

Annexure : 56.C

SCAA : 29.02.2008

**BHARATHIAR UNIVERSITY: COIMBATORE – 641 046.****M.Com –CA (Computer Applications) Degree****Course offered in Affiliated Colleges****COURSE OF STUDY, SCHEME OF EXAMINATION AND SYLLABUS  
REGULATIONS AND SYLLABUS (from the academic year 2007 – 2008)****1. ELIGIBILITY FOR ADMISSION TO THE COURSE**

B.Com., B.Com(C.A), B.Com (e-Commerce), B.Com(CS),B.Com (CS with CA), B.B.M, B.B.M.(CA), B.B.A, B.C.S, B.C.S. (CA), B.Sc.(C.S.), B.C.A and Bachelor degree in Bank Management.

**2. DURATION OF THE COURSE**

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

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

Paper	Subject	Lecture Hrs	Exam Duration	Max. Marks
<b>I Semester</b>				
I	Managerial Economics	7	3 Hrs	100
II	Marketing Management	7	3 Hrs	100
III	Database Management System	7	3 Hrs	100
IV	Computer Applications Practicals I – MS Office and Oracle	6	3 Hrs	100
	PG Diploma paper I	3	3 Hrs	100
	Total	30		500
<b>II Semester</b>				
V	Cost Accounting	5	3 Hrs	100
VI	Management Accounting	5	3 Hrs	100
VII	Business Research Methods	5	3 Hrs	100
VIII	Object Oriented Programming With C++	6	3 Hrs	100
IX	Computer Applications Practicals II –Tally and C++	6	3 Hrs	100
	PG Diploma paper II	3	3 Hrs	100
	Total	30		600
<b>III Semester</b>				
X	E-Commerce	7	3 Hrs	100
XI	Visual Basic	7	3 Hrs	100
XII	Financial Management	7	3 Hrs	100
XIII	Computer Applications Practical III – VB, VB Script, HTML, DHTML	6	3 Hrs	100
	Project Work			
	PG Diploma paper III	3	3 Hrs	100
	Total	30		500

IV Semester				
XIV	Investment Management	6	3 Hrs	100
XV	Direct Taxes	6	3 Hrs	100
XVI	Java programming and HTML	6	3 Hrs	100
XVII	Project Work & Viva Voce	6		200
	Computer Application Practicals	3		
	PG Diploma paper IV	3	3 Hrs	100
	Total	30		600

**M.Com CA Degree Course      1800 Marks**  
**PG Diploma Course              400 Marks**

#### 4. PRACTICAL TRAINING AND PROJECT WORK

The practical training is essential to expose the students to the real life work situation and to strengthen the conceptual knowledge gained in the classroom. One month practical training is to be arranged during the summer vacation after the second semester. The training shall be in banking, financial institution, and industrial enterprise or consultancy organisations involving the use of computers. Candidate should submit a report at the end of the study. The principal of the college and Head of the Department shall issue a certificate to the effect that the student had satisfactorily undergone the practical training for the prescribed period.

Project work, which is compulsory, carries 200 marks. A student should select a topic for project work in the third semester itself and submit the project report (dissertation) at the end of the fourth semester. There is viva for project work carrying 50 marks. The guide and an external examiner shall evaluate the project report and conduct the viva. The project work shall be related to computer applications in business or it may involve software development.

#### 5. REQUIREMENT TO APPEAR FOR THE EXAMINATION

- a) **A candidate will be permitted to appear for the University examination for any semester if:**
- i) **The student secures not less than 75% attendance during the semester.**
  - ii) The student earns a progress certificate from the head of the institution of having satisfactorily completed the course of study as required by these regulations and
  - iii) **The conduct of the student has been satisfactory;**
  - iv) **Provided that it shall be open to the syndicate or any other authority delegated with such powers by the syndicate, to grant exemption to a candidate who has failed to earn 75% attendance prescribed, for a valid reason, subject to usual conditions.**
- b) A candidate may be permitted to appear for the examination even if the student does not possess the minimum required attendance and allowed to continue to go for the subsequent semester and the student should compensate the attendance requirement for both the present and earlier semester. If the student could not earn the attendance even after continuing the subsequent semester then the student should rejoin the course and redo the semester last attended.
- c) A candidate having arrear paper(s) shall have the option to appear in any arrear paper along with the papers of regular study in any semester. If a candidate fails to submit the project report at the end of fourth semester such a candidates may be permitted to submit it with in the next six months.

#### 6. MEDIUM OF INSTRUCTION

The medium of instruction and examination is English only.

