

Annexure No.	57 H
SCAA Dated	29.02.2008

**Bharathiar University : Coimbatore-46**  
**School of Distance Education (SDE)**  
**B.Com (Computer Applications)**  
**B.COM (C.A) Degree Course**  
**Non Semester Pattern (With effect from 2007 – 08 Batch onwards)**

**Scheme of Examinations**

**Duration of Exam: 3 hrs**

**Max. Marks : 100**

**I Year**

1. Language-I	100
2. Language- II	100
3. Principles of Accountancy	100
4. Introduction to Information Technology	100
5. Computer Application Practical-I	100

**II Year**

6. Financial Accounting	100
7. Marketing Management	100
8. Data base Management System	100
9. C ++	100
10. Computer Application Practical – II	100

**III Year**

11. Cost and Management Accounting	100
12. Business Management	100
13. Business Statistics	100
14. Software Development and Visual Basic	100
15. Computer Application Practical – III	100

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**Total** 1500  
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**B.Com CA Course-SYLLABUS**  
**PRINCIPLES OF ACCOUNTANCY**

**Objectives: To make the students learn the Concepts and Conventions of Accounting and Basic Accounting Framework**

**CONTENTS:**

- I Fundamentals of Book - Keeping – Accounting Concepts and Conventions – Journal – Ledger – Subsidiary Books – Trial Balance.**
- II Final Accounts of a Sole Trader with adjustments – Errors and Rectifications.**
- III Bills of Exchange- Accommodation Bills – Average Due Date – Account Current.**
- IV Accounting for Consignments and Joint Ventures**
- V Bank Reconciliation Statement – Receipts and Payments Account, Income and Expenditure Account and Balance Sheet – Accounts of Professionals.**

**Note : Distribution of marks between problems and theory shall be 80% and 20%.**

**Books for Reference:**

1. N.Vinayakam, P.L.Maniam and K.L.Nagarajan – *Principles of Accountancy* – S.Chand & Company Ltd.,
2. T.S.Grewal – *Introduction to Accountancy*- S.Chand & Company Ltd.,
3. R.L.Gupta, V.K.Gupta and M.C.Shukla – *Financial Accounting* – Sultan Chand & Sons
4. T.S.Grewal, S.C.Gupta and S.P.Jain – *Advanced Accountancy*- Sultan Chand & Sons
5. K.L.Narang and S.N.Maheswari - *Advanced Accountancy*-Kalyani Publishers
6. S.K.Maheswari and T.S.Reddy - *Advanced Accountancy*-Vikas Publishers
7. A.Murthy -*Financial Accounting* – Margham Publishers

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**INTRODUCTION TO INFORMATION TECHNOLOGY**

**Objectives: After the successful completion of the course the students should have knowledge about concepts and principles of IT.**

**CONTENTS**

- I Hardware and Software : Computer systems - importance of computers in Business- Data and Information- Data Processing, Data Storage and Data retrieval capabilities - Computer applications in various areas of business- Computer- related jobs in business.**
- II Types of Computer systems- Micro, Mini, Mainframe and Super Computers. Analog, Digital and Hybrid Computers - Business and Scientific Computer systems - First, second, third and fourth generation Computers, Laptop or notebook Computers - Data Processing Systems- Batch, Online and Real time system - Time sharing , Multiprogramming and Multiprocessing systems - Networking: Local and Wide Area Network.**

**III Components of Computers - Input ,Output and Storage Devices - Software:  
System Software and Application Software; Programming Language-Machine  
Language- Assembly Language, Higher Level Languages. Flow Chart and  
Programme Flow Chart - Steps in developing a Computer programme.**

**IV Operating Systems: DOS, Windows, UNIX, Windows NT, Windows98 –  
E.Commerce. Internet- Extranet- E.mail and its uses - World Wide Websites-  
Mobile Computers.**

**V System Analysis and Design - Computer - based Information System-Transaction  
Processing - Office Automation-Management Information System-Decision  
Support Systems - Expert System**

