industries – Incentives to small Scale Sector – Industrial sickness in Small Scale Sector.

UNIT IV (18 hrs)

Social Responsibility of business – Dimensions – Arguments for and against – Social audit - Consumer Protection Act 1986 – Consumer Rights – Consumer Responsibilities – Three tier structure of grievances redressal machinery.

UNIT V (18 hrs)

SEBI – Functions - Guidelines relating to New issues, Rights issue, Bonus shares and Debentures –Multinational Corporations in India – Foreign capital – Need – Forms – Merits and Demerits – Government policy towards foreign capital.

1. Business Environment : Francis Cherunilam

Himalaya Publishing House, New Delhi.

2. Essentials of Business

Environment : Aswathappa

Himalaya Publishing House, New Delhi.

3. Business Policy and Strategic

Management : W.F.Glueck

Tata McGraw Hill Publishing Company Ltd,

New Delhi.

4. Business, Government and

Society : Maheswari& A.N. Gupta

Vani Educational Book

5. Business Environment : K.Chidambaram&V.Alagappan

Vikas Publishing House Pvt Ltd, New Delhi

6. Government and Business : D.Amarchand

Tata McGraw Hill Publishing Company Ltd,

New Delhi.

#### I SEMESTER CORE PAPER 2 BUSINESS RESEARCH METHODS

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

**Objectives**:

1. To make the students to understand the basic concepts and methods of research.

2. To make the students familiar with the sources of data, application of research tools and writing of research report.

UNIT I (18 hrs)

Business Research – Meaning – Scope and significance – Utility of business research – Qualities of good research – Types of research.

UNIT II (18 hrs)

Research process – Identification – Selection – Formulation of research problems – Hypothesis – Research design.

UNIT III (18 hrs)

Sampling – Methods and Techniques- Sampling Error – Field work and data collection – Observation and Interview method – Tools of data collection – Interview Schedule – Questionnaire – Pilot study, Pre-test and Collection of data.

UNIT IV (18 hrs)

Data processing – Editing – Coding – Classification – Tabulation – Analysis and interpretation of data.

UNIT V (18 hrs)

Report writing – Types and contents of report – Style in writing research reports – Steps in drafting reports – Qualities of good research report.

Note: 100 % Theory only

1. Research Methodology : C.R.Kothari

WishwaPrakashan, New Delhi

2. Statistical Methods : S.P.Gupta

Sultan Chand & Sons, New Delhi

3. Research Methodology : Dr.N.Thanulingam

Himalaya Publishing House, Mumbai

4. Research Methodology : R.Cauvery, U.K.SudhaNayak,

M.Girija and R.Meenakshi

S.Chand& Company Ltd., New Delhi

5. Research Methodology : P.Saravanavel

KitabMahal, Allahabad.

#### I SEMESTER CORE PAPER 3 RELATIONAL DATABASE MANAGEMENT SYSTEM

Sub Code: 6 hrs/Week

90 hrs/Semester

Credit: 5

#### **Objectives**:

1. To gain the knowledge to build the database

2. To manipulate database by using queries and make the students to know the basics of storage management.

UNITI (18 hrs)

Introduction toRDBMS :Introduction-RDBMS Terminology-Primary Key, Foreign Key and Candidate Key – Relational data structure – Data types - Operators.

UNIT II (18 hrs)

Entity-Relational Model: Basic Concepts – Design Issues – Mapping Constraints – Keys – Entity-Relationship Diagram – Weak Entity Sets – Extended E-R Features – Design of an E-R Database Schema.

UNIT III (18 hrs)

Relational Database Design : Pitfalls in Relational-Database Design – Decomposition – Normalization – First Normal Form – Second Normal Form – Third Normal Form – Boyce-Codd Normal Form – Forth Normal Form – Fifth Normal Form – Codd's Rules.

UNIT IV (18 hrs)

SQL: SQL Commands: CREATE, ALTER AND DROP TABLE – DML Commands: INSERT, DELETE, UPDATE and SELECT – DCL Commands: GRANT, REVOKE, COMMIT and ROLLBACK. SQL Functions - Character Functions - Arithmetic Functions - Date Functions and Group Functions.

UNIT V (18 hrs)

PL/SQL: Introduction to PL/SQL – Data types – Declaring program data – Data Retrieval: Cursor Basics – Working with Implicit and Explicit Cursors – Exception Handlers: Exception-Handling Concepts & Terminology – Defining, Raising and Handling Exceptions.