**7. PASSING MINIMUM**

- a) A candidate shall be declared to have passed in a paper if a student obtains not less than 50% of marks in that paper. A candidate shall be declared to have passed the whole examination if the student passes in all the papers.
- b) A candidate failing to secure the minimum marks prescribed shall be required to reappear for the examination in that paper and obtain the minimum marks required for passing the paper.

**7. CLASSIFICATION OF SUCCESSFUL CANDIDATES**

Successful candidates passing the M.Com [Computer Applications] degree examination securing marks 60% and above shall be declared to have passed the examination in first class. All others successful shall be declared to have passed the examination in second class.

**8. CONFERMENT OF THE DEGREE**

- a) No candidate shall be eligible for conferment of the degree unless the candidate has undergone the prescribed course of study for a period of not less than four semesters in an institution approved by / affiliated to the university or has been exempted there from in the manner prescribed and has passed the examinations as have been prescribed therefore and
- b) Has successfully completed the prescribed practical training as evidenced by a certificate issued by the principal of the college.

**9. RANKING**

A candidate who qualifies for the M.Com [Computer Applications] degree course passing all the examinations in the first attempt within the minimum period prescribed for the course of study from the date of admission to the course and secures first or second class shall be eligible for ranking and such ranking will be confined to 10% of the candidates qualifying for M.Com [Computer Applications] degree subject to a maximum of 10 ranks.

**10. REVISION OF REGULATION AND CURRICULUM**

- a) The above regulations, scheme of examinations and curriculum will be in force without any change for a minimum period of two years from the date of approval of the regulations. The university may revise, amend or change the regulations and scheme of examinations, if found necessary.
- b) If the regulations and curriculum changed, modified or amended, the students who have undergone the M.Com [Computer Applications] course following the old regulations and have not completed the course may be allowed to follow the old regulations itself for two more years i.e. for four semesters from the date of completion of the course by the last set of students admitted into the M.Com [Computer Applications] course following the old regulations. Even after the extra chances prescribed, the students having arrear papers may be permitted to appear for the examinations after obtaining specific directions from the university under the revised regulations.

**12. QUESTION PAPER PATTERN - Max : 75 Marks**

<b>Section A:</b>	Objective type questions with no choice (10 Questions)	10 x 1 = 10
<b>Section B:</b>	Short answer questions of either / or type (10 questions – 2 each from every unit)	5 x 5 = 25
<b>Section C:</b>	Essay type questions of either or type (10 questions – 2 each from every unit)	5 x 8 = 40

**Note:** Only Simple problems may be asked in Section – B in problem oriented subjects.

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**SEMESTER I**  
**PAPER – I    MANAGERIAL ECONOMICS**

**UNIT – I**

Nature and Scope of Managerial Economics in relation with other disciplines – Role and Responsibilities of Managerial Economist – Goals of Corporate Enterprises: Maximization of profit - Value of enterprise.

**UNIT - II**

Demand analysis - Demand determinants – Demand distinctions – Elasticity of demand – Types, methods – Applications – Demand forecasting for industrial goods – Consumer goods – Consumer durables – Factor influencing elasticity of demand.

**UNIT - III**

Cost and production analysis - Cost concepts – Cost and output relationship - cost control – Short run and Long run - cost functions - production functions – Break-even analysis Economics scale of production.

**UNIT - IV**

Pricing and output decisions in different market situations – Monopoly and duopoly competition - perfect and imperfect - pricing policies.

**UNIT – V**

Business cycles – National income, monetary and fiscal policy – Public finance. TRIM's- Intellectual Property rights – TRIP's – Industrial Sickness – causes –remedies.

**BOOKS FOR REFERENCE:**

1. Maheswari and Varshney : Managerial Economics
2. P.L.Metha : Managerial Economics
3. G.S.Gupta : Managerial Economics
4. D.Gopalakrishnan : Managerial Economics
5. B.M.Wali & Kalkundrikar : Managerial Economics

Note: Question paper shall cover 100% Theory

**PAPER II - MARKETING MANAGEMENT**

**Unit-I**

Definition and Meaning of marketing and Marketing Management-Scope of Marketing Management-Nature and Importance of Marketing Management- Problems of Marketing Management - Difference between Sales Management and Marketing Management - Functions of Marketing Management – Principles of Marketing Management - Marketing Organisation Structure.

**Unit-II**

Product Development – New Product Planning and Development – Steps in New Product Development – Management of Product Life Cycle – Product Line and Product Mix Strategies – Pricing – Objectives of Pricing Decisions – Factors influencing Pricing Decisions – Process of Price determination – Kinds of Pricing.

