IV Semester

Structure of B.Com (Computer Applications)Programme under Revised CBCS

SI. No	Courses	Name of Course (Each Course consists 5 Units with each Unit having 12 hours of class-work)	Hours/ Week	Credits	Marks	
					Mid Sem	Sem End
1.	4A	Corporate Accounting	5	4	25	75
2.	4B	Cost and Management Accounting	5	4	25	75
3.	4C	Income Tax	5	4	25	75
4.	4D	Business Laws	5	4	25	75
5.	4E	Object Oriented Programming with Java	3	4	25	75
6.		Object Oriented Programming with Java Practical	2	1	0	50
7.	4F	Data Base Management System	3	4	25	75
		Data Base Management System Practical	2	1	0	50
Total			30	26	150	550

<u>IV Semester</u> <u>Course 4A:Corporate Accounting</u>

Learning Outcomes:

At the end of the course, the student will able to;

- Understand the Accounting treatment of Share Capital and aware of process of book building.
- > Demonstrate the procedure for issue of bonus shares and buyback of shares.
- Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
- > Participate in the preparation of consolidated accounts for a corporate group.
- Understand analysis of complex issues, formulation of well-reasoned arguments and reaching better conclusions.
- Communicate accounting policy choices with reference to relevant laws and accounting standards.

SYLLABUS:

Unit-I:

Accounting for Share Capital: Kinds of Shares – Types of Preference Shares – Issue of Shares at Par, Discount and Premium - Forfeiture and Reissue of Shares (including problems).

Unit-II:

Issue and Redemption of Debentures and Issue of Bonus Shares: Accounting Treatment for Debentures Issued and Repayable at Par, Discount and Premium -Issue of Bonus Shares - Buyback of Shares - (including problems).

Unit-III:

Valuation of Goodwill: Need and Methods - Average Profit Method, Super Profits Method – Capitalization Method and Annuity Method (Including problems).

Unit –IV:

Valuation Shares: Need for Valuation - Methods of Valuation - Net Assets Method, Yield Basis Method, Fair Value Method (including problems).

UNIT – V:

Company Final Accounts: Provisions of the Companies Act, 2013 - Preparation of Final Accounts – Adjustments Relating to Preparation of Final Accounts – Profit and Loss Account and Balance Sheet – (including problems with simple adjustments).

<u>Reference Books</u>:

- 1. Corporate Accounting T.S Reddy and Murthy, MarghamPublications, Chennai.
- 2. Advanced Accounts: M C Shukla, T S Grewal and S C Gupta, S Chand Publications
- 3. Corporate Accounting Haneef & Mukherji, Tata McGraw Hill Publications.
- 4. Corporate Accounting RL Gupta & Radha Swami, Sultan Chand & sons
- 5. Corporate Accounting P.C. Tulsian, S.Chand Publishers
- 6. Advanced Accountancy: Jain and Narang,,Kalyani Publishers
- 7. Advanced Accountancy: R.L. Gupta and M.Radhaswamy, S Chand.
- 8. Advanced Accountancy : Chakraborthy, Vikas Publishers
- 9. Corporate Accounting: S.N. Maheswari, S.K. Maheswari, Vikas Publishing House.
- 10. Advanced Accounts: M.C. Shukla, T.S. Grewal, S.C. Gupta, S. Chand & Company
- 11. Corporate Accounting: Umamaheswara Rao, Kalyani Publishers
- 12. Corporate Accounting: Dr ChandaSrinivas, SevenHills International Publishers,
- 13. Advanced Accountancy: Arulanandam& Raman, Himalaya Publishing House.

Suggested Co-Curricular Activities:

- Assignments
- Problem Solving Exercises
- Collect and fill the share application form of a limited Company
- Collect Prospectus of a company and identify its salient features
- Collect annual report of a Company and List out its assets and Liabilities.
- Collect the annual reports of company and calculate the value of goodwill under different methods
- Power point presentations on types of shares and share capital
- Group Discussions on problems relating to topics covered by syllabus

IV Semester

Course 4B:Cost and Management Accounting

Learning Outcomes:

At the end of the course, the student will able to;

- > Understand various costing methods and management techniques.
- Apply Cost and Management accounting methods for both manufacturing and service industry.
- > Prepare cost sheet, quotations, and tenders to organization for different works.
- > Analyze cost-volume-profit techniques to determine optimal managerial decisions.
- > Compare and contrast the financial statements of firms and interpret the results.
- > Prepare analysis of various special decisions, using relevant management techniques.