Procedures: Calling a Procedures – The Procedure Header – Procedure body Functions: Structure of a Functions – RETURN Data type – Calling a Function – Function body Parameters: Defining Parameters – Parameter Modes – Triggers: Use of Triggers-DML Triggers.

3. Oracle PL/SQL Programming

1. Database Management Systems :Alexis Leon & Mathews Leon

Leon Vikas Publications, Chennai, 2001

2. Database System Concepts :Abraham Silberschatz, Henry

F.Korth, S.Sudarshan

The McGraw-Hill Companies Inc.

:Published by Steven Feuerstein &

Pribyl – O'REILLY Media

# I SEMESTER CORE PAPER 4 RELATIONAL DATABASE MANAGEMENT SYSTEM AND TALLY

Sub Code: 6 hrs/Week
90 hrs/Semester

Credit: 5

#### **Objective:**

To impart knowledge on designing and manipulation of database **LIST OF PROGRAMS** 

#### **RDBMS**

- 1. DDL Commands and DML commands
- 2. DCL commands and Set Operations
- 3. Numeric&Character Functions
- 4. Group& Date Functions
- 5. PL/SQL program for simple interest and compound interest
- 6. PL/SQL program for Fibonacci series
- 7. PL/SQL program for factorial value
- 8. Write a program for exception

#### **TALLY**

- 9. Day Book Preparation
- 10. Final Accounts Preparation
- 11. Accounting Voucher with Inventory Details
- 12. Creation of Cost Categories and Centres with Class
- 13. Purchase Order and Sales Order Processing
- 14. Bill wise Details Outstanding Report
- 15. Bill Pending Report

### I SEMESTER ELECTIVE APPLIED STATISTICS

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

**Objectives:** 

1. To strengthen the conceptual understandings of various statistical techniques.

2. To facilitate the students to apply the techniques in research field.

UNIT I (18 hrs)

Application of Statistics in Business Research - Correlation Analysis : Simple, Partial and Multiple - Regression Analysis - Simple and Multiple.

UNIT II (18 hrs)

Statistical inference – Procedure for testing hypothesis – Errors in testing of hypothesis – Two tailed and one tailed tests of hypothesis – Standard Error and Sampling Distribution – Estimation.

UNIT III (18 hrs)

Tests of Significance – Tests of significance for attributes – Tests of significance for large samples – Tests of significance for small samples (t test).

UNIT IV (18 hrs)

Chi square test and Goodness of Fit – F test and Analysis of Variance – Techniques of Analysis of Variance – Analysis of Variance in Two way classification table (ANOVA).

UNIT V (18 hrs)

Non-Parametric tests – Sign test – Rank sum test – One sample runs test –Kruskal Wallis test – Rank Correlation test.

Note: 20% theory and 80% problems

1. Statistical Methods : S.P.Gupta

Sultan Chand & Sons, New Delhi

2. Statistical Methods : M.Manoharan

Palani Paramount Publications, Palani

3. Statistics for Management: Richard I.Levin& David S.Rubin

Prentice Hall of India (Pvt) Ltd, New Delhi

4. Fundamentals of Statistics: D.N.Elhance,

KitabMahal, Alahabad.

5. Statistics : R.S.N.Pillai and Bhagavathy

S. Chand & Sons, New Delhi

### II SEMESTER CORE PAPER 5 MARKETING MANAGEMENT

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

**Objectives**:

1. To impart marketing skill on the emerging areas like Service Marketing, On-Line Marketing etc.,

UNIT I (18 hrs)

Marketing Management – Meaning – Characteristics – Functions –Marketing Strategy and planning – Marketing planning – Importance – Characteristics – Marketing Planning Process – Marketing planning activities – On-line Marketing.

UNIT II (18 hrs)

Product Planning and Development – Meaning of product – Classification of product policies – Product life cycle – Management of product life cycle – Development of new products – New product planning process – Product failure.

UNIT III (18 hrs)

Pricing strategy – Objectives – Factors influencing price – Price determination – Kinds of pricing – Pricing policy – Promotional Mix..

UNIT IV (18 hrs)

Channels of distribution – Functions – Types – Multichannel – Intensity of distribution – Channel conflict – Physical distribution – Middlemen – Functions – Kinds – Wholesalers – Characteristics – Services – Retailers – Importance – Services – Types.

UNIT V (18 hrs)

Emergence of services marketing – Definition – Importance – Characteristics of services – Difference between Products and Services - Marketing mix in service marketing – Types of services – Marketing of Bank product/services – Marketing of Insurance product/services.