**Unit-III**

Channels of Distribution – Meaning - Basic channels of distribution - Selection of a suitable channel - Factors Influencing Selection of a channel-middlemen in distribution-Kinds – Functions - Elimination of Middlemen - Arguments in favour of and against.

**Unit-IV**

Sales promotion-meaning and definition-objectives and importance of sales promotion-causes for sales promotion activities-types of sales promotion programmes-salesmanship and personal selling-steps in selling-essentials of salesmanship-importance of salesmanship-qualities of a good salesman.

**Unit-V**

Meaning and Definition of Advertising - Advertising and Publicity - Objectives of Advertising – Functions - Advantages of Advertising - Advertisement copy - Qualities of a good copy - Elements of a Advertising copy - Objections against Advertisement copy - Media of Advertisement - Factors governing the selection of the Media-Advertising Agencies - Meaning and Definition - Benefits or Services of an Advertising Agency.

**Books for Reference**

- |                              |                            |
|------------------------------|----------------------------|
| 1. Marketing Management      | : C.B.Mamoria and Joshi    |
| 2. Marketing management      | : Dr.C.B. Gupta            |
| 3. Marketing Management      | : Philip Kotler            |
| 4. Modern Marketing          | : R.S.N.Pillai & Bagavathi |
| 5. Fundamentals of Marketing | : William J.Stanton        |

**PAPER III - DATA BASE MANAGEMENT SYSTEM****UNIT – I**

Database System Architecture Basic concepts : Data system, operational data, data independence, Architecture for a database system, Distributed databases. Storage Structures : Representation of Data. Data Structures and corresponding operators : Introduction, Relation Approach, Hierarchical Approach, Network approach.

**UNIT – II**

Relational Approach : Relational Data Structure : relation, Domain, attributes, keys. Relational Algebra : Introduction, Traditional set operation. Attribute names for derived relations, special relational operations.

**UNIT – III**

Embedded SQL : Introduction – Operations not involving cursors involving cursors – Dynamic statements. Query by Example – Retrieval operations, Built-in functions, update operations, QBE Dictionary. Normalization: Functional dependency, First, Second, third normal forms, Relations with more than one candidate key, Good and bad decomposition.

**UNIT – IV**

Hierarchical Approach: IMS data structure. Physical database, Database description, Hierarchical sequence. External level of IMS : Logical Databases, the program communication block. IMS Data manipulation : Defining the program communication Block : DL/I Examples.

## UNIT – V

Network Approach : Architecture of DBTG system. DBTG Data Structure : The Set construct, Singular sets, sample schema, the external level of DBTG – DBTG Data manipulation.

**BOOKS FOR REFERENCE:**

1. Database Systems concepts by Abraham Silberschatz, Henry F Korth
2. An Introduction to Database System – Bipin C Desai.
3. An Introduction to Database System – C.J.Dates.

**PAPER IV Computer Applications Practicals I – MS Office and Oracle****SEMESTER II****PAPER V - COST ACCOUNTING**

## UNIT – I

Introduction of Cost Accounting – Meaning and definitions – Difference between financial and cost accounting – Relationship with Management accounting – Nature and significance of cost accounting – Installation of Costing system – Characteristics of ideal costing system – Methods of costing – Elements of costing – cost concept, fixed cost and variable costs – Preparation of cost sheet.

## UNIT – II

Material classification and coding of material - fixation of maximum, minimum and reorder level – Economic order quantity – purchase procedure – storage of materials - Issue of materials – pricing of material issues and returns – Inventory control – Physical verification – periodical and perceptual inventory – Analysis of discrepancies – Correction measures.

## UNIT – III

Labour: Classifications of labour – Time keeping – Preparation of pay roll – Wage payment and incentive system – idle time – over time – accounting of labour cost – work-study – merit rating – Time and motion study – Standard time.

## UNIT – IV

Meaning and classifications of overheads – Classification according to function – variability and elements – Steps in overhead accounting – Absorption of overhead cost – Difference between cost allocation and apportionment and reapportionment – Predetermined overhead recovery rates – over absorption and under absorption – Meaning and causes – Accounting of under, over absorbed overheads.

## UNIT - V

Features of process costing – Difference between Joint costing and process costing – Process losses – Inter – process Profits Equivalent Production – Joint – Products and by products – Distinction between by – products, main products and joint products. Reconciliation of cost and financial accounts – Cost ledger - integrated accounts – cost audit under companies Act – Benefits of cost audit – Programmes and procedures.

