

THIRUVALLUVAR UNIVERSITY
BACHELOR OF ARTS
B.COM. (COMPUTER APPLICATION)
DEGREE COURSE
CBCS PATTERN
(With effect from 2020 - 2021)

The Course of Study and the Scheme of Examinations

S.NO.	Part	Study Components		Ins. hrs /week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
SEMESTER I									
1	I	Language	Paper-1	6	4	Tamil/Other Languages	25	75	100
2	II	English (CE)	Paper-1	6	4	Communicative English I	25	75	100
3	III	Core Theory	Paper-1	5	3	Financial Accounting – I	25	75	100
4	III	Core Theory	Paper-2	5	3	Business Applications & Accounting Software	25	75	100
5	III	ALLIED -1	Paper-1	6	3	(To choose one out of 3) 1. Indian Economy – I 2. Business Statistics – I 3. Consumer Protection and Consumer Rights	25	75	100
6	III	PE	Paper-1	6	3	Professional English I	25	75	100
7	IV	Environmental Studies		2	2	Environmental Studies	25	75	100
				36	22		175	525	700
SEMESTER II									
8	I	Language	Paper-2	6	4	Tamil/Other Languages	25	75	100
9	II	English (CE)	Paper-2	4	4	Communicative English I	25	75	100
10	III	Core Theory	Paper-3	5	3	Financial Accounting – II	25	75	100
11	III	Core Theory	Paper-4	5	3	Software & Tally Lab	25	75	100
12	III	ALLIED-1	Paper-2	6	5	(To choose one out of 3) 1. Indian Economy – II 2. Logistic Management 3. Business Statistics – II	25	75	100
13	III	PE	Paper-2	6	3	Professional English II	25	75	100
14	IV	Value Education		2	2	Value Education	25	75	100
15	IV	Soft Skill		2	1	Soft Skill	25	75	100
				36	25		200	600	800

THRUVALLUVAR UNIVERSITY
B.COM (COMPUTER APPLICATION)
SYLLABUS
UNDER CBCS
(With effect from 2020-2021)
SEMESTER I
CORE PAPER - 1
FINANCIAL ACCOUNTING – I

Objective:

To gain knowledge of accounting in general and to understand the system of Financial Accounting.

Unit - I: Introduction

Meaning of accounting – objectives of accounting – advantages and limitations of accounting- Accounting concepts and conventions - Methods of accounting - Rules of debit and credit- Journal - Ledger accounts– Trial Balance - Errors and their rectification - Rectification of Errors without suspense a/c - Rectification errors with suspense a/c (effect of rectification on profit and rectification during subsequent accounting year are excluded) - Bank Reconciliation Statement.

Unit - II: Depreciation, Provisions and Reserve

Meaning of depreciation – causes for depreciation – need for charging depreciation – Methods of calculating depreciation: straight line method and written down value method (change in method of depreciation is excluded) – Methods of recording depreciation: by charging depreciation to assets account or by creating provision for depreciation account.

Unit - III: Bills of exchange

Meaning of bill of exchange - features and advantages of bill of exchange- types of bill of exchange: Trade bills and accommodation bills - Accounting treatment of trade bills (accommodation bills are excluded).

Unit - IV: Final accounts

Meaning of final accounts – adjustments in preparation of final accounts – preparation of trading, profit & loss account and balance sheet of sole proprietorship concern.

Unit V: Accounts from incomplete records

Meaning of single entry system – features and limitations of single entry system – Distinction between single entry system and double entry system - Methods of calculation of profit: Statement of affairs method and Conversion method – Distinction between statement of affairs and balance sheet.

Note: Questions in section A, B and C shall be in the proportion of 20: 80 between theory and problems

Text books

1. Jain & Narang, Financial Accounting, Kalyani Publishers, New Delhi.
2. T.S. Reddy & Dr. A. Murthy, Financial Accounting, Margham Publications, Chennai.

Reference books

1. Gupta, R.L. & Gupta, V.K., Advanced Accounting, Sulthan Chand & Sons, New Delhi.
2. Shukla & Grewal, Advanced Accounting, S. Chand & Co. New Delhi.
3. Parthasarathy, S. & Jaffarulla, A. Financial Accounting, Kalyani Publishers, New Delhi.
4. Murugadoss, Jaya, Charulatha and Baskar, Financial Accounting, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

CORE PAPER - 2

Business Application & Accounting Software

UNIT – I Word and Excel

MS Word: Creating and Editing Documents –Menus, Commands, Toolbars and Icons—Formatting document – Creating Tables – Mail Merger.

MS Excel: Spreadsheet Overview – Menus, Toolbars, Icons-Creating worksheets – Editing and Formatting – excel Formulas and Functions – Creating a Chart Data Forms, Sort, and Filter.

UNIT – II PowerPoint and Access

MS Power Point – Introduction – Menus – Toolbars – Text and Formats – Animation, Art and Sound – Making the presentation template.

MS Access: Database overview – Creating a database – Modifying table and Creating Form – Query – Creating reports – Mailing Labels.

UNIT-III Tally introduction

Introduction to Tally – Company Creation – Alter – Display – Accounts info – Ledger Creation – Voucher Creation – Bank Reconciliation Statement – Bill wise Details – Cost Centre and Cost Category – Multi Currency – Interest calculation – Budgets and Credit Limits – Day Book.

UNIT-IV Inventory

Inventory info – Stock Group – Stock Category – Stock Item – Unit of Measures – Godowns – Inventory vouchers – Re-order level and status – Batch-wise Details – Bill of Material.

UNIT-V Taxation

Statutory and Taxation – Value Added Tax (VAT) – Tax Deducted at Source (TDS) – Tax Collected at Source (TCS) – Service Tax – Security Control and Tally audit – Export and Import – Backup and Restore – Open Database Connectivity.

Text Books:

TEXT

BOOKS:

1. MS Office 2000 for Every One - Vikas Publishing House Pvt. Ltd., Sanjay Saxena.
2. MS Office 2000 Professional Fast & Easy – June Slton, BPB publications.
3. Guide to MS Office 2000 PH. - I Loura Acklen.
4. The ABC & MS Office Professional Edition - Guy Hart-Davis.
5. Tally 9.0 – A complete Reference – Tally Solutions (P) Limited.

ALLIED – 1
(To choose any 1 out of the given 3)
PAPER –1
1. INDIAN ECONOMY - I

Course Objectives:

1. The salient objective of this paper is to introduce the students to understand the main concepts of the Indian Economy.
2. The concepts which help to the students to assess gain knowledge on various Economic Policies of the Government and also students should know that India is a fifth largest economy.
3. The students become aware of the Agriculture and Agriculture Labour.
4. The students become aware of the various challenges of the Indian economy.
5. Students are able to analyse current economic scenario in India.
6. To impart knowledge about the functioning of industries.

UNIT: I Introduction

Features of developing Economies - Economic and Non-Economic factors impeding Economic development - Concept of growth and development.

UNIT: II Human Development, Poverty and Unemployment.

Human development – Components of human development – HD Index – Population Growth – Measures to control population - Recent Population Policy – Poverty Alleviation Programmes – Unemployment – Types – Causes and Effects.

UNIT: III Agriculture

Indian Agriculture – Contribution to Economic Development – Agricultural Productivity – Land Reforms – Green Revolution II.

UNIT: IV Agricultural labour

Agricultural labour – Definition – Features - Problems – Remedies - Agricultural Credit - Grameen Bank.

UNIT: V Industry

Meaning and Definition of Industry – Role of Industries – Industrial Policy of 1991 and recent changes – Role of Small Scale Industry in economic development – Large Scale Industry in India – Industrial Development Under Five Year Plans.

Text Books

Unit- I : Indian Economy Sankaran.S Margham Publications 7th edition 2014

Unit-II: Indian Economy Ruddar Dutt & Sundaram KPN Sulan Chand Publishing 7th edition 2016

Unit-III: Indian Economy Sankaran.S Margham Publications 7th edition 2014

Unit-IV: Indian Economy Sankaran.S Margham Publications 7th edition 2014

Unit- V: Indian Economy Sankaran.S Margham Publications 7th edition 2014

Reference Books:

1. Ruddar Dutt & Sundaram KPN Indian Economy S Chand Publishing 7th edition 2016
2. Sankaran .S. Indian Economy Margham Publications 7th 2014
3. Dhingra I.C. Indian Economy Manakin Press Sultan Chand & Sons 28th edition.
4. Puri V.K & Misra S.K Indian Economy Himalaya Publishing House 35th 2017
5. Agarwal A.N Indian Economy New Age 41st 2016
6. KK Dewett JD Varma & M Sharma Indian Economy S Chand & Company Pvt Ltd 1st 2016
7. Jhingan M.L Economics of Development & Planning Vrinda Publication 41st 2016

E- Materials

1. www.studyhaba.com/indian-economy-study-material-pdf
2. www.examrace.com/IEcoS/IEcoS-Study-Material
3. www.winmeen.com/tnpsc-indian-economy-study-materials
4. www.jagranjosh.com/articles/ias-prelims-2015-gs...
5. www.governmentexams.co.in/tnpsc-indian-economy-notes
6. www.clearias.com/ias-study-materials
7. www.tnpscshouters.com/2019/02/tnpsc-indian...
8. www.hirensir.com/indian-economy-in-gujarati-pdf

Course Out Comes

1. After studied unit-1, the student will be able to understand the various indicators of economic development.
2. After studied unit-2, the student will be able to understand the importance, causes and impact of population growth.
3. After studied unit-3, the student will be able to gain knowledge about the role of agriculture in economic development.
4. After studied unit-4, the student will be able to gain knowledge about the role of agriculture labour problems and remedies .
5. After studied unit-5, the student will be able to understand the industrial development during plan periods.

ALLIED - 1

PAPER - 1

2. BUSINESS STATISTICS – I

Objective

To understand and apply statistical tools in business.

UNIT-I

Statistics - Definitions - Scope and Limitations - Collection of Data - Primary and Secondary Data - Questionnaire - Classification and Tabulation - Diagrammatic and graphical representation of data.

UNIT-II

Measures of Central tendency - Mean - Median - Mode - Harmonic Mean and Geometric Mean,

UNIT-III

Measures of Dispersion - Range - Quartile deviation - Mean Deviation - Standard Deviation - Coefficient of Variation - Lorenz Curve.

UNIT-IV

Measures of Skewness - Karl Pearson's and Bowley's Coefficient of Skewness - Kurtosis - Characteristics of Kurtosis - Measures - Calculation.

UNIT-V

Statistical Quality Control - Control Charts - X, P, C, R - Charts - Acceptance sampling only.

(Weightage of Marks = Problems - 80%, Theory - 20%)

Text Books:

1. Dr. S.P. Gupta, Business Statistics & Operation Research - Sultan Chand.
2. PA. Navanitham, Business Statistics & Operation Research, Jai Publications, Trichy.
3. S.P. Rajagopalan & R. Sattanathan, Business Statistics & Operation Research 3rd Edition, Vijay Nicole Publications, Chennai.

Reference Books:

1. Dr. S.P. Gupta, Statistical Methods - Sultan Chand.
2. R.S.N. Pillai & Bhagavathi, Statistics.
3. J.K. Sharma, Business Statistics - Pearson Education.
4. B. Agarwal, Basic Statistics - Wiley Eastern.

ALLIED - 1

PAPER - 1

3. CONSUMER PROTECTION AND CONSUMER RIGHTS

Objective:

To make students to acquire basic knowledge of consumer laws, consumer rights and consumer welfare and protection.