1. Marketing Management : C.B Memoria and Joshi

KitabMahal ,Alahabad.

2. Marketing Management : Ramasamy and Namakumari

Macmilan, India.

3. Marketing Management : R.S.N.Pillai and Bhagavathy

S. Chand & Sons, New Delhi

4. Marketing Management :Philip Kotler

Sultan Chand & Sons, New Delhi.

5. Marketing Management : Dr.N.Rajan Nair

Sultan Chand & Sons, New Delhi.

### II SEMESTER CORE PAPER 6 ADVANCED CORPORATE ACCOUNTING

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

#### **Objectives**:

1. To make the students understand the various concepts and accounting treatment of companies.

UNIT - I (18 hrs)

Amalgamation – Absorption – External Reconstruction and Internal Recontruction.

UNIT – II (18 hrs)

Insurance Company Accounts – Types of Insurance – Explanation of Special terms peculiar to insurance business – Accounts of Life Insurance Business – Preparation of Final Accounts – Determination of Net liability and Profit of Life Insurance Business – Preparation of Final Accounts of General Insurance Companies.

UNIT – III (18 hrs)

Holding company Accounts including inter-company Holding – Preparation of consolidated Balance sheet.

UNIT – IV (18 hrs)

Inflation Accounting – Limitations of Historical Accounting – Approaches to price level changes.

UNIT - V (18 hrs)

Human resource accounting – Need for HRA – Concepts of HRA – Objectives – Valuation of Human resources – Benefits – Problems and Limitations (**Theory only**).

Note: 40% theory and 60% problems

#### **BOOKS FOR REFERENCE**

1. Corporate Accounting :T.S.Reddy ,A.Murthy.

Margham Publications, Chennai

2. Advanced Accountancy : Jain & Narang,

Kalyani Publishers, New Delhi

3. Advanced Accountancy :R.S.N.Pillai&Bhagavathy

S.Chand& Co Ltd.

4. Advanced Accounting :Dr.M.A.Arulanandam&K.S.Raman

Himalaya Publishing House, Mumbai

#### II SEMESTER CORE PAPER - 7 HUMAN RESOURCE DEVELOPMENT

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

#### **Objectives**:

- 1. To impart knowledge about the significance of Human Resource (HR) in an organization.
- 2. To be familiar with the various Human Resource development methods

UNIT I (18 hrs)

HRD - Meaning - Definition - Objectives - Features - Need - Methods - Processes - Outcomes - HRD vs. Personnel function.

UNIT II (18 hrs)

Career planning and development: Concept of career – Career stages – Career planning – Definition – Objectives – Process – Benefits – Career development – Career development programme – CDP benefits to employees.

UNIT III (18 hrs)

Recruitment: Concept - Purpose - Importance - Recruitment policy - Factors affecting recruitment policy - Recruitment process - Selection - Concept - Process.

UNIT IV (18 hrs)

Training and Development - Concept - Role - Need - Methods - Organising training and development programmes.

UNIT V (18 hrs)

Internal mobility and separations: Promotion – Types – Purposes – Policy - Transfer – Need – Types – Policy - Demotions – Causes – Policy – Separations – Various forms of Separation.

1. Human Resource Management : S.S.Khanka

S.Chand, New Delhi

2. Human Resource Development :A.C.Tripathi

Sultan Chand, New Delhi

3. Human Resource Management : L.M.Prasad

Sultan Chand & Sons Educational

Publishers, New Delhi

4. Personnel Management and

Human Resources : C.S. VenkataRatnam, B.K. Srivastava

Tata McGraw Hill Publishing Co Ltd,

New Delhi

### II SEMESTER CORE PAPER 8 E-COMMERCE AND WEB TECHNOLOGY

Sub Code: 6 hrs/Week

90 hrs/Semester

Credit: 5

**Objectives**:

1. To equip the students with the basics of E-Commerce technologies.

2. To impart knowledge regarding the various issues associated with E-Commerce technologies.

UNIT I (18hrs)

E-Commerce – Anatomy of E-Commerce – Application of E-Commerce – Electronic Data Interchange (EDI) – Applications – Legal security and Privacy issues.

UNIT II (18 hrs)

Internet Service Provider (ISP) - Digital Copy Rights - Digital cash - Digital signature - Digital token - Electronic Payment Systems - Smart cards - Credit cards - ATMs - Risk connected with Electronic Payment System - Electronic Fund Transfer.