SYLLABUS:

UNIT-I: Introduction:

Cost Accounting: Definition – Features – Objectives – Functions – Scope – Advantages and Limitations - Management Accounting: Features – Objectives – Functions – Elements of Cost - Preparation of Cost Sheet (including problems)

UNIT-II: Material and Labour Cost:

Techniques of Inventory Control – Valuation of Material Issues: FIFO - LIFO - Simple and Weighted Average Methods

Labour: Direct and Indirect Labour Cost – Methods of Payment of Wages- Incentive Schemes -Time Rate Method, Piece Rate Method, Halsey, Rowan Methods and Taylor Methods only(including problems)

UNIT-III: Job Costing and Batch Costing:

Definition and Features of Job Costing – Economic Batch Quantity (EBQ) – Preparation of Job Cost Sheet – Problems on Job Cost Sheet and Batch Costing(including problems)

UNIT-IV: Financial Statement Analysis and Interpretation:

Financial Statements - Features, Limitations. Need, Meaning, Objectives, and Process of Financial Statement Analysis- Comparative Analysis – Common Size Analysis and Trend Analysis (including problems)

UNIT-V: Marginal Costing:

Meaning and Features of Marginal Costing – Contribution –Profit Volume Ratio- Break Even Point – Margin of Safety – Estimation of Profit and Estimation of Sales(including problems)

References:

- 1. S.P. Jain and K.L. Narang Advanced Cost Accounting, Kalyani Publishers.
- 2. M.N. Arora A test book of Cost Accounting, Vikas Publishing House Pvt. Ltd.
- 3. S.P. Iyengar Cost Accounting, Sultan Chand & Sons.
- 4. Nigam & Sharma Cost Accounting Principles and Applications, S.Chand& Sons.
- 5. S.N. Maheswari– Principles of Management Accounting, Sultan Chand & Sons.
- 6. I.M.Pandey Management Accounting, Vikas Publishing House Pvt. Ltd.
- 7. Sharma & Shashi Gupta Management Accounting, Kalyani Publishers.
- 8. Murthy & Guruswamy Management Accounting, Tata McGraw Hill, New Delhi.
- 9. S.P. Gupta Management Accounting, S. Chand Publishing, New Delhi.
- 10. Umamaheswara Rao and Ranganath, Cost Accounting, Kalyani Publishers.
- 11. Dr V Murali Krishna Cost Accounting, Seven Hills International Publishers.

Suggested Co-Curricular Activities:

- Debate on methods of payments of wages
- Seminars
- Problem Solving Exercises
- Seminar on need and importance of financial statement analysis
- Graphs showing the breakeven point analysis
- Identification of elements of cost in services sector by Visiting any service firm
- Cost estimation for the making of a proposed product
- Listing of industries located in your area and methods of costing adopted by them
- Collection of financial statements of any two organization for two years and prepare a common Size Statements
- Collection of cost sheet and pro-forma of quotation
- Examinations (Scheduled and surprise tests)

IV Semester

Course 4C:Income Tax

Learning Outcomes:

At the end of the course, the student will able to;

- Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
- > Understand the provisions and compute income tax for various sources.
- ➢ Grasp amendments made from time to time in Finance Act.
- Compute total income and define tax complicacies and structure.
- > Prepare and File IT returns of individual at his own.

Syllabus:

Unit-I: Introduction: Income Tax Act-1961 - Basic Concepts: Income, Person, Assessee - Assessment Year, Previous Year, Rates of Tax, Agricultural Income, Residential Status of Individual -Incidence of Tax – Incomes Exempt from Tax (theory only).

Unit-II: Income from Salaries: Basis of Charge, Tax Treatment of Different Types of Salaries Allowances, Perquisites, Profits in Lieu of Salary, Deductions from Salary Income, Computation of Salary Income (including problems).

Unit-Ill: Income from House Property and Profits and Gains from Business: Annual Value, Let-out/Self Occupied/Deemed to be Let-out house -Deductions from Annual Value - Computation of Income from House Property

Definition of Business and Profession – Procedure for Computation of Income from Business – Revenue and Capital Nature of Incomes and Expenses – Allowable Expenses – Expenses Expressly Disallowed – Computation (including problems). Unit-IV: Income from Capital Gains - Income from Other Sources: Meaning of Capital Asset – Types – Procedure for Computation of Long-term and Short-term Capital Gains/Losses

Meaning of Other Sources - General Incomes – Specific Incomes – Computation (including problems).