Unit - I

Introduction of Consumer Protection Act 1986 – Objectives - Consumer Protection Act 2006 (Amendments) – Salient features.

Unit - II

Definitions of the term: - Consumer – Types of Consumer Appropriate authority – Complainant – Consumer dispute – Restrictive Trade Practice.

Unit - III

The various Consumer Rights: - Right to Safety, Right to Information, Right to Choose, Right to be heard – Right against exploitation – Right to Consumer Education.

Unit - IV

Consumer Production Council: - Composition and Powers of National Commission, State Commission and District Consumer Forum.

Unit - V

Redressal of consumer grievances-Goods & Services covered under Consumer Protection Act-Procedure for filing of complaints with District Forum, State Commission , National Commission.

Books for reference

1. Lecture on Torts and Consumer Protection Laws by Dr. Rega Surya Rao – Asia Law House, Hyderabad.
2. Consumer Protection Laws – By Prof. RakeshKhanna – Central – Law Agency.
3. Consumer Protection (Amendment) Act, 2002. S. Chand & Sons.2012.

SEMESTER – II
CORE PAPER - 3
FINANCIAL ACCOUNTING – II

Objective:

To gain a knowledge of accounting in general and to understand the system of Financial Accounting.

Unit - I: Branch accounts

Meaning – objects of branch accounts – accounting in respect of dependent branches: debtors system; stock and debtors system; wholesale branch system and final accounts system - Independent branches – incorporation of branch trial balance in head office books.

Unit - II: Departmental Accounting

Meaning of departments and departmental accounting – Distinction between departments and branches- need for departmental accounting – advantages of departmental accounting - Apportionment of indirect expenses – Inter departmental transfers at cost and selling price - preparation of departmental trading, profit & loss account and balance sheet.

Unit - III: Hire purchase and Instalment purchase systems

Meaning and features of hire purchase system - calculation of interest – books of hire purchaser and books of hire vendor - default and repossession (Hire purchase trading account excluded)

Meaning of instalment system -distinction between hire purchase system and instalment system - calculation of interest – books of buyer and books of seller.

Unit - IV: Partnership accounts (fundamentals and reconstitution of partnership)

Meaning and features of partnership – Partnership deed - calculation of Interest on capital and interest on drawings – preparation of profit & loss appropriation account – preparation of capital accounts (fixed and fluctuating) – admission of a partner – retirement of a partner – death of a partner – treatment of goodwill as per AS 10.

Unit - V: Partnership Accounts (Dissolution of partnership firms)

Dissolution of a firm – insolvency of a partner (Garner Vs Murray rule) – Insolvency of all the partners – Piecemeal distribution: proportionate capital method and maximum loss method.

Note: Questions in section A, B and C shall be in the proportion of 20: 80 between theory and problems.

Text books

1. Jain & Narang, Financial accounting, Kalyani publishers, New Delhi.
2. T.S. Reddy & Dr. A.Murthy, Financial accounting, Margham publications, Chennai.

Reference books

1. Gupta, R.L & Gupta, V.K, Advanced Accounting, Sultan Chand & Sons, New Delhi.
2. Shukla & Grewal, Advanced Accounting, S.Chand & Co.New Delhi.
3. Parthasarathy, S.& Jaffarulla, A.Financial Accounting, Kalyani Publishers, New Delhi.
4. Murugadoss, Jaya, Charulatha and Baskar, Financial Accounting, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

CORE PAPER - 4
SOFTWARE & TALLY LAB

MS.WORD:

1. a. Starting MS-WORD, Creating, Saving, Printing (with options), Closing and Exiting.
1. b. Study of Word – Menu / toolbars.
2. a. Create a document, save it and edit the document as follows:
 - i) Find and Replace options.
 - ii) Cut, Copy, Paste options.
 - iii) Undo and Redo options.
2. b. Format the document:
 - i) Using Bold, Underline and Italic.
 - ii) Change Character size using the font dialog box.
 - iii) Formatting paragraph: Center, Left aligns & Right align
 - iv) Changing paragraph and line spacing, Using Bullets and Numbering in Paragraphs.
 - v) Creating Hanging Paragraphs.
3. Using tap settings enhancing the documents (Header, Footer, Page Setup, Border, Opening & Closing Toolbars, Print Preview).
4. Creating Tables in a document, Selecting Rows & Column sort the record by using tables format painter and Auto Format.
5. Drawing flow chart using (creating main document, data source, inserting merge fields and viewing merge data, viewing and printing merged letter, using mail merge to print envelope creating mailing labels).

MS-EXCEL

1. a. Create a worksheet, moving/ copying/ inserting/ deleting rows and columns (usage of cut, paste, commands, copying a single cell, copying a range of data, filling up a cell. Undo command, inserting a row, column, deleting rows and columns).
1. b. Formatting work sheets.
 1. Bold style.
 2. Italic style.
 3. Font size changing.
 4. Formatting numbers (Auto fill, Selection Command, Currency format, Currency)
 5. Specifying percentage (%) Scientific notations.
 6. Drawing border around cells.
 7. Printing a work sheet (Print preview, Margin Setting, Header, Footer).
2. a. Database Concept: database, record field and field name – creating and sorting a data base and maintaining a database (data form).
2. b. Using auto filter, advanced filter
2. c. Creating subtotals and grand totals - using database functions.

3. Creating charts
 - i) Using chart wizard (five steps)
 - ii) Changing the chart type (Pie, Bar, Line)
 - iii) Inserting titles for the axes X. Y
 - iv) Changing colors.
 - v) Printing charts.

4. a. Using date, time, maths functions:
 - i) entering current data.
 - ii) Using date arithmetic (adding and subtracting dates)
 - iii) Date functions (day, month, second)

- b. Math Functions
 - i) SUM, COUNT, AVERAGE
 - ii) MAX, MIN
 - iii) STDEV, VAR
 - iv) ABS, EXP, INT
 - v) LOG 10 AND LOG
 - vi) MOD, ROUND, SORT
 - vii) Using auto sum

- c. Logical and Financial Functions
 - i) Logical (IF / AND / OR / NOT)
 - ii) Financial (PMT, FV, NPER, RATE)
5. i) Creating and running a macro.
 - ii) Assigning button to a defined macro.
 - iii) Editing a macro.

MS-POWER POINT:

1. Creating a presentation using auto content wizard.
2. Different views in power point presentation.
3. Setting animation effects / grouping / ungrouping / cropping power / point objects.
4. Printing a presentation / Importing – Exporting files
5. Creating an organisation chart in Power Point.

TALLY:

1. Company Information

- a. Company creation
- b. Select Company
- c. Shut Company
- d. Alter Company
- e. Split Company Data
- f. Backup and Restore

2. Gateway of Tally

- a. Accounts info
 - i) Groups
 - ii) Ledgers
 - iii) Voucher Types

- b. Inventory info
 - i) Stock Group
 - ii) Stock Category
 - iii) Stock item
 - iv) Unit of Measures
 - v) Godown
- c. Accounting Vouchers
- d. Inventory Vouchers

3. Statutory and Taxation

- a. Value Added Tax (VAT)
- b. Tax Deducted at Source (TDS)
- c. Tax Collected at Source (TCS)
- d. Service Tax

4. Display

- a. Trial Balance
- b. Day Book
- c. Accounts Book
- d. Statement of Accounts
- e. Inventory Books
- f. Statement of Inventory
- g. Statutory Info
- h. Statutory Reports
- i. Cash flow and Fund flow

ALLIED – 1
(To choose any 1 out of the given 3)
PAPER –2

1. INDIAN ECONOMY - II

Course Objectives:

1. To acquire sufficient knowledge about India's Economic Development and fundamental Concept about National Income in India.
2. The knowledge acquired through this paper will help the students to know the current changes towards economic development.
3. To equip the students to enhance their knowledge about the economic progress and problems of our country.
4. To impart the knowhow of planning and its methodologies.
5. To understand the importance of logistics and movement of people through various transport system.
6. To bring awareness on Information Technology and its impact on Economic Development.

UNIT: I National Income

National Income – Definitions – Concepts – Methods of measuring National Income – Difficulties in the Measurement of National Income – Trends in National Income Growth and Structure – Limitations of National Income estimation in India.

UNIT: II Planning

Planning in India – Objectives – Importance – Evaluation of Economic Planning – Strategy of India's development Plan's – Regional Planning in India – Assessment of Indian Planning – Establishment of NITI Aayog and its functions.

UNIT: III Economic Reforms and Liberalisation

Economic Reforms since 1990's – Appraisal of Economic Reforms – Liberalization: Meaning – Advantages and Disadvantages – Privatization: Meaning and Scope – Globalization – its impact on Indian Economy – Merits and Demerits of Globalization.

UNIT: IV Transport System in India

Transport – Importance of Transport (Roadway, Railways, Shipping and Civil Aviations) to Economic Development – Evaluation of Government in Policy in relation to privatisation policy - Transport Coordination.

UNIT: V Information Technology

Role of Technology - Information Technology BPO in India - their impact on Economic Development – Cyber Crime.

Text Books

Unit-I: Sankaran.S Indian Economy Margham Publications 7th edition 2014

Unit-II: Ruddar Dutt& Sundaram Indian Economy KPN Sulan Chand Publishing 7thedition 2016

Unit-III: Sankaran.S Indian Economy Margham Publications 7th edition 2014

Unit-IV: Sankaran.S Indian Economy Margham Publications 7th edition 2014

Unit-V:Sankaran.S Indian Economy Margham Publications 7th edition 2014

Reference Books:

S.No	Title	Authour	Publisher	Edition	Year
1.	Indian Economy	RuddarDutt& Sundaram KPM	S.Chand Publishing	7 TH	2016
2.	Indian Economy	Sankaran S	Margham Publications	7 th	2014
3.	Indian Economy	Dhingra I.C	Manakin Press	21 ST	2013
4.	Indian Economy	Misra S.K &PuriV.K	Himalaya Publishing House	35 TH	2017
5.	Indian Economy	Sanjiv Verma	Unique Publishers	8 th	2019
6.	Indian Economy	Agarwal A.N	New Age	41 ST	2016
7.	Economics of Development & Planning	Jhingan M.L	Vrinda Publication	41 ST	2016

E- Materials

1. www.studyhaba.com/indian-economy-study-material-pdf
2. www.examrace.com/IEcoS/IEcoS-Study-Material
3. www.winmeen.com/tnpsc-indian-economy-study-materials
4. www.jagranjosh.com/articles/ias-prelims-2015-gs...
5. www.examrace.com/NTA-UGC-NET/NTA-UGC-NET-Study...
6. www.governmentexams.co.in/tnpsc-indian-economy-notes
7. www.tnpscshouters.com/2019/02/tnpsc-indian...

Course Out Comes

1. After studied unit-1, the student will be able to understand the formation of National Income.
2. After studied unit-2, the student will be able to acquire knowledge about the planning in India.
3. After studied unit-3, the student will be able to clarify the economic reforms and LPG policy.
4. After studied unit-4, the student will be able to understand the transport system and policy in India.
5. After studied unit-5, the student will be able to understand the information technology in India.

ALLIED - 2

PAPER - 2

2. LOGISTIC MANAGEMENT

Objective:

To understand the comprehensive nature of Logistics Management.

UNIT-I

Logistics - definition - scope - functions - objectives of Logistics Management - customer service and logistics.

UNIT-II

Supply Chain - components - role of logistics in supply chain - Warehousing - functions - types - warehouse layout - material handling and logistics - Inventory Management.