**Books for Reference**

- 1. Computer and Common Sense-Roger Hunt and John Shellery**
  - 2. Using Micro Computers- Brightman and Dimsdale**
  - 3. P.C.Software Made Simple-R.K.Taxali**
  - 4. Introduction to Computers-Alexis Leon and Mathews Leon**
  - 5. Information Technology for Management-Henry C.Lucas**
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**B.COM CA-SEMESTER I  
COMPUTER APPLICATION –PRACTICAL I**

**MS OFFICE**

**I-MS WORD**

1. Type Chairman's speech/ Auditor's report / Minutes/ Agenda and perform the following operations:  
**Bold, Underline, Font Size, style, Background color, Text color, Line spacing, Spell Check, Alignment, Header & Footer, Inserting pages and page numbers, Find and Replace.**
2. Prepare an invitation for the college function using Text boxes and clip parts.
3. Design an invoice and Account sales by using Drawing tool bar, Clip Art, Word Art, Symbols, Borders and Shading.
4. Prepare a Shareholders meeting letter for 10 members using mail merge operation.
5. Prepare a Wizard by using Wizard/ Templates.

**II-MS EXCEL**

1. Prepare a mark list of your class (minimum of 5 subjects) and perform the following operations:  
**Data Entry, Total, Average, Result and Ranking by using arithmetic and logical functions and sorting.**
2. Draw the different type of charts (Line, Pie, Bar) to illustrate year-wise performance of sales, purchase, profit of a company by using chart wizard.

**III-MS POWERPOINT**

1. Design presentation slides for a product of your choice. The slides must include name, brand name, type of product, characteristics, special features, price, special offer etc. Add voice if possible to explain the features of the product. The presentation should work in manual mode.
2. Design slides for the headlines News of a popular TV Channel. The Presentation Should contain the following transactions:  
**Top down, Bottom up, Zoom in and Zoom out.**  
The presentation should work in custom mode.

**IV-MS ACCESS**

1. Prepare a payroll for employee database of an organization with the following Details:  
**Employee id, Employee name, Date of Birth, Department and Designation, Date of appointment, Basic pay, Dearness Allowance, House Rent Allowance and other deductions if any. Perform queries for different categories.**
2. Create mailing labels for student database which should include atleast three Table must have atleast two fields with the following details:

**Roll Number, Name, Course, Year, College Name, University, Address, Phone Number.**

## **B.COM. (Computer Applications) – II Year**

### **Financial Accounting**

**Objective :** To expose the students to the accounting procedure of partnership firms and allied aspects of accounting.

**Unit – I** Depreciation – Methods of Depreciation: Straight Line Method - Written Down Value Method – Sinking Fund Method – Annuity Method – Insurance Policy Method.

**Unit – II** Royalties - Minimum Rent – Short Working – Recoupment – Strike Period (excluding Sub-lease)

**Unit – III** Single Entry System – Meaning – Features – Statement of Affairs Method and Conversion Method

**Unit – IV** Partnership Accounts – Admission of a Partner – Retirement of a Partner – Death of a Partner.

**Unit – V** Dissolution – Insolvency of a Partner – Garner Vs Murray – Piece Meal Distribution.

**Note:** - Distribution of Marks: Theory- 20% and Problems-80%

#### **Books for Reference**

1. Advanced Accountancy - S. P. Jain & K. L. Narang.
2. Advanced Accounting - M.C. Shukla.
3. Advanced Accounting - S.N. Maheshwari.
4. Advanced Accounting - M.A. Arulanandam  
K.S. Raman.
5. Advanced Accounting - R.L. Gupta and Rathaswamy.

## **B.COM. (Computer Applications) – II Year**

### **Marketing Management**

**OBJECTIVE :** To endow the students with the knowledge of Marketing Management.

#### **Unit – I**

Market – Marketing – Definition – Object and Importance of Marketing - Evolution of Concept of Marketing - Recent Development in Marketing Concept – Marketing Functions – Approaches to the Study of Marketing - Market Segmentation- Basis – Criteria – Benefits.