Unit-V: Computation of Total Income of an Individual: Deductions under Section 80 - Computation of Total Income (Simple problems).

Reference Books:

- 1. Dr. Vinod; K. Singhania; Direct Taxes Law and Practice, Taxman Publications
- 2. T. S. Reddy and Dr. Y. Hari Prasad Reddy Taxation , by Margham Publications
- 3. Premraj and Sreedhar, Income Tax, Hamsrala Publications
- 4. B.B. Lal Direct Taxes; Konark Publications
- 5. Dr. Mehrotra and Dr. Goyal -Direct Taxes, Law and Practice, Sahitya Bhavan Publication.
- 6. Balachandran&Thothadri- Taxation Law and Practice, PHI Learning.
- 7. V.P. Gaur and D.B. Narang Income Tax, Kalyani Publications
- 8. Dr Y Kiranmayi Taxation, Jai Bharath Publishers
- 9. Income Tax, Seven Lecture Series, Himalaya Publications

Suggested Co-Curricular Activities:

- Seminar on different topics of Income tax
- Quiz programs
- Problem Solving Exercises
- Debate on Tax Evasion and Avoidance
- Practice of provisions of Taxation
- Visit a Tax firm
- Talk on Finance Bill at the time of Union Budget
- Guest lecture by Chartered Accountant
- Presentation of tax rates
- Practice of filing IT Returns online
- Group Discussions on problems relating to topics covered by syllabus
- Examinations (Scheduled and surprise tests)

IV Semester

Course 4D:Business Law

Learning Outcomes:

At the end of the course, the student will able to;

- ➤ Understand the legal environment of business and laws of business.
- ▶ Highlight the security aspects in the present cyber-crime scenario.
- > Apply basic legal knowledge to business transactions.
- > Understand the various provisions of Company Law.
- Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues.
- > Integrate concept of business law with foreign trade.

Syllabus:

Unit-I: Contract:

Meaning and Definition of Contract - Essential Elements of Valid Contract - Valid, Void and Voidable Contracts - Indian Contract Act, 1872

Unit-II: Offer, Acceptance and Consideration:

Definition of Valid Offer, Acceptance and Consideration - Essential Elements of a Valid Offer, Acceptance and Consideration.

Unit-Ill: Capacity of the Parties and Contingent Contract:

Rules Regarding to Minors Contracts - Rules Relating to Contingent Contracts - Different Modes of Discharge of Contracts - Rules Relating to Remedies to Breach of Contract.

Unit-IV: Sale of Goods Act 1930 and Consumer Protection Act 2019:

Contract of Sale - Sale and Agreement to Sell - Implied Conditions and Warranties - Rights of Unpaid Vendor- Definition of Consumer - Person - Goods - Service - Consumer Dispute -Consumer Protection Councils - Consumer Dispute Redressal Mechanism

Unit-V: Cyber Law:

Overview and Need for Cyber Law - Contract Procedures - Digital Signature - Safety Mechanisms.

References:

- 1. J. Jaysankar, Business Laws, Margham Publication. Chennai.
- 2. ND Kapoor, Business Laws, S Chand Publications.
- 3. Balachandram V, Business law, Tata McGraw Hill.
- 4. Tulsian, Business Law, Tata McGraw Hill.
- 5. Pillai Bhagavathi, Business Law, SChand Publications.
- 6. Business Law, Seven Hills Publishers, Hyderabad.
- 7. K C Garg, Business Law, Kalyani Publishers.

Suggested Co-Curricular Activities

- Seminar on Basics of Indian Contract Act,1872
- Quiz programs
- Co-operative learning
- Seminar on Cyber Law
- Group Discussions
- Debate on Offer, Agreement, and Contract
- Creation of Contract by abiding rules of Indian Contract Act, 1872
- Making a sale by abiding rules of Sale of Goods Act,1930
- Guest lecture by a Lawyer/Police officer
- Celebrating consumers day by creating awareness among the students
- Examinations (Scheduled and surprise tests)
- Any similar activities with imaginative thinking beyond the prescribed syllabus

IV Semester

Course 4E: Object Oriented Programming with Java

Learning Outcomes:

At the end of the course, the student will able to;

- > Understanding the meaning and necessity of audit in modern era
- > Comprehend the role of auditor in avoiding the corporate frauds
- > Identify the steps involved in performing audit process
- > Determine the appropriate audit report for a given audit situation
- > Apply auditing practices to different types of business entities
- > Plan an audit by considering concepts of evidence, risk and materiality

SYLLABUS:

Unit I: Introduction to OOPs: Problems in Procedure Oriented Approach, Features of Object Oriented Programming

Introduction to Java: Features of Java, The Java Virtual Machine (JVM), Parts of Java program, Naming Conventions in Java, Data Types in Java, Operators in Java, Reading Input using scanner Class, Displaying Output using System. out.println (), Command Line Arguments.