UNIT-III

Transportation - infrastructure - freight management - transportation network - route planning - containerization.

UNIT-IV

Logistical packaging - logistics information needs - logistics design for distribution channels - logistics outsourcing.

UNIT-V

Government policies and regulations - Motor Vehicles Act, carriage by air, sea, multi-modal transportation etc., Documentation - Airway Bill, Railway Receipt, Lorry Receipt, Bill of Lading etc.

Text Books:

1. Ronal H. Ballou, Business Logistics / Supply Chain Management, Pearson Education, Prentice Hall, New Delhi - 2001.

Reference Books:

1. Vinod V. Sople, Logistics Management, Pearson Education (Singapore) P. Ltd.,
2. Satis C. Ailawadi, Rakesh Singh, Logistics Management, Prentice Hall of India, New Delhi - 110 001.
3. Sunil Chopra & Peter Meindi, Supply Chain Management / Strategy, Planning and Operation - Pearson Education Asia, New Delhi.
4. B. S. Sahay, Supply Chain Management for Global Competitiveness, Macmillan India Ltd., Delhi.

ALLIED - 2

PAPER - 2

3. BUSINESS STATISTICS – II

Objective

To understand and apply statistical tools in Business.

UNIT-I

Correlation - Definition - Karl Pearson's Coefficient of Correlation - Rank Correlation.

UNIT-II

Regression Equations – Properties of Regression Lines and Coefficients – Standard Error of Estimate.

UNIT-III

Index Number - Definition - Uses - Unweighted Index Number - Simple Aggregate Price Index, Simple Average of Price Relatives Index - Weighted Index - Laspeyre's Paasche, Dorbish Bowley's - Marshall Edgeworth, Fisher Ideal Index - Time and Factor Reversal Test - Cost of Living Index.

UNIT-IV

Time Series - Definition and Uses - Components - Semi Average, Moving Average - Method of Least Square - Seasonal Variation - Simple Average Method.

UNIT-V

Probability - Addition and Multiplication Theorem - Permutation and Combination - Baye's Theorem.

(Weightage of Marks = Problems - 80%, Theory - 20%)

Text Books:

1. Dr. S.P. Gupta, Business Statistics & Operation Research - Sultan Chand.
2. PA. Navanitham, Business Statistics & Operation Research, Jai Publications, Trichy.
3. S.P. Rajagopalan& R. Sattanathan, Business Statistics & Operation Research 3rd Edition, Vijay Nicole Publications, Chennai.

Reference Books:

1. Dr. S.P. Gupta, Statistical Methods - Sultan Chand.
2. R.S.N. Pillai&Bhagavathi, Statistics.
3. J.K. Sharma, Business Statistics - Pearson Education.
4. B. Agarwal, Basic Statistics - Wiley Eastern.

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		Course Title					CIA	Uni. Exam	Total
SEMESTER I									
1.	I	Language	Paper-1	6	4	Tamil/Other Languages	25	75	100
2.	II	English (CE)	Paper-1	6	4	Communicative English I	25	75	100
3.	III	Core Theory	Paper-1	5	3	Financial Accounting – I	25	75	100
4.	III	Core Theory	Paper-2	5	3	Business Applications & Accounting Software	25	75	100
5.	III	ALLIED -1	Paper-1	6	3	(To choose one out of 3) 1. Indian Economy – I 2. Business Statistics – I 3. Consumer Protection and Consumer Rights	25	75	100
6.	III	PE	Paper-1	6	3	Professional English I	25	75	100
7.	IV	Environmental Studies		2	2	Environmental Studies	25	75	100
				36	22		175	525	700
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8.	I	Language	Paper-2	6	4	Tamil/Other Languages	25	75	100
9.	II	English (CE)	Paper-2	4	4	Communicative English I	25	75	100
10.	III	Core Theory	Paper-3	5	3	Financial Accounting – II	25	75	100
11.	III	Core Practical	Practical-1	5	3	Software & Tally Lab	25	75	100
12.	III	ALLIED-1	Paper-2	6	5	(To choose one out of 3) 1. Indian Economy – II 2. Logistic Management 3. Business Statistics – II	25	75	100
13.	III	PE	Paper-2	6	3	Professional English II	25	75	100
14.	IV	Value Education		2	2	Value Education	25	75	100
15.	IV	Soft Skill		2	1	Soft Skill	25	75	100
				36	25		200	600	800
SEMESTER III							CIA	Uni.	Total

S.NO	Part	Study Components		Ins. hrs /week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
								Exam	
16.	III	Core Theory	Paper-4	6	4	Corporate Accounting - I	25	75	100
17.	III	Core Theory	Paper-5	5	4	Business Law	25	75	100
18.	III	Core Theory	Paper-6	4	3	Banking Theory, Law & Practice	25	75	100
19.	III	Core	Paper-7	5	4	Management Information Systems (MIS)	25	75	100
20.	III	ALLIED-2	Paper-3	6	3	Merchant Banking	25	75	100
21.	IV	Skill based Subject	Paper-1	2	2	Elements of Insurance	25	75	100
22.	IV	Non-Major Elective	Paper-1	2	2	Elements of Accountancy	25	75	100
				30	22		175	525	700
SEMESTER IV									
23.	III	Core Theory	Paper-8	6	4	Corporate Accounting - II	25	75	100
24.	III	Core Theory	Paper-9	5	4	Principles of Marketing	25	75	100
25.	III	Core Theory	Paper-10	5	4	RDBMS	25	75	100
26.	III	Core Practical	Paper-2	4	3	RDBMS Lab	25	75	100
27.	III	ALLIED-2	Paper-4	6	5	E-Commerce & Its Applications	25	75	100
28.	IV	NMSDC : Digital Skills for Employability	Paper-2	2	2	Office Fundamentals	25	75	100
29.	IV	Non-Major Elective	Paper-2	2	2	Advertising and Salesmanship	25	75	100
				30	24		175	525	700
SEMESTER V									
30.	III	Core Theory	Paper-11	6	4	Cost Accounting - I	25	75	100
31.	III	Core Theory	Paper-12	6	4	Management Accounting	25	75	100
32.	III	Core Theory	Paper-13	6	4	Business Management	25	75	100
33.	III	Core Theory	Paper-14	6	4	Internet & Its Applications	25	75	100
34.	III	Internal Elective	Paper-1	4	3	(To choose one out of 3) 1. Entrepreneurial Development 2. Practical Auditing 3. Income Tax Law & Practice - I	25	75	100
35.	IV	Skill based Subject	Paper-3	2	2	Financial Management	25	75	100
				30	21		150	450	600
SEMESTER VI									
36.	III	Core Theory	Paper-15	5	4	Cost Accounting - II	25	75	100

S.NO	Part	Study Components		Ins. hrs /week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
37.	III	Core Theory	Paper-16	6	4	Web Technology	25	75	100
38.	III	Core Practical	Paper-3	5	4	Web Technology Lab	25	75	100
39.	III	Compulsory Project	Paper-17	5	5	(Individual / Group Project)	25	75	100
40.	III	Internal Elective	Paper-2	4	3	(To choose one out of 3) 1. Income Tax Law & Practice – II 2. Business Environment 3. Services Marketing	25	75	100
41.	III	Internal Elective	Paper-3	4	3	(To choose one out of 3) 1. Software Engineering 2. Data Mining 3. Internet of Things	25	75	100
42.	III	NMSDC : Digital Banking and Audit Essentials for Employability	Paper-4	2	2	Fintech Course	25	75	100
43.	V	Extension Activities		-	1		100	-	100
				30	26		275	525	800

Part	Subject	Papers	Credit	Total Credits	Marks	Total Marks
Part I	Languages	2	4	8	100	200
Part II	Communicative English	2	4	8	100	200
Part III	Allied (Odd Semester)	2	3	6	100	200
	Allied (Even Semester)	2	5	10	100	200
	Electives	3	3	9	100	300
	Core	16	(3-5)	60	100	1600
	Core Practical	3	(3-4)	10	10	300
	Professional English	2	3	6	100	200
	Compulsory Project (Group/Individual Project)	1	5	5	100	100
Part IV	Environmental Science	1	2	2	100	100
	Soft skill	1	1	1	100	100
	Value Education	1	2	2	100	100
	Lang. & Others /NME	2	2	4	100	200
	Skill Based	4	2	8	100	400
Part V	Extension Activities	1	1	1	100	100
	Total	43		140		4300

THRUVALLUVAR UNIVERSITY
B.COM (COMPUTER APPLICATION) SYLLABUS
UNDER CBCS
(With effect from 2020-2021)
SEMESTER - III
CORE PAPER - 4
CORPORATE ACCOUNTING - I

Objective:

To gain comprehensive understanding of all aspects relating to corporate accounting.

UNIT - I

Share capital

Meaning and types of shares - Issue and allotment of equity and preference shares - issue at par, premium and at discount - calls in advance - calls in arrears - forfeiture of shares - reissue of forfeited shares - redemption of preference shares - underwriting of shares (Determining the liability of underwriters - firm underwriting)

UNIT - II

Debentures

Meaning and types of debentures - Issue of debentures at par, premium and at discount - writing off discount on issue of debentures - issue of debentures as collateral security - issue of debentures for consideration other than cash - redemption of debentures - methods - open market buying - conversion of debentures into shares - sinking fund method - insurance policy method.

UNIT - III

Acquisition of Business

Meaning of Acquisition of business - accounting treatment - new set of books to be opened - same set of books to be continued - profit prior to incorporation

UNIT - IV

Final accounts

Preparation of Statement of profit & loss and Balance sheet (as per revised schedule VI)

UNIT - V

Amalgamation, Absorption, External and Internal reconstruction

Purchase consideration - methods - Amalgamation in the nature of merger or purchase - absorption (AS 14). Alteration of share capital - reduction of share capital (scheme of capital reduction is excluded).

Note: Questions in Sec.A, B & C shall be in the proportion of 20:80 between Theory and Problems.

Text Books

1. Jain,S.P & Narang,N.L., Advanced Accounting, Kalyani Publications.
2. ReddyT.S.& Murthy,A, Corporate Accounting, Margham Publications, Chennai.

Reference Books

1. Gupta,R.L & Radhaswamy,M, Advanced Accounts, Sulthan Chand, NewDelhi.
2. Shukla & Grewal & Gupta, Advanced Accounting, S. Chand &Co.,N ew Delhi.
3. Palaniyappan, Corporate Accounting, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

CORE PAPER - 5

BUSINESS LAW

Objective:

To gain a comprehensive knowledge on all aspects of law as applied to business.

UNIT - I

Contract - Formation and Essential Elements of Contract - Types of Contract and Agreements - Rules as to offer, Acceptance and Consideration - Capacity to Contract - Lawful Object and Free Consent - Quasi Contract.

UNIT - II

Performance of Contract - Devolution of Joint Rights and Liabilities - Discharge of Contract - Breach of Contract and Remedies.

UNIT - III

Indemnity and Guarantee - Features and Distinctions - Extent of Surety's Liability - Rights and Discharge of Surety - Bailment and Pledge - Features - Difference - Rights and Duties of Bailor and Bailee - Law Relating to Lien and Finder of Lost Goods - Rights and Duties of Pawnor and Pawnee - Pledge by Non-Owner.

UNIT - IV

Contract of Agency - Definition and Meaning - Creation - Ratification and Requisites - Rights of Principal and Agent - Relation of Principal with Third Parties - Personal Liability of Agent - Termination of Agency - Irrevocable Agency.