UNIT III (18hrs)

Software agents – Layers and networking – IP suite – Desktop.Transmission Control Protocol/ Internet Protocol (TCP/IP) – Forms of IP – Mobile TCP/IP – Next generation IP.

UNIT IV (18hrs)

World Wide Websites (WWW) – Home page – Uniform Resource Locator (URL) - E-mail– Client / Server Architecture – Web Browser – Search Engine – Need for Web Server – Web design principles.

UNIT V (18hrs)

HTTP - HTML programming - Format - Usages - Tags - Running HTML Programmes - Requirements - List - Tables - Forms - Hyperlinks - Link pages to Home pages - Interact with other systems - Handling of non-texts - Images - Picture formats - Frames.

1. Frontiers of Electronic Commerce : Kalkota&Whinston

Addition Wesley, 1999.

2. Electronic Commerce :Bharat Bhasker

Tata McGraw Hill Publishing Co. Ltd.,

New Delhi

3. Web Design : Balaja

4. Web Design : Xavier

5. The Complete Reference HTML : Thomas Apwowel

Tata McGraw Hill Publishing Company

Ltd, New Delhi.

# II SEMESTER Elective WEB DESIGNING AND VISUAL BASIC

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

#### **Objectives:**

- To impact practical knowledge of web designing.
- To enable the students to develop applications using graphical user interface.

#### LIST OF PROGRAMS

#### WEB DESIGNING

- 1. Formatting Tags
- 2. Types of List
- 3. Image Creation
- 4. Table Creation
- 5. Employee Payroll
- 6. Frame Utilities
- 7. Application format design using option and checkbox.
- 8. Creating a website for our College
- 9. Creating a website for any Hospital
- 10. Creating a website for any Bank

#### **VISUAL BASIC**

- 11. Designing the application Form
- 12. Authentication Form
- 13. Design a clock
- 14. Design a color mixture
- 15. Picture animation
- 16. Rich text box
- 17. Menu Creation with MDI form
- 18. Flex grid control
- 19. Arithmetic operation using functions
- 20. Students mark list-DAO

# III SEMESTER CORE PAPER 9 FINANCIAL MANAGEMENT

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

**Objectives**:

1. To make the learners to understand the various applications in Financial Management.

UNIT I (18 hrs)

Financial Management - Nature - Scope - Objectives - Traditional and modern approach of Financial Management - Investment decisions - Dividend decisions - Financial decisions - Role of Financial Manager

UNIT II (18 hrs)

Cost of Capital – Meaning - Importance – Cost of Debt, Preference, Equity and Retained Earnings – Weighted average cost of capital - Capital Budgeting – Meaning - Importance - Techniques - Traditional Methods and Modern Methods.

UNIT III (18 hrs)

Financial leverage – measures – EBIT and EPS analysis – Operating leverage – Financial and Operating risk – Capital structure – Determinants of Capital structure – Theories of capital structure – Net Income approach – Net Operating Income approach – MM Hypothesis.(Theory Only)

UNIT IV (18 hrs)

Working capital Management – Concepts – Kinds of working capital – Importance of adequate working capital – Factors determining working capital requirements – Management of working capital – Estimate of working capital requirement – Financing of working capital.

UNIT V (18 hrs)

Dividend – Meaning – Theories of dividend – Walter's Model – Gordon and MM's Models – Dividend policy – Determinants of Dividend policy – Types of Dividend policy - Forms of dividend.

Note: 60% theory and 40% problems.

1. Financial Management :Prasanna Chandra

Tata McGrawHill Publishing Company Ltd,

NewDelhi.

2. Financial Management :I.M.Pandey

Vikas Publishing House Pvt Ltd, New Delhi

3. Financial Management :Khan & Jain,

Tata McGrawHill Publishing Company Ltd,

NewDelhi.

4. Financial Management :S.N.Maheswari

Sultan Chand & Sons, New Delhi

5. Financial Management :ShashiK.Gupta&R.K.Sharma

Kalyani Publishers, NewDelhi.

### III SEMESTER CORE PAPER 10 FINANCIAL MARKETS AND INSTITUTIONS

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

#### **Objectives**:

- 1. To enable the students to understand the basic concepts of financial markets and institutions.
- 2. To understand about the role of various financial institutions.

UNIT I (18 hrs)

Structure of financial system – Equilibrium in financial markets – Financial system and economic development – Concepts of financial development.

UNIT II (18 hrs)

Money market – Call money market – Treasury bill market – Discount market – Government securities market.