Unit II: Control Statements in Java: if... else, do... while Loop, while Loop, For loop, Switch Statement, break Statement, continue Statement

Arrays: Types of Arrays, array name, length,

Strings: Creating Strings, String Class Methods, String Comparison, Immutability of Strings.

Unit III: Classes and Objects: Object Creation, Initializing the Instance Variables, Access Specifiers, Constructors

Inheritance: Inheritance, Types of Inheritance

Polymorphism: Method overloading, Operator overloading

Abstract Classes: Abstract Method and Abstract Class

Unit IV: Packages: Package, Different Types of Packages, Creating Package and Accessing a Package

Streams: Stream classes, Creating a File using File Output Stream, Reading Data from a File using File Input Stream, Creating a File using File Writer, Reading a File using File Reader

Unit V: Exception Handling: Errors in Java Program, Exceptions, throws Clause, throw Clause, Types of Exceptions

Threads: Single Tasking, Multi-Tasking, Uses of Threads, Creating a Thread and Running it, Terminating the Thread, Thread Class Methods.

References:

- 1. The Complete Reference JAVA Seventh Edition Herbert Schildt. Tata McGraw Hill Edition.
- 2. Core Java: An Integrated Approach, Dr. R. Nageswara Rao &Kogent Learning Solutions Inc.
- 3. E. Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGrawHill Company

Online Resources:

https://stackify.com/java-tutorials/ https://www.w3schools.com/java/ https://www.javatpoint.com/java-tutorial https://www.tutorialspoint.com/java/index.html

Practical Component: @ 2 hours/week/batch

- 1. Write a program to implement command line arguments.
- 2. Write a program to read Student Name, Reg.No, Marks and calculate Total, Percentage, and Result. Display all the details of students .
- 3. Write a program to perform String Operations.
- 4. Java program to implement Addition of two N X N matrices.
- 5. Java program to implement bubble sort.
- 6. Java program to demonstrate the use of Constructor.
- 7. Calculate area of the following shapes using method overloading. a.Rectangle b. Circle c. Square
- 8. Implement multilevel inheritance
- 9. Java program for to display Serial Number from 1 to 5 by creating two Threads
- 10. Java program to demonstrate the following exception handlingsa. Divided by Zero b. Array Index Out of Bound c. Arithmetic Exception

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Course 4F:Database Management System

(Five units with each unit having 12 hours of class work)

Model Outcomes for Database Management System

At the end of the course, the students is expected to DEMONSTRATE the following cognitive abilities (thinking skill) and psychomotor skills.

- B. Remembers and states in a systematic way (Knowledge)
 - 1. Understand the role of a database management system in an organization.
 - 2. Understand basic database concepts, including the structure and operation of the relational data model.
 - 3. Understand and successfully apply logical database design principles, including E-R diagrams and database normalization
 - 4. Understand Functional Dependency and Functional Decomposition
- C. Explains (Understanding)
 - 5. To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modeling, designing, and implementing a DBMS.
 - 6. Perform PL/SQL programming using concept of Cursor Management, Error Handling, Packages
- D. Critically examines, using data and figures (Analysis and Evaluation)
 - 7. Apply various Normalization techniques
 - 8. Model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model
- D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity) Design and implement a small database project

E. Construct simple and moderately advanced database queries using Structured Query Language (SQL)(Practical skills)

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Course 4F: Database Management System

SYLLABUS

Details

I Overview of Database Management System

Introduction, Data and Information, Database, Database Management System, Objectives of DBMS, Evolution of Database Management System, Classification of Database Management System.

II File-Based System

Unit

File Based System. Drawbacks of File-Based System, DBMS Approach, Advantage of DBMS, Data Models, Components of Database System, Database Architecture, DBMS Vendors and their products.

III Entity-Relationship Model:

Introduction, The Building Blocks of an Entity-Relationship, Classification of Entity Set, Attribute Classification, Relationship Degree, Relationship Classification, Generalization and Specialization, Aggregation and Composition, CODD's Rules, Relational Data Model, Concept of Relational Integrity.