UNIT - V

Sale of Goods Act 1930 - Definition of Sale - Sale Vs Agreement to Sell - Subject Matter - Express and Implied Conditions and Warranties - Caveat Emptor and Exceptions - Performance of Contract - Transfer of Property - Rights of an Unpaid Seller - Sale by Non-owner - Auction Sale.

Text Books:

1. N.D.Kapoor, Business Laws, Sultan Chand & Sons, New Delhi.
2. R.S.N.Pillai & Bagavathi, Business Laws, S. Chand & Co., New Delhi.

Reference Books:

1. M.C.Dhandapani, Business Laws, Sultan Chand & Sons, New Delhi.
2. M.C.Shukla, Mercantile Law, S. Chand & Co., New Delhi.
3. P.C. Tulsian, Business Laws, Tata McGraw Hill, New Delhi.
4. Dr.N.Premavathy, Business Law, Sri Vishnu Publications, Chennai.
5. Dr.N.Premavathy, Business Law (in Tamil), Sri Vishnu Publications, Chennai.
6. Balachandran. V and Thothadri. R, Business Law, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

CORE PAPER - 6
BANKING THEORY, LAW AND PRACTICE

Objective:

To study in detail about the Central Bank and Commercial Banking System including the latest directives and decisions of Reserve Bank of India. To study the recent developments in Indian banking system. To acquire the basic knowledge about the banking transactions.

UNIT - I

Origin of banks - Banking Regulation Act, 1949 - Roll of Banks and Economic Development - Central Banking and Role of RBI and their functions - Credit Control Measures of Central Bank.

UNIT - II

Commercial Banks - Functions - E-Banking - ATM Cards, Debit cards, Personal Identification Number - Online enquiry and update facility - Electronic Fund Transfer - Electronic Clearing System - Credit Creation and Credit Control - Role of SBI in the Economic Development of India.

UNIT - III

Types of Bank Accounts - Savings Account, Current Account - Types of Deposit Account - Fixed and Recurring Deposits Account - Procedure for opening of an Account - Types of customers (Individuals, firms and Companies) - Importance of CRM - Customer grievances and redressal - Ombudsman.

UNIT - IV

Negotiable instruments - Promissory Note - Bills of Exchange, Cheque, Draft - Definitions, Features - Crossing - Endorsement - Material Alteration - Dishonour of Cheques - Paying Banker - Rights, Duties and Statutory Protection to Paying Banker - Collecting banker - Rights and Duties.

UNIT - V

Principles of lending - Types of Loans - Precautions to be taken by a banker while lending against LIC Policies, Shares, Gold, Silver Ornament and Jewellery.

Text Books:

1. Banking Law Theory and Practice - Sundaram and Varshney - Sultan Chand Co.
2. Banking and Financial Systems - B. Santhanam, Margham Publishers.
3. Banking Law Theory and Practice - S.N. Maheswari - Kalyani Publications.
4. Banking Theory Law and Practice, Dr. S. Guruswamy, 3rd Edition, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

Reference Books:

1. Indian Banking - Parameswaran - S. Chand and Co.
2. Financial Services - Dr. S. Gurusamy, Tata McGraw-Hill Education India.
3. Banking Theory Law Theory and Practice - Dr. S. Gurusamy, Tata McGraw-Hill Education India.

CORE PAPER - 7

MANAGEMENT INFORMATION SYSTEM

UNIT - I

Management Information - Meaning of Information - Information needs of Managers - Web Data basis - Data warehousing - Knowledge management - Information system for decision making.

UNIT - II

Types of Information System - Transaction Processing System - Office Automation System - Decision Support System - Executive Support System - MIS - Evolution of MIS - Computer and MIS.

UNIT - III

System Analysis - System Planning and Mutual Investigation - System Design - The Process and Stages of System Design - Input / Output forms Design - File Organisation - System Implementation.

UNIT - IV

Management Information Needs and Communication links for Marketing system, Production System, Accounting System, Manufacturing System, Inventory Control System and Budget Control System - IS Organisation - Top Management Responsibility - Processing Group Responsibility.

UNIT - V

Development - Maintenance of MIS - Operation of manual Information System - Role of Computer in MIS - Data base Concept - Expert Systems - System Audit.

Text Book:

1. M. Assam - Fundamentals of Management Information System - Vijay Nicole Imprints Private Ltd., Chennai.
2. Effy Oz, "Management Information Systems", Second edition, Thomson Learning Course Technology, 2002.
3. Jawadekar W.S, "Management Information Systems", Tata McGraw Hill Publishing Company Ltd, 2002.
4. Kenneth.C Laudon and Jane P. Laudon, "Management Information Systems", Prentice Hall of India Ltd, 2002.

Reference Books:

1. David Knoenke (1989), "Management Information Systems", Tata McGraw Hill, New Delhi.
2. Iandon K.C and Landon J.P (2001), "Management Information Systems",

Maxwell Macmillan Publishing Company.

3. Murdic Rose and Elaggett, "Information System for Modern Management, Prentice Hall.
4. Robert Schultheis, Mary Sumner, "Management Information Systems" - The Manager's View, Fourth edition, Tata McGraw Hill Edition, 1999

ALLIED - 3
PAPER - 3
MERCHANT BANKING

UNIT-I

Merchant Banking – Definitions and Functions – Regulatory Framework – Registration of Merchant Bankers – Procedure Capital Adequacy Requirement – Lead Merchant Banker Appointment, Restrictions and Responsibilities.

UNIT-II

Public Issue Management – Functions and Mechanism – Categories of Issue – Issue Manager – Category and Restrictions Activities Involved in Public Issue Management – Marketing of New Issues – Methods – Pricing of Rights and Other Public Issues.

UNIT-III

Post Issue Management – Allotment / Dispatch of Shares / Refunds – Basis of Allotment – Procedure – Listing Requirements of Stock Exchanges – Advantages – Listing Requirements of OTCEI.

UNIT-IV

Capital Market Instruments – Meaning and Types – Commercial Paper – Issue of Commercial Paper – Usance – E-nomination – Ceiling – Mode of Issue – Credit Syndication – For Long Term and Working Capital.

UNIT-V

Port Folio Management – Functions – Registration of Port-folio Managers – Obligation – Investment of Client Funds – Maintenance of Book and Accounts – Reports to be Furnished – Code of Conduct.

Text Books:

1. Dr.S.Gurusamy, “Merchant Banking” Vijay Nicholes Imprint Pvt. Ltd., Chennai
2. Dr.V.Balu, “Merchant Banking & Finance Services” Sri Venkateswara Publication, Chennai

Reference Books:

1. H.R. Machiraju, “Merchant Banking” New Age International, New Delhi.
2. Dr. J.C.Verma, “A Manual of Merchant Banking” Baharat Law House, New Delhi.

SKILL BASED SUBJECT
PAPER - 1
ELEMENTS OF INSURANCE

Objective:

To gain a knowledge of insurance and its importance.

UNIT - I

Definition of insurance - classification of Contracts of insurance - marine and non-marine - general principles of law as applied to non-marine insurance.

UNIT - II

Life Assurance - objects of life Assurance - principles of life Assurance - different plans of life Assurance and annuities - policy condition and privilege - assignment and nomination - lapses and revivals - surrender values and loans - claims - double insurance.

UNIT - III

Marine insurance - principles of marine insurance - functions of marine insurance - proximate clause - subrogation and contribution

UNIT - IV

Types of marine policy - clauses in general use - warranties - kinds of marine losses - reinsurance and double insurance.

UNIT - V

Fire insurance - principles of law as applied to fire insurance - the subject matter of fire insurance - fire waste - hazard types of fire policy - cover notes - surveys and inspection average - re-insurance - renewals.

Text and Reference Books:

1. Dr. B. Vardharajan - Insurance Vol 1 and 2. - Tamil Text Book.
2. R.S. Sharma - Insurance Principle & Practice - Vara Bombay, 2006.

A. Murthy - Elements of Insurance Risk management & Insurance - Harrington, 2006 - Tata McGraw Hill pub.

NON-MAJOR ELECTIVE
PAPER - 1
ELEMENTS OF ACCOUNTANCY

Objectives:

To facilitate the non- commerce students to have a basic knowledge in Book-Keeping and Accounting.

UNIT - I

Need for Accounting - Definition (AICPA) - Steps - Objectives - Double Entry System - Meaning of Debit and Credit - Advantages - Limitations - Types of Accounts - Accounting Rules - Accounting Terminology - Accounting Concepts and Conventions - Meaning and Types - Accounting Equation.

UNIT - II

Journal - Ledger Accounts - Trial Balance.

UNIT - III

Subsidiary Books - Meaning - Types (no problems from Bills Receivable Book and Bills Payable Book but only theory) - Advantages over Journal - Ledger Accounts - Trial Balance.

UNIT - IV

Errors - Classification - Rectification (Rectification after the preparation of final account is excluded) - Suspense Account - Meaning and Need.

UNIT - V

Closing and Adjustment Entries - Final Accounts with simple Adjustments.

(Weightage: Theory: 25%, Problems: 75%)

Text Books

1. Jain,S.P & Narang, N.L., AdvancedAccounting, KalyaniPublications.
2. Jaya Charulatha and Baskar, Introduction to Accountancy, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

Reference Books

1. Gupta,R.L & Radhaswamy,M, AdvancedAccounts, SulthanChand, NewDelhi.
2. Shukla & Grewal & Gupta, AdvancedAccounting, S.Chand & Co., NewDelhi.

SEMESTER - IV
CORE PAPER - 8
CORPORATE ACCOUNTING - II

Objective:

To gain accounting knowledge in advanced corporate accounting.

UNIT - I

Valuation of goodwill and shares

Methods of Valuation of Goodwill - Average Profit Method - Super Profit Method - Capitalisation Method. Methods of Valuation of Shares - Net Assets Method - Yield Method - Fair Value Method.

UNIT - II

Liquidation of companies

Order of Payments - Preferential Creditors - Liquidator's Remuneration - Liquidator's Final Statement of Account - Statement of Affairs and Deficiency Account.

UNIT - III

Bank and Insurance Company accounts

NPA - Interest on Doubtful Debts - Rebate on Bills Discounted - Preparation of Bank Profit & Loss Account and Balance Sheet. Life insurance - Ascertaining Correct Assurance Fund - Revenue Account - Valuation Balance Sheet - Profit & Loss account - Balance Sheet (new format). General Insurance - Revenue Account - Profit & Loss Account - Balance Sheet (new format).

UNIT - IV

Holding company accounts

Capital Profit - Revenue Profit - Cost Of Control - Minority Interest- Elimination Of Common Transactions - Unrealised Profit - Revaluation of Assets and Liabilities - Bonus Shares - Consolidated Balance Sheet (Intercompany Investment is Excluded).

UNIT - V

Inflation accounting (Accounting for price level changes)

Limitations of Historical Accounting - Meaning of Inflation Accounting - Methods of Inflation Accounting - CPP Method; Gain or Loss on Monetary Items; Valuation of Cost of Sales and Closing Inventory - CCA Method: COSA; MWCA; Depreciation Adjustment; Gearing Adjustment.

Note: Questions in Sec. A, B & C shall be in the proportion of 20:80 between Theory and Problems.

Text Books

1. Jain,S.P & Narang,N.L., Advanced Accounting, Kalyani Publications.
2. ReddyT.S. & Murthy,A, Corporate Accounting, Margham Publications, Chennai.