UNIT III (18 hrs)

Primary market – Functions – Methods of floating securities – Instruments of issue – Players in the primary market.

Secondary market – Control over secondary market – Listing of securities – Registration of brokers – Method of trading in a stock exchange – Recent developments.

UNIT IV (18 hrs)

Merchant banking – Functions and services – Guidelines for Merchant bankers – Scope for merchant banking in India - Credit rating Agencies – CRISIL -ICRA – Methods.

UNIT V (18 hrs)

Financial institutions – Reserve bank of India – Commercial Banks – Life Insurance Corporation – General Insurance Corporation – Industrial Development Bank of India – Industrial Finance Corporation of India – Industrial Credit and Investment Corporation of India – State Financial Corporations.

1. Financial Markets and Services : Gordon & Natarajan

Himalaya Publishing House, New Delhi

2. Indian Financial System : Khan, M.Y.

Tata McGraw Hill Publishing Company Ltd.,

New Delhi

3. New Issues Markets of India : Bholey,L.M.

Tata McGraw Hill Publishing Company Ltd.,

New Delhi

4. Financial Services : Dr.S.Gurusamy

Vijay Nicok Imprints Pvt Ltd., Chennai

5. Investment Management : Preeti Singh

Himalaya Publishing House, Mumbai

### III SEMESTER CORE PAPER 11 OBJECT ORIENTED PROGRAMMING WITH C++

Sub Code : 6hrs/Week 90hrs/Semester

Credit: 5

#### **Objectives**:

- 1. To get a basic knowledge of C++ and its applications
- 2. To know the uses of Structure, Functions, Inheritance and Pointer.

UNIT I (18 hrs)

Principles of Object-Oriented Programming: Object-Oriented Programming paradigm – Basic concepts of OOP – Benefits of OOP – Object-Oriented Languages – Applications of OOP – A simple C++ program – Structure of C++ program.

UNIT II (18 hrs)

Token's, Expressions and Control structures: Tokens – Keywords – Identifiers and Constants – Basic data types – User-defined and Derived data types – Symbolic constants – Operators, Expressions and Control structures in C++ - Functions in C++.

UNIT III (18 hrs)

Classes and Objects: Introduction – Specifying a Class – Defining member functions – A C++ program with class – Making an outside function inline – Nesting of member functions – Private member function – Arrays within a class – Memory allocation for objects – Static data member – Static member functions – Arrays of objects – Friendly functions.

UNIT IV (18 hrs)

Constructors and Destructors: Parameterized constructors – Copy constructors – Dynamic constructors – Destructors - Operator overloading - Overloading unary operators – Overloading binary operators – Inheritance.

UNIT V (18 hrs)

Pointers, Virtual functions and Polymorphism. - Working with Files: Introduction – Classes for file stream operations – Opening and closing a file – Detecting end of file.

#### **BOOKS FOR REFERENCE**

1. Object Oriented Programming with C++ : E.Balagurusamy

Tata McGraw Hill, New Delhi

### III SEMESTER CORE PAPER 12 OBJECT ORIENTED PROGRAMMING WITH C++

Sub Code: 6hrs/Week 90hrs/Semester Credit: 5

#### LIST OF PROGRAMS

- 1. Write a C++ program to display the prime series
- 2. Write a C++ program to display student details using array
- 3. Write a C++ program to display the week day using enumerated data type
- 4. Write a C++ program for factorial value
- 5. Write a C++ program for Fibonacci series
- 6. Write a C++ program for area of the triangle
- 7. Write a C++ program for centigrade and Fahrenheit
- 8. Write a C++ program for simple interest and compound interest
- 9. Write a C++ program to perform inline function
- 10. Write a C++ program to perform command line arguments
- 11. Write a C++ program to display arithmetic operations using type casting
- 12. Write a C++ program to perform function overloading
- 13. Write a C++ program to display biggest among two numbers using friend function
- 14. Write a C++ program to perform copy constructor
- 15. Write a C++ program to perform unary minus operator
- 16. Write a C++ program for Armstrong Number Checking
- 17. Write a C++ program to perform single inheritance using operator overloading
- 18. Write a C++ program to perform multiple inheritance

# III SEMESTER ELECTIVE OPERATIONS RESEARCH`

Sub Code: 6hrs/Week 90hrs/Semester

Credit: 5

#### **Objectives**:

1. To develop an understanding of basic Operations Research Techniques

2. To enable the learners to acquaint with necessary quantitative tools which help in decision making.

UNIT I (18 hrs)

Operation Research – Meaning -Nature –Scope -Characteristics - Linear Programming (LP) Mathematical formulation – Graphical Method – Simplex methods (excluding non-standard LPS) optimal solutions – Limitations of L.P Techniques.