IV Structured Query Language

Introduction, History of SQL Standards, Commands in SQL, Data types in SQL, Data Definition Language (DDL),Selection Operation Projection Operation, Aggregate Functions, Data Manipulation Language, Table Modification, Table Truncation, Imposition of Constraints, Set Operations.

V PL/SQL:

Introduction, Structure of PL/SQL,PL/SQL Language Elements, Data Types, Control Structure, Steps to Create a PL/SQL Program, Iterative Control Cursors, Steps to Create a Cursor, Procedure, Functions, Packages, Exceptions Handling, Database Triggers, Types of triggers.

Learning Resources (Course 4F: Database Management System)

References:

- 1. Paneerselvam:Database Management system,PHI.
- 2. David Kuklinski, Osborne, Data management system McGraw Hill Publication.
- 3. Shgirley Neal And Kenneth LC Trunik Database management system in Business-PHI.
- 4. Godeon C. EVEREST, Database Management-McGraw Hill Book Company.
- 5. MARTIN, Database Management-Prentice Hall of India, New Delhi.
- 6. Bipin C.Desai , `An Introduction to Database System`, Galgotia Publications
- 7. Korth, Database Management System.
- 8. Navathe, Database Management System.
- 9. S. Sumathi, S. Esakkirajan, Fundamentals of Relational Database Management System

Online resources:

http:// www.onlinegdb.com/

http://www.tutorialspoint.com/

http://learnsql.com

https://www.codecademy.com/learn/learn-sql/

https://www.w3schools.com/sql/default.asp

Practical Component: @ 2 hours/week/batch

- 1. Create tables department and employee with required constraints.
- **2.** Initially only the few columns (essential) are to be added. Add the remaining columns separately by using appropriate SQL command.
- **3.** Basic column should not be null
- 4. Add constraint that basic should not be less than 5000.
- 5. Calculate hra, da, gross and net by using PL/SQL program.
- 6. The percentage of hra and da are to be stored separately.
- 7. When the da becomes more than 100%, a message has to be generated and with user permission da has to be merged with basic.
- 8. Empno should be unique and has to be generated automatically.

RECOMMENDED CO-CURRICULAR ACTIVITIES:

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

Measurable

- 1. Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
- 2. Student seminars (on topics of the syllabus and related aspects (individual activity)
- 3. Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams)
- 4. Field studies (individual observations and recordings as per syllabus content and related areas (Individual or team activity)
- 5. Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity)

General

- 1. Group Discussion
- 2. Visit to Software Technology parks / industries

RECOMMENDED CONTINUOUS ASSESSMENT METHODS:

Some of the following suggested assessment methodologies could be adopted:

- 1. The oral and written examinations (Scheduled and surprise tests),
- 2. Closed-book and open-book tests,
- 3. Coding exercises,
- 4. Practical assignments and laboratory reports,
- 5. Observation of practical skills,
- 6. Individual and group project reports,
- 7. Efficient delivery using seminar presentations,
- 8. Viva voce interviews.
- 9. Computerized adaptive testing, literature surveys and evaluations,
- 10. Peers and self-assessment, outputs form individual and collaborative work

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Recommended Format for Question Paper

For Courses 1A, 2A, 3A, 3B, 4A, 4B, 4C

Time: 3 Hours]

Section-A

[Max. Marks : 75 [5X5=25]

Answer any **FIVE** of the following questions.

(at least 4 problems must be given)

- 1 Contents of Unit-I
- 2 Contents of Unit-II
- 3 Contents of Unit-III
- 4 Contents of **Unit-IV**
- 5 Contents of Unit-V
- 6 Contents of Unit-I to Unit V
- 7 Contents of Unit-I to Unit V
- 8 Contents of Unit-I to Unit V

Section-B

[5X10=50]

Answer **FIVE** questions

- 9 a Contents of Unit-I(Theory/Problem)
 (OR)
 9 b Contents of Unit-I(Problem)
- 10 a Contents of **Unit-II**(Theory/Problem)

(**OR**)

- 10 b Contents of Unit-II(Problem)
- 11 a Contents of Unit-III(Theory/Problem)
 (OR)
- 11 b Contents of Unit-III(Problem)
- 12 a Contents of Unit-IV(Theory/Problem)

(OR)

12 b Contents of Unit-IV(Problem)

13 a Contents of Unit-V(Theory/Problem)

(OR)

13 b Contents of Unit-V(Problem)