Reference Books

1. Gupta, R.L & Radhaswamy, M, Advanced Accounts, Sulthan Chand, New Delhi.
2. Shukla & Grewal & Gupta, Advanced Accounting, S. Chand & Co., New Delhi.

CORE PAPER - 9

PRINCIPLES OF MARKETING

Objectives:

To enable the students to understand the concept and importance of marketing and the developments that have taken place in the field of marketing in the global scenario.

UNIT - I

Introduction

Meaning of market - classification of markets - meaning and definition of marketing - features of marketing - importance of marketing - difference between marketing and selling - Evolution of marketing concepts - functions of marketing.

UNIT - II

Market Segmentation and Consumer Behaviour

Meaning and definition of market segmentation - different patterns of market segmentation - Bases for segmenting consumer markets - benefits and limitations of market segmentation. Definition of consumer behaviour - consumer behaviour theories - factors determining consumer behaviour.

UNIT - III

Marketing Mix and Product policy

Definition and components of marketing mix - four P's of marketing mix - definition of product - features of a product - classification of products - stages in new product development - product life cycle - Branding - advantages of branding a product - packaging - functions of package - labelling - functions of labelling - kinds of labels.

UNIT - IV

Pricing policy, Channel of distribution and Promotion Mix

Meaning of price - factors affecting price decision - Types of pricing strategies - definition of channel of distribution - features of marketing channels - types of Channel of distribution - factors determining Channel of distribution - functions of wholesalers - types of retailers - promotion mix - Advertising - types of advertising - personal selling - qualities of a good salesman - sales promotion - kinds of sales promotion.

UNIT - V

Recent trends in Marketing

Social marketing - De-marketing - Re - marketing - Over marketing - Meta marketing - E- Marketing - online retailing - shopping malls.

Text Books:

1. Rajan Nair, Marketing, Sultan Chand & Sons, New Delhi
2. Varshney, Marketing Management, Sultan Chand & Sons, New Delhi.

Reference Books:

1. Jaisankar, Marketing, Margham Publications, Chennai
2. L. Natarajan, Marketing, Margham Publications, Chennai
3. Dr. K. Sundar, Essentials of Marketing, Vijay Nicole Imprints Private Ltd., Chennai.

CORE PAPER - 10

RELATIONAL DATABASE MANAGEMENT SYSTEMS

Objective:

1. The students are able to understand database concepts and database management system software and have a high-level understanding of major DBMS components and their function.
2. The students are able to understand the E R model and relational model.
3. The students are able to be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS.
4. The students are able to Understand Functional Dependency and Functional Decomposition.
5. The students are able to understand the architecture of database management system and also understand the various different architecture such as server system architecture, parallel systems and distributed database systems.

Course Outcomes:

- CO1** - Describe the database architecture and its applications Sketch the ER diagram for real world applications Uses various ER diagram for a similar concepts from various sources.
- CO2** - Discuss about the relational algebra and calculus Construct various queries in SQL and PL/SQL Compiles various queries in SQL, Relational Calculus and Algebra.
- CO3** - Describe the various normalization forms Apply the normalization concepts for a table of data Practices a table and implement the normalization concepts.
- CO4** - Explain the storage and accessing of data.
- CO5** - Illustrate the query processing in database management. Define the concurrency control and deadlock concept

UNIT- I

DATABASE ARCHITECTURE AND ER DIAGRAM

Database system applications - Purpose of database systems - View of data- Database languages - Database architecture - Database users and administrators - History of database systems-Entity relationship modeling: entity types, entity set, attribute and key, relationships, relation types, roles and structural constraints, weak entities, enhanced E-R and object modeling, sub classes; super classes, inheritance, specialization and generalization

UNIT - II

RELATIONAL DATA MODEL

Relational model concepts, Relational constraints, Relational Languages : Relational Algebra, The Tuple Relational Calculus - The Domain Relational Calculus - SQL: Basic Structure - Set Operations - Aggregate Functions-Null Value-Nested Sub Queries -

Views Complex Queries Modification Of Database - Joined Relations - DDL - Embedded SQL - Dynamic SQL - Other SQL Functions - Integrity and Security.

UNIT - III

DATA NORMALIZATION

Pitfalls in relational database design - Decomposition - Functional dependencies - Normalization - First normal form - Second normal form - Third normal form - Boyce - codd normal form - Fourth normal form - Fifth normal form

UNIT - IV

STORAGE AND FILE ORGANIZATION

Disks - RAID -Tertiary storage - Storage Access - File Organization - organization of files - Data Dictionary storage

UNIT - V

QUERY PROCESSING AND TRANSACTION MANAGEMENT

Query Processing - Transaction Concept - Concurrency Control -Locks based protocol Deadlock Handling -Recovery Systems

TEXT BOOK:

1. Abraham Silberschatz, Henry Korth, S.Sudarshan, Database Systems Concepts, Sixth Edition, Mc.Graw Hill, 2010.
2. Raghu Ramakrishnan and Johannes Gehrke, Database management systems, Third Edition, 2002

REFERENCES

1. Bipin Desai, An Introduction to database systems, Galgotia Publications, 2010.
2. Ramez Elamassri, Shankant B-Navathe, Fundamentals of Database Systems, Pearson, 7th Edition, 2015

E - REFERENCES

1. NPTEL, Introduction to database design, Dr P Sreenivasa Kumar Professor CS&E, Department, IIT, Madras
2. NPTEL, Indexing and Searching Techniques in Databases Dr. Arnab Bhattacharya, IIT Kanpur

CORE PRACTICAL - 2

RDBMS LAB

Objectives:

1. To understand the concepts of DDL/DML/DCL/TCL commands.
2. To understand the concepts of Join queries.
3. To understand the concepts of exception handling.
4. To understand the concepts of cursors.
5. To understand the concepts of packages.

Course Outcomes:

CO1 - Design and Implement a database schema for a given problem domain.

CO2 - Populate and Query a database using SQL DDL/DML Commands.

CO3 - Build well formed in String Date/Aggregate Functions.

CO4 - Design and Implement a database query using Joins, Sub-Queries and Set Operations.

CO5 - Program in SQL including Objects (Functions, Procedures, Triggers)

LAB EXERCISES:

1. Execute a single line query and group functions.
2. Execute DDL Commands.
3. Execute DML Commands
4. Execute DCL and TCL Commands.
5. Implement the Nested Queries.
6. Implement Join operations in SQL
7. Create views for a particular table
8. Implement Locks for a particular table.
9. Write PL/SQL procedure for an application using exception handling.
10. Write PL/SQL procedure for an application using cursors.
11. Write a PL/SQL procedure for an application using functions
12. Write a PL/SQL procedure for an application using package

ALLIED - 2
PAPER - 4
E-COMMERCE AND ITS APPLICATIONS

UNIT - I:

Introduction to E-Commerce - Meaning - Working of E-Commerce - Electronic Business - Categories of E-Commerce Application - Global Trading Environment and Adoption of E-Commerce - Product suitability - Comparison between Traditional and Electronic Commerce - Advantages and Disadvantages of E-Commerce.

UNIT - II:

Business Models of E-Commerce - Introduction - Major challenges of B2C E-Commerce - Meaning of B2B Exchange - Development of B2B E-Commerce - Types of B2B Markets - Difference between B2C and B2B Commerce.

UNIT - III:

Introduction to E-Hub Concept - Introduction to B2G Concept - E-filing.

UNIT - IV:

Internet - Internet Operation - Internet Explorer - Creation of E-mail ID, E-mail etiquettes.

UNIT - V:

Web Browsing - Role of Website in B2C E-Commerce, Website strategies and goals. Websites Design Principles for E-Commerce websites.

Text Books:

E-Commerce - SrinivasaVallabhan. S.V - Vijay Nicole Imprints Private Ltd.,
Chennai.

**SKILL BASED SUBJECT
PAPER - 2
INDUSTRIAL ORGANIZATION**

Objective:

To gain knowledge of the basic industrial structure and its working.

UNIT - I

Meaning of Industrial Organisation - Industrial Revolution - Industrial Growth - Aggregation, Consolidation, Integration - Mass Production - Importance, Advantages, Limitations - Specialisation - division of labour - its advantages and disadvantages - Industrial growth in India - major industries in India - current scenario.

UNIT - II

Industrial ownership - Sole Proprietorship - Features, merits and demerits - partnership - Features, merits and demerits - Joint Stock Company - Features, merits and demerits - Types - Public Ltd and Private Ltd companies.

UNIT - III

Physical facilities - plant location - need for selection of location - stages in selection of location - plant layout - definition, objectives, advantages, types - factors influencing plant layout - tools used for design of plant layout - principles of a good plant layout.

UNIT - IV

Production management - product design - characteristics of a good product design - design of production system - its types - design of work study - motion study - time study - production planning - objectives, levels - production control - factors determining production control operation - functions of production planning and control.

UNIT - V

Materials management - its meaning, objectives, advantages, functions - purchasing - types of purchasing policy - store keeping - organization of stores department - inventory control - its objectives, functions, benefits.

Text Book:

1. Dr. A. Murthy, Industrial Organisation, Margham Publications, Chennai.

Reference Books:

1. L Bethel, Atwater, Smith and Stackman, Industrial Organisational Management, McGraw Hill.
2. Kimball & Kimball, Principles of Industrial Organisation, McGraw Hill.
3. Lundy, Effective Industrial Management Eurasia Publishing House (Pvt.) Ltd., New Delhi.

**NON-MAJOR ELECTIVE
PAPER - 2
ADVERTISING AND SALESMANSHIP**

Objectives:

To study the concept of Advertisement and Salesmanship.

To gain knowledge about the role of Advertisement and Salesmanship in boosting the volume of sales.

To study the qualities to be imparted by a salesman in the present global competitive market.

UNIT - I

Origin and Development of Advertising - Objectives - Nature - Functions - Types - Benefits - Difference between Advertising and Publicity - Scope of Advertising - DAGMAR approach.

UNIT - II

Various media of Advertising - Print Media - Newspapers - Magazines - Advantages - Limitations - Radio and TV advertising - Advantages - Limitations.

UNIT - III

Advertisement copy - Characteristics - Clarification - Components - Salesmen Recruitment - Salesmen report - Types - Salesmanship and Psychology.

UNIT - IV

Salesmanship - Characteristics of Salesmanship - Objectives of Personal selling - Advantages - Limitations - Essentials of Effective selling - Advertising and Salesmanship.

UNIT - V

Qualities of Good Salesman - Sales Promotion - Kinds of Sales promotion - Importance of Salesmanship - Types of Salesmen - Methods of Remuneration - Qualities of successful Salesman.

Text Books:

1. Modern Marketing (Principles and Practises) R.S.N. Pillai&Bagavathi, S. Chand & Co. New Delhi
2. Sales and Advertisement Management S Rajkumar, V Rajagopalan, S. Chand & Company Pvt. Ltd.

Reference Books:

1. Advertising (Principles and Practise) ChunawallaK.C. Sethia, Himalaya Publishing House, Delhi.

2. Advertising Management Dr. M.M. Varma, R. K. Agarwal, Forward 300K Depot, New Delhi.
3. Advertising Management Mahendra Mohan, Tata Mcgraw-hill Publishing Company Limited, New Delhi, India.
4. Advertising Marketing and Sales Management G.R. Basotia N. K Sharama, Mangal Deep Jaipur.
3. Essentials of Marketing, Dr. K. Sundar, Vijay Nicholes Imprint Pvt. Ltd., Chennai.