#### **Unit - II**

Product Policy- Product Planning and Development - Product Life Cycle – Product Mix- Distribution Channels- Types of Channels – Factors Affecting Choice of Distribution-. Branding – Features – Types – Functions. Packaging – Features – Types – Advantages – Brand Name and Trademark.

#### **Unit – III**

Pricing – Definition – Objectives – Factors Affecting Price Determinations – Methods of Setting Prices – Cost – Demand and Competition.- Pricing Policies and Strategies.

#### **Unit – IV**

Sales Promotion – Objectives and Importance of Sales Promotion – Personal Selling – Advertising – Meaning – Objectives – Functions and Importance – Kinds of Media – Direct Marketing – Multi-level Marketing.

#### **Unit – V**

Retail Marketing – Methods – Problems – Retail Marketing in India - Marketing of Services – E-Marketing – Marketing Ethics – Consumerism – Meaning – Evolution – Types of Exploitation – Consumer Rights – Laws Protecting the Consumer Interest – Consumer Protection Acts – Consumer Courts.

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

1. **R.S.N. Pillai & Bagavathi**, “Modern Marketing Principles and Practices”, S. Chand & Co PV Ltd, New Delhi, 2004.
2. **Dr.Rajan Nair**, “Marketing”, Sultan Chand & Sons, New Delhi, 2004
3. **Philip Kotler**, “Principles of Marketing”, Prentice Hall of India, New Delhi, 2006.

## **B.COM. (Computer Applications) – II Year**

### **Data Base Management System**

**Objectives :** To enable the students to learn the data base operations and process

#### **Unit – I**

Introduction – Purpose of Database Systems – View of Data – Data Abstraction – Instances and Schemas – Data Independence – Data Models – Object based Logical Models – Physical Data Models – Record based Logical Models – Database Languages – Data Definition Language – Data Manipulation Language – Transaction Management – Storage Management – DBA – Database Users – Structure of an Overall System.

#### **Unit – II**

Entity – Relational Model – Basic Concepts – Keys – Entity – Relationship Diagram – Structure of Relational Database – Relational Algebra – Extended Relational Algebra Operations – Modification of the Database – Integrity Constraints.

#### **Unit –III**

Introduction to Oracle – Tools of Oracle – Introduction to SQL – Oracle Internal Data Type – Data Definition Language – Data Manipulation Language – Data Control Language – Transaction Control Language – Date Functions – Character Functions – Numeric Functions – Conversion Functions – Miscellaneous Functions – Group Functions – Set Operators – Relating Data through Join Concept.

#### **Unit – IV**

Usage of Sub-Queries – Database Objects – View – Synonym – Sequences – Index – Concept of Locking – Types of Locks – SQL \* Plus Formatting Commands – Compute Commands – Title Commands – Setting Page Dimensions – Storing and Printing Query Results.

#### **Unit – V**

Introduction to PL/SQL – Advantages of PL/SQL – Architecture of PL/SQL Block – Introduction to PL/SQL Block – Attributes – Control Structures – Concept of Error Handling – Cursor Management – Database Triggers – Basic Concept of SQL\* FORM – Components of an Oracle Form – Simple Form Construction.

#### **Books for Reference**

1. **Iwan Vayross**, “Oracle 8i”, BPB Publication, New Delhi, 2006.
2. **Abraham Silber Schatz, Henry F. Korth & S. Sudharasan**, “Database System Concepts”, Mc Graw Hill Publication, New Delhi, 2006.