UNIT II (18 hrs)

Transportation and Assignment Problems – Game theory.

UNIT III (18 hrs)

Queuing Theory – Meaning - Elements of queuing system – Single channel models only.

UNIT IV (18 hrs)

Net work Analysis – PERT/CPM – Objectives, Advantages and Limitations.Similarities and dissimilarities (excluding crash cost method).

UNIT V (18 hrs)

Simulation – Meaning – applications – Monte-Carlo method – Limitations.(**Theory only**)

Note :40% theory and 60% problems.

#### **BOOKS FOR REFERENCE**

1. Operations Research :KantiSwarup, PK.Gupta, Manmohan

Sultan Chand & Sons, New Delhi

2. Introduction to Operations

Research :P.K.Gupta&D.S.Hira

S. Chand & Sons, New Delhi

3. Opertations Research :V.K.Kapoor

Sultan Chand & Sons, New Delhi

4. Operations Research :A.Mangalados

5. Resource Management

Techniques :Ganapathy AR Publications, Chennai

6. Linear Programming :Arumugam

New Gamma Publishing House, Palayamkottai

#### IV SEMESTER CORE PAPER - 13 INCOME TAX

Sub Code: 6hrs/Week

90hrs/Semester

Credit: 5

#### **Objectives**:

1. To impart the basic knowledge of direct tax laws and its implications.

2. To impart knowledge regarding the various sources of income of different assesses.

UNIT I (18 hrs)

Computation of Income from Salary.

UNIT II (18 hrs)

Computation of Income from house property – Profit and gains from Business or Profession.

UNIT III (18 hrs)

Computation of Income from Capital gains - Income from other sources.

UNIT IV (18 hrs)

Gross total income - Deductions from Gross total income - Assessment of individual.

UNIT V (18 hrs)

Set off and Carry forward of losses – Meaning – Provisions regarding Set-off of losses – Carry forward and Set-off of losses – Order of Set-off.

E-filing – Forms – Introduction to Software.

#### **BOOKS FOR REFERENCE**

1. Income Tax Law & Practice : H.C.Mehrotra

SahityaBhawan Publications.

2. Income Tax : Gaur & Narang

Kalyani Publishers, New Delhi.

3. Students Guide to Income Tax : VinodK.Singhania

Taxmann's Publishers

4. Income Tax Law and Practice : B.B.Lal

Kalyani Publishers, New Delhi.

#### IV SEMESTER CORE PAPER - 14 ELECTRONIC BANKING

Sub Code: 6hrs/Week 90hrs/Semester

Credit: 5

#### **Objectives**:

1. To create an awareness among the students about the modern services offered by the banks.

UNIT I (18hrs)

E-banking – Meaning – Initiatives - Benefits.

UNIT II (18 hrs)

Risk Management - E-Security Systems.

UNIT III (18hrs)

E-banking – Services - Core banking – Anywhere banking – Anytime banking – Home banking – Internet banking – Mobile banking – Telephone banking – ATM - Debit card and Credit card operations.

UNIT IV (18 hrs)

Electronic Funds Transfer – Origin – Steps – Benefits – Requirements – Electronic Clearing Services – Benefits – Electronic Payment System – Payment methods – RTGS.

UNIT V (18hrs)

Banking sector Reforms – Cash Reserve Ratio – Statutory Liquidity Ratio – Differential rates of interest – Non Performing Assets in banks – Merger and acquisitions of banks.

#### **BOOKS FOR REFERENCE**

1. Merchant banking and financial services : S.Gurusamy

Vijay Nicole Imprints Pvt Ltd, Chennai

2. Banking Theory Law and Practice: E.DharmarajSei

Tech Publication (India) Pvt Ltd., Chennai

3. Indian Banking : R.Parameswaran&S.Nataraj

S.Chand& Co Ltd., New Delhi

4. Banking Theory Law and Practice: B.Santhanam

Margham Publications, Chennai.

5. Banking Technology : Dr.A.Rama&A.Aruna Devi

New Century Book HousePvtLtd., Chennai

6. Banking and Financial Institutions: K.KJindal,

Skylark Publications, New Delhi

### IV SEMESTER PROJECT WORK

Sub Code :	18 hrs/Week
	270 hrs/Semester
	Credit: 5