SEMESTER - V
CORE PAPER - 11
COST ACCOUNTING - I

Objective:

To understand the basic concepts and methods of Cost Accounting.

UNIT - I:

Nature and Scope of Cost Accounting

Cost Accounting : Nature and Scope - Objectives, Advantages and Limitations - Financial Vs. Cost Accounting - Costing System - Types of Costing and Cost Classification - Cost Sheet and Tenders - Cost Unit - Cost Centre and Profit Centre.

UNIT - II:

Material Purchase and Control

Purchase Department and its Objectives - Purchase Procedure - Classification and Codification of Materials, Material Control: Levels of Stock and EOQ - Perpetual Inventory System, ABC and VED Analysis - Accounting of Material Losses.

UNIT - III:

Methods of pricing of Material Issues

Cost Price Methods: FIFO, LIFO, Average Price Methods: Simple and Weighted Average Price Methods, Notional Price Methods: Standards Price, and Market Price Methods

UNIT - IV:

Labour Cost Control

Labour Turnover: Causes, Methods of Measurement and Reduction of Labour Turnover - Idle and Over Time - Remuneration and Incentive: Time and Piece Rate - Taylor's, Merricks and Gantt's Task - Premium Bonus System - Halsey, Rowan and Emerson's Plans - Calculation of Earnings of Workers.

UNIT - V:

Overheads

Classification of Overhead Costs - Departmentalization of Overheads - Allocation Absorption and Apportionment of Overhead Costs - Primary and Secondary Distribution of Overheads - Computation of Machine Hour Rate and Labour Hour Rate.

Text Books: (Weightage of Marks = Problems 80%, Theory 20%)

1. T.S. Reddy & Hari Prasad Reddy - Cost Accounting - Margham Publications, Chennai
2. A.Murthy and S. Gurusamy, Cost Accounting 2nd Edition, Vijay Nicole Imprints Private Ltd., Chennai.
3. A.Murthy and S. Gurusamy, Cost Accounting, Tata McGraw-Hill Publishing Company Ltd. New Delhi.
4. Tulsian P.C. - Cost Accounting - Tata McGraw Hills.

Reference Books:

1. S.P.Jain and Narang - Cost Accounting - Kalyani Publishers, New Delhi
2. S.N.Maheswari - Principles of Cost Accounting - Sultan Chand & sons, New Delhi
3. A.Murthy and S. Gurusamy, Essentials of Cost Accounting, Vijay Nicole Imprints Private Ltd., Chennai.
4. S.P.Iyengar - Cost Accounting - Sultan Chand & Sons, New Delhi.

CORE PAPER - 12
MANAGEMENT ACCOUNTING

Objective:

To enable the students to gain knowledge in the application of accounting to Management.

UNIT - I

Management Accounting: Definition - objectives - Functions - Advantages and limitations - Financial Statement Analysis - Comparative and Common size statements - Trend Analysis.

UNIT - II

Ratio Analysis : Definition - Significance and Limitations - Classification - Liquidity, Solvency, Turnover and Profitability ratios - Computation of Ratios from Financial Statements - Preparation of Financial Statement from Ratios.

UNIT - III

Fund Flow and Cash Flow Analysis: Concept of Funds, Sources and Uses of Funds - Fund Flow Statement - Concept of Cash Flow - Cash Flow Statement as Per AS3.

UNIT - IV

Standard Costing - Variance Analysis - Material - Labour - Overheads - Fixed - Variable Sales Variance.

UNIT - V

Budget and Budgetary Control: Definition - Objectives - Essentials - Uses and Limitations - Preparation of Material Purchase, Production, Sales, Cash and Flexible Budget - Zero Base Budgeting.

(Weightage of Marks - Problems - 80%, theory - 20%)

Reference Books:

1. S.N.Maheswari, Management Accounting - Sultan Chand & Sons, New Delhi.
2. A.Murthy and S.Gurusamy, Management Accounting, Tata Mc-Graw Hill Publishing Company, New Delhi.

Reference Books:

1. Manmohan & Goyal, Management Accounting - SahithiyaBhavan, Agra.
2. S.P.Gupta, Management Accounting - Sultan Chand & Sons, New Delhi.
3. R.S.N.Pillai & Bhagavathi, Management Accounting - S. Chand & Co. Ltd., New Delhi.
4. T.S.Reddy & Hari Prasad Reddy, Management Accounting - Margham Publications, Chennai.

CORE PAPER - 13
BUSINESS MANAGEMENT

Objective:

To understand the basic principles of Business Management.

UNIT - I

Management - Meaning - Definition - Nature - Importance - Distinction between Administration and Management - Scope - Principles and Functions of Management.

UNIT - II

Planning - Meaning - Nature - Importance - Advantages and Limitations - Process of Planning - Types of Plans - MBO - Forecasting - Decision Making.

UNIT - III

Organising - Meaning - Definition - characteristics - Importance - Types - Authority and Responsibility - Centralisation and Decentralisation and Departmentation.

UNIT - IV

Directing - Meaning - Definition - Characteristics - Directing Process - Span of Supervision - Motivation - Leadership - Communication.

UNIT - V

Controlling - Definition - Principles - Controlling process - Types of Controls - Control Techniques - Coordination.

Reference Books:

1. Dr. C.B. Gupta, Business Management -Sultan Chand & Sons
2. Jayashankar, Business Management -Margham Publications, Chennai.

Reference Books:

3. Koontz, Weihrich and Aryasri, Principles of Management, Tata McGraw hill
4. Dr.H.C. Das Gupta, Principles & Practice of Management &SahityaBhawan.
Agra
5. Lallan Prasad &S.S.Gulshan, Management principles and Practices &S.
Chand& Co.
6. Dr.N.Premavathy, Principles of Management, Sri Vishnu Publications,
Chennai.

CORE PAPER - 14
INTERNET AND ITS APPLICATIONS

UNIT - I

Introduction to Computers - Programming Language types - History of Internet - Personal Computers - History of World Wide Web - Micro Software .NET Java - Web resources.

UNIT - II

Web Browsers - Internet Explorer - Connecting to Internet - Types of Internet connection - Features of Internet Explorer6 - Searching the Internet - Online help and tutorials - File Transmission Protocol (FTP) - Browser settings.

UNIT - III

Attaching a file - Electronic Mail - Creating an E-mail ID - Sending and Receiving Mails - Attaching File - Instance Messaging - Other Web browsers.

UNIT - IV

Introduction to HTML headers - Linking - Images - Types of computer viruses - Ill-effect of Viruses - Remedy for Viruses.

UNIT - V

E-marketing - Consumer tracking - Electronic advertising search engine - CRM - Credit Card payments - Digital cash and e-wallets - Micro Payments - Smart Card.

Text Book:

Internet and World Wide Web, Third Edition, H.M. Deital, P.J. Deital and A.B. Goldberg - PHI

Reference Book:

Harley Hahn, The Internet - Complete Reference, Tata McGraw Hill.

INTERNAL ELECTIVE

(To choose any 1 out of 3)

PAPER - 1

A. ENTREPRENEURIAL DEVELOPMENT

Objective:

To encourage students to become entrepreneurs.

UNIT - I

Meaning of Entrepreneur - Entrepreneur and Enterprise - Entrepreneur and Manager - Entrepreneur and Intrapreneur - Qualities (Traits) of True Entrepreneur - Characteristics of Entrepreneur - Types of Entrepreneurs - Functions of an Entrepreneur - Roles of Entrepreneurs in the Economic Development.

UNIT - II

Establishing an Enterprise - Project Identification - Selection of the Product - Project Formulation - Assessment of Project Feasibility - Preparation of Project Report - Selection of Site (Location).

UNIT - III

Selection of Types of Organization - Sole Proprietorship - Partnership Joint Stock Company - Factors Influencing the Choice of Organization - Sources of Project Finance - Sources of Long Term Finance - Sources of Short Term Finance.

UNIT - IV

Incentives and Subsidies - Meaning of Incentives and Subsidies - Need and Problems - Incentives for Development of Backward Area - Incentives for SSI Units in Backward Areas - Taxation Benefits to SSI Units - Subsidies and Incentives in Tamil Nadu.

UNIT - V

Women Entrepreneurs - Concept - Functions and Role - Problems of Women Entrepreneurs - Suggestions for Development of Women Entrepreneurs - Rural Entrepreneurship - Need - Problems - How to Develop Rural Entrepreneurship.

Text Books:

1. C.B. Gupta, Entrepreneurship development in India - Sultan Chand.
2. Gupta C.B and SrinivasanN.P. Entrepreneurial Development, Sultan Chand & Sons, New Delhi.

Reference Books:

1. P Sarvanavel, Entrepreneurial development - Ess Pee kay Publishing House.
2. S.S. Khanka, Entrepreneurial Development, S. Chand & Co., New Delhi.

**INTERNAL ELECTIVE
PAPER - 1
B. PRACTICAL AUDITING**

Objective:

To gain knowledge of the principles and practice of auditing.

UNIT - I

Meaning and Definition of Auditing - Nature and Scope of Auditing - Accountancy and Auditing, Auditing and Investigation - Objectives of Auditing - Limitations of Audit - Advantages of Audit - Classification of Audit

UNIT - II

Meaning and Definition of Audit Programme - Advantages and Disadvantages - Audit File, Audit Note Book, Audit Working Papers - Purposes and Importance of Working Papers - Internal Check - Meaning, Object of Internal Check - Features of Good Internal Check System - Auditors duty with regards to Internal Check System - Internal Check and Internal Audit.

UNIT - III

Vouching - Meaning - Objects - Importance of Vouching - Meaning of Voucher - Vouching of Cash Receipts and Vouching of Cash Payments - Vouching of Trading Transactions.

UNIT - IV

Verification and Valuation of assets and liabilities - Meaning and objects of verification - Vouching and verification - Verification and Valuation of different kinds of Assets and Liabilities.

UNIT - V

The Audit of Limited Companies - Necessity of Company Audit - Qualification and Disqualification of Auditors - Appointment - Removal - Remuneration - Status of Auditors - Rights - Powers - Duties and Liability of Auditors - Auditor's Report - Importance and Contents.

Text Books:

1. B.N. Tandon, Sultan Chand - A handbook of practical auditing
2. B.N. Tandon, Sudharsanam, Sundharabahu - S Chand - Practical auditing.
3. Sundar. K and Pari. K, Vijay Nicole Imprints Private Ltd., Chennai.

Reference Books:

1. Sharma, SahityaBhavan, Agra - Auditing
2. Dr.N.Premavathy, Practical Auditing, Sri Vishnu Publications, Chennai.
3. Dr.N.Premavathy, Practical Auditing (in Tamil), Sri Vishnu Publications, Chennai.

**INTERNAL ELECTIVE
PAPER - 1
C. INCOME TAX LAW AND PRACTICE - I**

Objective:

To enable the students to have a knowledge of law of practice of Income tax.

UNIT - I

Introduction

Income Tax Act 1961- Basic Concepts - Assessment Year - Previous Year - Person - Assessee - Income - Gross Total Income - Total Income - Agricultural Income - Casual Income - Capital and Revenue Receipts - Capital and Revenue Expenditures - Exempted Incomes u/s 10. Residential status of an individual- Residential status of a HUF - Residential status of a firm and association of persons - Residential status of a company - incidence of tax liability.