## **B.COM. (Computer Applications) – II Year**

### **C++**

**Objectives :** To promote the knowledge of OOPs Concepts through C++.

#### **Unit – I :**

OOPs, A New Paradigm – Evaluation of Programming Paradigm – Objects – Classes – Multiple Viewing of the Same Object – Encapsulation and Data Abstraction – Inheritance – Delegation – Object Composition – Polymorphism – Message Communication – Popular OOPs Languages – Merits and Demerits of OOPs Methodology – Application of OOPs.

#### **Unit – II**

Application of C++ - Structure of C++ Program – Tokens, Expression -Basic Data Types – Symbolic Constants – Declaring Data Types - Reference Variables – Operator in C++ - Scope Resolution Operator – Expressions and Implicit Conversions – Control Structures – Functions in C++ - Call by Reference – Call by Value – Inline Functions – Default Arguments – Constant Arguments – Classes and Objects – Defining Member Functions – Nesting Member Function – Private Member Function – Static Member Function.

#### **Unit – III**

Array of Objects – Friend Function – Returning Objects – Constant Member Function – Pointer to Members – Constructors with Default Arguments – Copy Constructor – Dynamic Constructor – Destructor – Operator Overloading and Type Conversions – Rules for Operator Overloading – Function Overloading – Function Overloading with Arguments – Special Features of Function Overloading.

#### **Unit – IV**

Inheritance – Single Inheritance – Types of Base Classes – Types of Derivation – Public – Private – Protected Inheritance – Multilevel Inheritance – Multiple Inheritance – Hierarchical Inheritance – Hybrid Inheritance – Polymorphism – Virtual Functions – Pure Virtual Function –Pointer to Derived Classes.

#### **Unit – V**

Managing Console I/O Operations – C++ Streams – Stream Classes – istreams, ostream, ifstream, ofstream, filebuff, istrstream, ostrstream – Unformatted I/O Operation – Classes for File Stream Operations – Opening and Closing a file.

#### **Books for Reference**

1. **E. Balagurusamy**, “Object Oriented Programming with C++ ”, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2003.
2. **D.Ravichandran**, “Programming with C++”, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2002.



## **B.COM. (Computer Applications) – II Year**

### **Computer Application Practical II**

#### **Oracle**

1. Create a table Student with the fields Register Number, Student Name. Create another table Marks with fields Register number, Marks of 3 subjects. Join these two tables and display all the above information.
2. Create an employee record.
3. Create a table customer with fields Customers number, name, address, city, pin code and insert 10 values. Perform Select, Update and delete operations for the table customer details
4. Write a PL/SQL Block to print natural numbers up to n.
5. Write a PL/SQL Block to print the number in reverse order.
6. Write a PL/SQL Block to check whether the number is even or odd.
7. Write a PL/SQL block to print the Fibonacci series.

#### **C++**

1. Write a program to sum the first N prime numbers.
2. Write a program to check whether the given year is a Leap year or not.
3. Solve a quadratic equation for all types of roots.
4. Write a Program for Counting vowels, consonants and white space.
5. Find out the numbers of palindromes in a given sentence.
6. Write a program to exchange the contents of two variables using a call by value.
7. Create a Program to read the student details from the key board and to display the result on the screen using Single Inheritance Concept.
8. Write a Program to find the square of a given number using Function Overloading.

## **B.COM. (Computer Applications) – III Year**

### **Cost and Management Accounting**

**Objectives :** To expose the students to the concepts and the tools used in Cost and Management Accounting.

#### **Unit - I**

Cost and Management Accounting – Definition - Meaning – Objectives - Scope - Relationship with Financial Accounting - Limitations - Elements of Cost - Cost Sheet - Tender or Quotations

#### **Unit - II**

Materials - Levels of Inventory – EOQ - Methods of Valuing Material Issues –FIFO – LIFO - Labour - Systems of Wage Payment - Time Rate - Piece rate - Taylor, Merrick, Piece Rate System - Incentive Schemes - Halsey – Rowan - Overheads – Classification – Allocation, Apportionment & Absorption of Overheads - Methods of Absorption of Factory Overheads

#### **Unit - III**

.Funds Flow Analysis – Cash Flow Analysis.