UNIT - II

Salaries

Meaning and features of Salary - Allowances - Perquisites - Profits in lieu of Salary - Provident Fund and its types - payments exempted u/s 10: Leave travel concession; gratuity; pension; leave encashment; retrenchment compensation; VRS - Deductions from salary: EA and professional tax- deduction u/s 80C- taxable salary

UNIT - III

Income from House Property

Annual value - Determination of annual value- Income from let out house property - Income from self-occupied house property - Deductions allowed from Income from house property u/s 24.

UNIT - IV

Profit and Gains of Business or profession and depreciation

Meaning of business and profession - deductions expressly allowed - expenses expressly disallowed - treatment/ admissibility of certain expenses and incomes - income from business- income from profession. Meaning of depreciation - conditions for depreciation - actual cost - written down value - computation of allowable depreciation.

UNIT - V

Income tax authorities

CBDT - powers - Director General of income tax - Chief commissioner of income tax - Assessing officer - appointment - Jurisdiction - powers relating to search and seizure.

Note: Questions in Sec. A, B & C shall be in the proportion of 20:80 between Theory and Problems.

Text books

1. Gaur & Narang, Income Tax Law & Practice, Kalyani Publishers.
2. Dr. A. Murthy, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai
3. Reddy, T.S. & Hariprasad Reddy, Y, Income Tax Theory, Law & Practice, Margham Publications, Chennai.

Reference books

1. Mehrotra - Income Tax Law & Accounts, Sahithiya Bhavan Publications.
2. Vinod, K. Singhanian, Students Guide to Income Tax, Taxman Publications Pvt. Ltd.

SKILL BASED SUBJECT
PAPER - 3
FINANCIAL MANAGEMENT

Unit-I:

Nature and Importance of Finance Functions – Organizing Finance Functions – Functions of Finance Manager – Objectives of Finance Function – Methods and Sources of Raising Finance – Critical Appraisal of the Various Sources of Finance.

Unit-II:

Goals of Finance Function – Financing Decisions – Financial Planning – Financial Forecasting – Capital Structure Decisions – Net Income Approach, NOI Approach and MM Approach-Capitalization – Cost of Capital – Computation of Cost of Capital-Dividend Policy-Factors Determining Dividend Policy.

Unit-III:

Investment Decisions – Estimation of Cash Flows – Evaluation of Alternative Investment Proposals like NPV, ARR, IRR Methods – Decision Making Under Risk and Uncertainty – Inflation and Investment Decisions

Unit-IV:

Working Capital – Meaning, Concept, Types and Significance-Gross and Net Working Capital – Determinants of Working Capital – Sources of WC – Credit and Collection Policies.

Unit-V:

Security Analysis and Portfolio Management - Leverages –Meaning, Types of Leverage. Degree of Operating and Financial Leverage - Financial Ratio Analysis.

Text Books

1. Dr. S.N.Maheswari” Financial Management” - Sultan Chand & Sons, New Delhi
2. Dr. A.Murthy “Financial Management” - Margham Publications,Chennai.
Dr. J. Srinivasan, Sridhar and Ramalingam “Financial Management” - Vijay Nicole Imprints Pvt .Ltd. Chennai
3. R.K.Sharma “Financial Management” - Kalyani Publishers, New Delhi

Reference Books

1. I.M.Pandey “Financial Management” - Vikas Publision house Pvt Ltd. Noida
2. Prasanna Chandra “Financial Management 10ed” - McGraw hill education Pvt. Ltd India
3. Subirkumar Banerjee “Financial Management” - PHI Learning Pvt Ltd
4. Vyuptakesh Sharan “Fundamentals of Financial Management” Pearson Education

5. Dr .N. Premavathy “Financial Management” - Sri Vishnu Publications, Chennai.
6. S.C. Kuchhal “Financial Management” – Chaitanya
7. P.V. Kulkarni & B.G. Satyaprasad “Financial Management” - Himalaya Publishing House

SEMESTER - VI
CORE PAPER - 15
COST ACCOUNTING - II

Objective:

To understand the basic concepts and methods of Cost Accounting.

UNIT - I

Job, Batch, Contract Costing: Job Costing - definition - Features - Procedure - WIP - Cost Accumulation, Batch Costing - EBQ, Contract Costing - Definition, Features, Work Certified and Uncertified - Incomplete Contract - Escalation Clause - Cost Plus Contract - Contract Account

UNIT - II

Process Costing : Definition - Features - Job Vs Process Costing - Process Account - Losses - By Products and Joint Products - WIP - Equivalent Units and its Calculation - Closing WIP with or without Process Loss.

UNIT - III

Operating Costing (Transport Costing): Cost Unit - Cost Classification - Operating Cost sheet.

UNIT - IV

Marginal Costing: Definition - Advantages and Limitation - Break Even Point - Margin of Safety - P/V Ratio - Key factor - Make or Buy Decision - Selection of Product Mix - Changes in Selling Price - Foreign Market Offer - Desired Level of Profit.

UNIT - V

Reconciliation of Cost and Financial Accounts.

Text Books : (Weightage of Marks = Problems - 80%, Theory - 20%)

1. T.S. Reddy & Hari Prasad Reddy - Cost Accounting - Margham Publications, Chennai
2. A.Murthy and S. Gurusamy, Cost Accounting 2nd Edition, Vijay Nicole Imprints Private Ltd., Chennai.
3. A.Murthy and S. Gurusamy, Cost Accounting, Tata McGraw-Hill Publishing Company Ltd. New Delhi.
4. Tulsian P.C. - Cost Accounting - Tata McGraw Hills.

Reference Books:

1. S.P. Jain and Narang - Cost Accounting - Kalyani Publishers, New Delhi
2. S.N. Maheswari - Principles of Cost Accounting - Sultan Chand & sons, New Delhi
3. S.P. Iyengar - Cost Accounting - Sultan Chand & Sons, New Delhi.

CORE PAPER - 16
WEB TECHNOLOGY

UNIT - I

Internet Basic - Introduction to HTML - List - Creating Table - Linking document Frames - Graphics to HTML Doc.

UNIT - II

Style sheet - Style sheet basic - Add style to document - Creating Style sheet rules - Style sheet properties - Font - Text - List - Color and background color - Box - Display properties.

UNIT - III

Introduction - Object in HTML - Event Handling - Window Object - Document object - Browser Object - Form Object - Navigator object Screen object - Build in Object - User defined object.

UNIT - IV

HTML server controls - Anchor, Tables, Forms, Files. Basic Web server Controls - Label, Textbox, Button, Image, Links, Check & Radio button, Hyperlink. Data List Web Server Controls - Check box list, Radio button list, Drop down list, List box, Data grid, Repeater.

UNIT - V

Request and Response Objects, Cookies, Working with Data - OLEDB connection class, command class, transaction class, data adaptor class, data set class.

Reference Books:

1. Deitel & Deitel, internet & world wide web How to program, Pearson Education
2. I. Bayross, Web Enable Commercial Application Development Using HTML, DHTML, Javascript, Pen CGI, BPB Publications, 2000
3. J. Jaworski, Mastering Javascript, BPB Publications, 1999
4. T. A. Powell, Complete Reference HTML (Third Edition), TMH, 2002
5. G. Buczek, ASP.NET Developers Guide, TMH, 2002

CORE PRACTICAL - 3

WEB TECHNOLOGY LAB

1. Create a simple page introducing yourself how old you are, what you do, what you like and dislike. Modify the introduction to include a bullet list of what you do and put list the 5 things you like most and dislike as numbered lists. Create another page about your favorite hobby and link it to (and from) your main page. Center something, and put a quote on one of your pages
2. Put an existing image on a web page. Create a table, use a heading and at least one use of row span/col. span. Color a page and some text within the page. Link to another site
3. Create a new file called index. html.
 - ❖ Put the normal HTML document structure tags in the file.
 - ❖ Give it a title.
 - ❖ At the bottom of the page (i.e. the last thing between the body tags) put the following:
 - ◆ A horizontal rule.
 - ◆ A Link to your e-mail Address (With your name between the tag) ; remember to put the link to your E- Mail address within address tags.
 - ◆ A line break.
 - ◆ The date. (I have this same structure at the bottom of this page).
 - ◆ Above this block (which is called the footer), put a title in heading tags.
 - ◆ Add some text describing yourself (you can split this into multiple headings and Paragraphs if you wish).
4. Write a script to create an array of 10 elements and display its contents.
5. Create a document that accepts the user's name in a text field form and displays the same the next time when the user visits the site informing him that he has accessed the site for the second time, and so on.

INTERNAL ELECTIVE

(to choose one out of 3)

PAPER - 2

A. INCOME TAX LAW AND PRACTICE - II

Objective:

To enable the students to have a knowledge of law of practice of Income tax.

UNIT - I

Capital gains

What are capital assets? - What are not capital assets? - kinds of capital assets - transfer u/s 2 (47) - cost of acquisition - cost of improvement - computation of short term capital gain - computation of long term capital gain - exemptions from capital gains.

UNIT - II

Income from other sources

Specific incomes chargeable to tax - general incomes chargeable to tax - Interest on securities - Interest exempt from tax u/s 10 (15) - deductions allowed from Income from other sources - computation of income from other sources.

UNIT - III

Clubbing of Incomes and Set off and carry forward of losses

Income transfer without asset transfer - cross transfer - transfer for the benefit of son's wife - capital gain on an asset gifted before marriage - gifted money used for construction of house by spouse - income including losses - clubbing of business income - clubbing of minor's income - computation of total income. Provisions relating to set off of losses- Provisions relating to set off and carry forward of losses - unabsorbed depreciation - order of set off - computation of total income.

UNIT - IV

Agricultural Income and Deductions from gross total income

Meaning of agricultural income - types of agricultural income - income from growing and manufacturing rubber - income from growing and manufacturing coffee - income from growing and manufacturing tea - income of a sugar mill growing its own sugarcane - computation of tax of an assessee having agricultural income. Permissible deductions from gross total income - section 80C, 80CCC, 80CCD, 80D, 80DD, 80DDB, 80E, 80G, 80GG, 80GGA, 80QQB, 80RRB, 80U.

UNIT - V

Assessment of Individuals and Assessment procedures

Sources of income of an individual - computation of total income and tax liability of an individual. Filing of returns - permanent account number (PAN) - Usage of PAN - TDS - types of assessment - self assessment - Best judgement assessment - Income escaping assessment (reassessment) - Advance payment of tax

Note: Questions in Sec. A, B & C shall be in the proportion of 20:80 between Theory and Problems.

Text books

1. Gaur & Narang, Income Tax Law & Practice, Kalyani Publishers.
2. Murthy.A, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai
3. Reddy, T.S. & Hariprasad Reddy, Y, Income Tax Theory, Law & Practice, Margham Publications, Chennai.

Reference books

1. Mehrotra-Income Tax Law & Accounts, Sahithiya Bhavan Publications.
2. Vinod, K. Singhanian, Students Guide to Income Tax, Taxman Publications Pvt. Ltd.

**INTERNAL ELECTIVE
PAPER - 2**

B. BUSINESS ENVIRONMENT

UNIT - I

The concept of Business Environment - Its nature and significance - Brief overview of political - Cultural - Legal - Economic and social environments and their impact on business and strategic decisions.