#### **Unit - IV**

Budgetary Control – Flexible Budget – Sales Budget – Cash Budget - Production Budget – Purchase Budget.- Working Capital - Sources of Working Capital - Estimates of Working Capital Requirements.

#### **Unit - V**

Marginal Costing – Break Even Analysis – Applications of Marginal Costing Techniques – Determination of Sales Mix – Key Factor – Make or Buy Decision (Simple Problems Only).

**Distribution of Marks:** Theory- 20% Problems-80%

#### **BOOKS FOR REFERENCE**

- |  |                                |
|--|--------------------------------|
| 1. Cost Accounting                             | - S.P. Jain & K.L.Narang,      |
| 2. Cost Accounting Principles and Practice     | - S.P.Iyyangar,                |
| 3. Cost Accounting                             | - V.KSaxena & C.D.Vashist,     |
| 4. Cost Accounting                             | - M.N.Arora,                   |
| 5. Management Accounting and Financial Control | - S. N. Maheshwari,            |
| 6. Management Accounting                       | - R.K. Sharma Shashi K. Gupta, |
| 7. Management Accounting                       | - Sharma and Gupta             |

## **B.COM. (Computer Applications) – III Year**

### **Business Management**

**Objectives :** To make the students to understand the conceptual frame work of Business Management.

#### **UNIT-I**

Nature and Scope of Management Process – Management Science, Art – Development of Management – Scientific Management – Planning; The meaning and purpose of Planning – Steps in Planning – Types of Planning – Objectives and Policies- Decision making: Process of Decision making - Types of Decisions - Problems involved in Decision making.

#### **UNIT II**

Organization: Types of Organization – Organizational structure – Span of Control – Delegation: Delegation and Decentralization – Line and Staff relationship.

#### **UNIT-III**

Directing: Nature and Purpose of Directing – Controlling – Need for Controlling – Meaning and importance of Controls – Control process – Budgetary and Non-Budgetary Controls – Case studies.

#### **UNIT-IV**

Staffing: Sources of Recruitment – Maslow’s Theory of Motivation – Communication – Types and Channels of Communication.

#### **UNIT-V**

Leadership – Functions and Types – X, Y and Z Theories – Qualities of a good Leader – Decision making – Traditional and Modern Techniques and Steps involved.

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

1. Dinkar Pagare----Principles of Management----Sultan Chand & Sons
2. C.N.Sontakki----Principles of Management----Kalyani Publications
3. S.A.Sherlekar----Principles of Business Management----Himalaya Publishing House
4. Gulshan and Lallan Prasad--Management -Principles and Practice--S.Chand & Co.,

## **B.COM. (Computer Applications) – III Year**

### **Business Statistics**

**Objectives:** To promote the skill of applying statistical techniques in business.

#### **Unit – I**

Meaning and Scope of Statistics – Characteristics and Limitations – Presentation of Data by Diagrammatic and Graphical Methods - Measures of Central Tendency – Mean, Median, Mode, Geometric Mean, Harmonic Mean.

#### **Unit - II**

Measures of Dispersion and Skewness – Range, Quartile Deviation and Standard Deviation – Pearson’s and Bowley’s Measures of Skewness.

#### **Unit - III**

Simple Correlation – Pearson’s coefficient of Correlation – Interpretation of Co-efficient of Correlation – Concept of Regression Analysis – Coefficient of Concurrent Deviation.

#### **Unit – IV**

Index Numbers (Price Index Only) – Method of Construction – Wholesale and Cost of Living Indices, Weighted Index Numbers – LASPEYRES’ Method, PAASCHE’S Method, FISHER’S Ideal Index. (Excluding Tests of Adequacy of Index Number Formulae).