UNIT - II

Political Environment - Government and Business relationship in India - Provisions of Indian constitution pertaining to business

UNIT - III

Social Environment - Cultural heritage - Social attitudes - impact of foreign culture - castes and communities - Joint family systems - Linguistic and Religious groups - Types of Social Organization

UNIT - IV

Economic Environment - Economic Systems and their impact of Business - Macro Economic Parameters like GDP - Growth Rate - Population - Urbanization - Fiscal deficit - Plan investment - Per capita Income and their impact on business decisions

UNIT - V

Financial Environment - Financial System - Commercial banks - RBI - IDBI - Non-Banking Financial Companies NBFC's

Text Books:

1. Dr. S. Sankaran - Business Environment. Margham Publications, Chennai
2. Aswathappa - Business Environment, Himalaya Pub. House, 2009.

Reference Books:

1. Dasgupta and Sengupta - Government and Business in India.
2. Srinivasan K - Productivity and Social Environment.
3. International Business Environment - Prentice - Hall of India.
3. Dhanabakiyam & M. Kavitha, Business Environment, Vijay Nicole Imprints Pvt. Ltd. Chennai.

**INTERNAL ELECTIVE
PAPER - 2
C. SERVICES MARKETING**

Objective:

To enable the students to acquire a deep knowledge in services marketing.

UNIT - I

Concept of service - Meaning, definitions - Components and types - Service Vs goods - Service Marketing mix characteristics - Advertising - objectives - Advertising message and media selection - merits - personal selling - process - Advantages

UNIT - II

Physical evidence - Essential and peripheral evidence - Guidelines for physical evidence - Managing demand and supply Capacity constraints - demand patterns - Capacity planning and types - Managing capacity to match demand - Managing demand to match capacity

UNIT - III

Pricing in services - objectives - types of pricing - characteristics and factors affecting pricing decisions - customer relationship marketing - objectives and requisites - benefits

UNIT - IV

Quality of service - five dimensions of quality - Gap analysis and causes for customer gap - key factors leading to Customer Gap - Provider Gaps

UNIT - V

Marketing of Services by Insurance business - Banks - Education - Tourism - Transport.

REFERENCE BOOKS:

1. S.M.Jha, Services Marketing, Himalaya Publications, New Delhi
2. M.K.Rampal & S.L.Gupta, Services Marketing, Galgotta Pub. House
3. Dr.B.Baly, Services Marketing, S. Chand & Co., New Delhi
4. Vasanthi Venugopal & Raghu V.N, Services Marketing, Himalaya Publications, New Delhi.
5. Dr.L. Natarajan, Services Marketing, Margham Publications, Chennai.

INTERNAL ELECTIVE
(To choose any 1 out of 3)

PAPER - 3

A. SOFTWARE ENGINEERING

UNIT - I

Introduction - Evolving Role of Software - Changing Nature of Software - Software Myths; a Generic View of Process: Layered Technology - Process Models: Waterfall Model - Evolutionary Process Models.

UNIT - II

Requirements Engineering: Tasks - Initiating the Requirements Engineering Process - Eliciting Requirements - Building the Analysis Model - Requirements Analysis - Data Modeling Concepts.

UNIT - III

Data Engineering: Design Process and Design Quality - Design Concepts - The Design Model Creating an Architectural Design: Software Architecture - Data Design -Architectural Design - Mapping Data Flow into Software Architecture; Performing User Interface Design: Golden Rules.

UNIT - IV

Testing Strategies: Strategic Approach to Software Testing- Test Strategies for Conventional and Object Oriented Software - Validation Testing - System Testing -Art of Debugging. Testing Tactics: Fundamentals - White Box- Basis Path - Control Structure - Black Box Testing Methods

UNIT - V

Project Management: Management Spectrum - People - Product - Process - Project. Estimation: Project Planning Process - Resources - Software Project Estimation - Project Scheduling - Quality Concepts - Software Quality Assurance - Formal Technical Reviews.

TEXT BOOK:

1. Roger S Pressman, "Software Engineering - A Practitioner's Approach", Sixth Edition, McGraw Hill International Edition, New York: 2005.

REFERENCES:

1. Ian Sommerville, "Software Engineering", 7th Edition, Pearson Education, 2006.
2. Mall Rajib," Software Engineering", 2/E, PHI, 2006.

INTERNAL ELECTIVE

PAPER - 3

B. DATA MINING

UNIT - I

Data Mining - Introduction - Meaning- importance of Data mining - various kinds of data - Data Mining Functionalities - Various kinds of Patterns - Pattern Interesting Classification of Data mining Systems - Data mining Task Primitives - Integration of Data Mining System - Major issues in Data Mining.

UNIT - II

Data Processing - Process the Data Descriptive Data Summarization - Measuring Central Tendency Dispersion of Data Graphic Displays of -Basic Descriptive Data Summaries Data Cleaning Data Integration and Transformation data Reduction Data Discrimination - Concept Hierarchy Generation

UNIT - III

Data Warehouse OLAP Technology An overview - Data Warehouse Multidimensional Data Model Data Warehouse Architecture Data Warehouse Implementation from Data Warehouse to Data mining

UNIT - IV

Mining - Frequent Patterns Associations Correlations - Basic Concepts Road Map Efficient Scalable Frequent Item set Mining methods Mining - Various Kinds of Association rules Analysis - Association mining to Correlation Constrain Based Association mining

UNIT - V

Applications Trends - Data mining Applications Data mining - System Products Research Prototype Additional Themes on Data Mining Social impact of Data mining Trends in Data mining

Text Book:

1. **Data Mining** (Concepts and Techniques) Second Ed (Chapter 1,2,3,5,11)

Author: Jiawei Han and Micheline Kamber **Publishers:** Morgan Kaufmann Publishers (An imprint of Elsevier)

Reference Books:

1. **Data Mining** (Next Generation Challenges and Future Directions) Author: Karguta, Joshi, Sivakumar & Yesha **Publishers:** Printice Hall of India (2007)

2. **Data Mining** (Practical Machine Learning Tools and Techniques (Second Edition) **Author:** Ian H. Witten & Eibe Frank **Publishers:** Morgan Kaufmann Publishers (An imprint of Elsevier)

3. **Data Warehousing, Data mining & OLAP** (Edition 2004) **Author:** Alex Benson, Stephen V. Smith **Publishers:** Tata McGraw - Hill

INTERNAL ELECTIVE

PAPER - 3

INTERNET OF THINGS

Objectives:

This course presents the Introduction to IoT, M2M, IoT Architecture, IoT Model And Views, IOT protocols and Real world design constraints enable the students to learn the concepts of IoT.

UNIT - I

INTRODUCTION TO IoT

Objective: To understand the fundamentals of Internet of Things.

Introduction to Internet of Things -Definition and Characteristics of IoT- Physical Design- Logical Design-IoT Enabling Technologies -IoT Levels & Deployment Templates - Domain Specific IoTs - Home - City - Environment - Energy - Retail - Logistics - Agriculture - Industry - health and Lifestyle.

UNIT - II

M2M and IoT ARCHITECTURE

Objective: To understand the M2M and IoT Architecture

IoT and M2M - Difference between IoT and M2M -SDN -IoT System Management with NETCONF-YANG-IoT Platforms Design Methodology - M2M high-level ETSI architecture - IETF architecture for IoT- OGC architecture -Service Oriented Architecture - IoT reference architecture

UNIT - III

IoT MODEL AND VIEWS

Objective: To understand the IoT Model And Views

IoT reference model - Domain model - information model - functional model - communication model - Functional View - Information View - Deployment and operational View - other relevant architectural views - data representation and visualization.

UNIT - IV

IoT PROTOCOLS

Objective: To learn about the basics of IOT protocols.

Protocol Standardization for IoT - Efforts - M2M and WSN Protocols - SCADA and RFID Protocols - Unified Data Standards - Protocols - IEEE 802.15.4 - BACNet Protocol - Modbus-Zigbee Architecture - Network layer - 6LowPAN -CoAP - Security

UNIT - V

REAL-WORLD APPLICATIONS

Objectives: Analyze applications of IoT in real time scenario.

Real world design constraints - Applications - Asset management, Industrial automation, smart grid, Commercial building automation, Smart cities - participatory sensing - Data Analytics for IoT - Software & Management Tools for IoT Cloud Storage Models & Communication APIs - Cloud for IoT- Amazon Web Services for IoT.

TEXT BOOKS:

1. "Interconnecting Smart Objects with IP: The Next Internet", Jean-Philippe Vasseur, Adam Dunkels, Morgan Kuffmann, 2010.
2. Internet of Things - A Hands-on Approach, ArshdeepBahga and Vijay Madisetti, Universities Press, 2015.
3. Getting Started with Raspberry Pi, Matt Richardson & Shawn Wallace, O'Reilly (SPD), 2014.

REFERENCES:

1. "Internet of Things - A hands-on approach", ArshdeepBahga, Vijay Madisetti, Universities Press, 2015
2. "Architecting the Internet of Things", DieterUckelmann, Mark Harrison, Michahelles, Florian (Eds), Springer, 2011.
3. "The Internet of Things in the Cloud: A Middleware Perspective", Honbo Zhou, CRC Press, 2012.
4. "From Machine-to-Machine to the Internet of Things - Introduction to a New Age of Intelligence", Jan Ho"ller, VlasiosTsiatsis, Catherine Mulligan, Stamatis , Karnouskos, Stefan Avesand, David Boyle, Elsevier, 2014.
5. "The Internet of Things - Key applications and Protocols", Olivier Hersent, David Boswarthick, Omar Elloumi ,Wiley, 2012.

SKILL BASED SUBJECT
PAPER - 4
INDUSTRIAL RELATIONS

Objective: To enable the students to learn the concepts of Industrial Relations including trade unions, collective bargaining and various labour enactments.

UNIT - I

Industrial Relations (IR)

Concept of Industrial Relations; Nature of Industrial Relations; Objectives of IR; Factors affecting IR in changing Environment, Evolution of IR in India; Role of State; International Dimensions of IR.

UNIT - II

Trade Union

Trade Union: Origin and growth, unions after Independence, unions in the era of liberalization; Factors affecting growth of Trade Unions in India, Major Provisions of Trade Union Act 1926.

UNIT - III

Collective Bargaining and Worker's Participation in Management

Collective Bargaining: Meaning, Nature, Types, Process and Importance of Collective Bargaining Status of Collective Bargaining in India, Functions and role of Trade Unions in Collective bargaining.

Workers' Participation in Management: Consent, practices in India, Works Committees, Joint management councils; Participative Management and co-ownership; Productive Bargaining and Gain Sharing.

UNIT - IV

The Industrial Disputes Act, 1947:

Definitions of Industry, workman, and Industrial Dispute; Authorities under the Act; Procedure, Powers and Duties of Authorities; Strikes and Lock outs; Lay-off and Retrenchment; Provisions relating to Layoff, Retrenchment, and closure.

UNIT - V

The Factories Act, 1948:

Provisions relating to Health, Safety, Welfare facilities, working hours, Employment of young persons, Annual Leave with wages.

Text Books:

1. B. Nandhakumar, *Industrial Relations and Labour Welfare and Labour Laws* - Vijay Nicole Imprints Private Ltd., Chennai.
2. JP Sharma, *Simplified Approach to Labour Laws*, Bharat Law House (P) Ltd.

Reference Books:

1. PK Padhi, *Industrial Relations and Labour Law*, PHI Learning.
2. Arun Monalppa, *Industrial Relations and Labour Law*, McGraw Hill Education.
3. SC Srivastav, *Industrial Relations and Labour Law*, Vikas Publishing House.
4. C.S. Venkata Ratnam, *Industrial Relations*, Oxford University Press.
5. P.L. Malik's *Handbook of Labour and Industrial Law*, Vol 1 and Vol 2, Eastern Book Company.