#### **Unit - V**

Analysis of Time Series and Business Forecasting – Methods of Measuring Trend and Seasonal Changes (Including Problems)

Methods of Sampling – Sampling and Non-Sampling Errors (Theoretical Aspects Only)

**NOTE Distribution of Marks** : Theory : 20 % Problems- 80%

#### **Books for Reference**

1. **Navanitham, P.A.**, “Business Mathematics and Statistics”, Jai Publishers, Trichy, 2004.
2. **S.P. Gupta**, “Statistical Methods”.
3. **M. Sivathanu Pillai**, “Economic and Business Statistics”.

## **B.COM. (Computer Applications) – III Year**

### **Software Development and Visual Basic**

**Objectives :** To enable the students to develop a front end tool for Customer Interaction in Business.

#### **Unit – I**

Introduction – Client/Server – Benefits of Client/Server – Downsizing – Upsizing – Right sizing – Client/Server Models – Distributed Presentation – Remote Presentation – Remote Data – Distributed Logic – Distributed Data – Client/Server Architecture – Technical Architecture – Application Architecture – Two Tier Architecture – Three Tier Architecture OLTP & n Tier Architecture.

#### **Unit – II**

Introduction to Visual Basic – Steps in VB Application – Integrated Development Environment (IDE) – Menu Bar – Tool Bar – Project Explorer Window – Property Window – Toolbox – Properties, Methods and Events – Event Driven Programming – Working with Forms - Variables – Scope of Variables – Constants – Data Types.

#### **Unit – III**

Functions – Procedures – Control Structure : If - Switch – Select – For – While – Do While - Arrays – User Defined Data Types – Data Type Conversions - Operators – String Functions – Date and Time Functions.

#### **Unit – IV**

Creating and Using Standard Controls: Form, Label, Text box, Command Button, Check Box, Option Button, List Box, Combo Box, Picture Box, Image Controls, Scroll Bars – Drive List Box – Directory List Box - Time Control, Frame, Shape and Line Controls – Control Arrays – Dialog Boxes - Single Document Interface (SDI) – Multiple Document Interface (MDI) – Menus – Menu Editor – Menu Creation.

#### **Unit – V**

Data Controls – Data Access Objects (DAO) – Accessing and Manipulating Databases – Recordset – Types of Recordset – Creating a Recordset – Modifying, Deleting Records – Finding Records - Data Report – Data Environment – Report - Designer – Connection Object – Command Object – Section of the Data Report Designer – Data Report Controls.

#### **Books for Reference**

1. **Steven Holzner**, “VB 6 Programming Black Book”, Dream Tech Press, New Delhi, 2002.
2. **N. Krishnan & N. Saravanan**, “Visual Basic 6.0 in 30 days”, Scitech Publications, (India) Pvt Ltd., Chennai, 2004.

## **B.COM. (Computer Applications) – IIIYear**

### **Computer Application Practical III**

#### **Visual Basic**

1. Create a VB application to calculate simple and compound interest.
2. Develop a quiz application in Visual Basic.
3. Create a VB application with File, Edit and Format Menus and perform its operations.
4. Design a Electricity Bill by considering the following conditions:

<b>Units Consumed</b>	<b>Rate (Rs.)</b>
Up to 100 units	1.00
101 units – 200 units	1.50
Above 200 units	2.00
<b>Minimum Charge : Rs. 40</b>	

5. Develop a Pay Slip application for Raja & Co., by considering the following:

<b>Basic Pay (Rs.)</b>	<b>DA (% on Basic Pay)</b>	<b>HRA (Rs.)</b>	<b>PF (% on Basic Pay)</b>	<b>Insurance (Rs.)</b>
Up to 5,000	20	250	12	600
5,001 – 10,000	30	500	12	1000
Above 10,000	40	1000	12	1500

6. Design a simple calculator.
7. Create a student / an employee database in Ms-Access and display the information in the VB form using data control.
8. Design an application to view and update the student mark details / Employee Pay details using DAO controls.

#### **Internet**

9. Create an e-mail id in your name.
10. Search and Download the Business Information / Reports.

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