Note: The Question paper shall cover 40 % theory and 60 % problems

**BOOKS FOR REFERENCE:**

- |                             |  |
|-----------------------------|--|
| 1. Horngren                 | : Cost accounting with Managerial emphasis   |
| 2. Wheldon                  | : Cost accounting                            |
| 3. Biggs                    | : Cost accounting                            |
| 4. N.K.Prasad               | : Principles and practice of cost accounting |
| 5. S.P.. Jain & K.L. Narang | : Cost accounting                            |

**PAPER VI -MANAGEMENT ACCOUNTING**

## UNIT – I

Nature and Scope of Management Accounting – Meaning – Nature, scope, objectives, functions – Importance – Limitations – Distinction between Financial accounting and Management accounting – Distinction between Cost accounting and Management accounting.

**UNIT – II**

Analysis – Interpretations of Financial statements – Ratio Analysis – Fund flow statement – Cash flow statement.

**UNIT – III**

Working capital - concepts, kinds, importance of working capital - working capital requirements and their computation

**UNIT - IV**

Budgeting and Budgetary control – Meaning, characteristics of good budgeting – Budgetary control – Classification and types of budgets, sales budget, production budget – Cost of production budget, material budget – Flexible budget – Cash budget – Zero based budgeting.

**UNIT – V**

Marginal costing – Meaning – Techniques – Objectives, application of marginal costing for business decision-making – Break-even analysis (Cost volume Analysis).

Note : The Question paper shall cover 40 % theory and 60 % problems

**BOOKS FOR REFERENCE:**

- |                   |                         |
|-------------------|-------------------------|
| 1. Sharma & Gupta | : Management Accounting |
| 2. Khan & Jain    | : Management Accounting |
| 3. Manmohan Goyal | : Management Accounting |
| 4. S.N.Maheswari  | : Management Accounting |
| 5. I.M.Pandey     | : Management Accounting |

**PAPER VII - BUSINESS RESEARCH METHODS****UNIT – I**

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

**UNIT – II**

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

**UNIT – III**

Measurement and scaling techniques – Processing and analysis of data – Editing and coding – Transcription and Tabulation – Statistical tools used in research – Interpretations and report writing – Types and contents and style of reports – Steps in drafting reports.

**UNIT – IV**

Measures of Central tendency – Standard deviation – Correlation – simple, partial and multiple correlation – Path analysis – Auto correlation – Regression models – OLS ordinary least square methods – Multiple regression.

**UNIT – V**

Test of significance – ‘t’ Test - large sample and ‘f’ Test, test of significance for attributes, analysis of variants – Business forecasting – Exponential smoothing – Chi-square test.

Note : The question paper shall cover 60 % theory and 40 % problem

**BOOKS FOR REFERENCE:**

- |                      |                             |
|----------------------|-----------------------------|
| 1. Emory             | : Business Research Methods |
| 2. Rummel & Ballaine | : Business Research Methods |
| 3. S.P. Gupta        | : Statistical Methods       |
| 4. Kothari           | : Research Methodology.     |

**PAPER VIII - OBJECT ORIENTED PROGRAMMING WITH C++****UNIT – I**

Evaluation of Programming Paradigm – Elements of Object oriented programming - Data Encapsulation and Abstraction classes – Inheritance – Derived classes – Polymorphism – Operator overloading – Friend functions – Polymorphism – virtual functions – Merits and demerits of OOP – Popular OOP languages – C++ at a glance – Applications of C++ - C++ statements – structure of C++ program.

**UNIT – II**

Data types – character set – Token, Identifiers and Keywords – variables – operators and expressions –Control flow – IF, IF. . Else, Nested If.. Else, For loop, While..loop, do..while loop, break statement, switch statement, continue statement and go to statement. Arrays – operations on arrays – Multidimensional arrays – strings – string manipulations. Functions – Function components – Library functions – Inline functions.

**UNIT – III**

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

**UNIT – IV**

Operator overloading – overloadable operators – Rules for overloading operators – Data conversion. Inheritance – Forms of inheritance – single, multiple, multi level, hierarchal and hybrid inheritance – when to use inheritance – Benefits of Inheritance.

**UNIT – V**

Virtual functions and Polymorphism – need for virtual functions – Pointers to derived class objects – Pure virtual functions – Abstract classes – Rules for Virtual functions – Data file operations – Opening of file – closing of file – stream state member functions – reading/writing a character from a file – structure and file operations – classes and file operations.

**BOOKS FOR REFERENCE:**

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

**PAPER IX COMPUTER APPLICATIONS PRACTICALS II –TALLY AND C++**



**BHARATHIAR UNIVERSITY**  
**COMPUTER APPLICATIONS PRACTICAL LIST**  
**For M.COM (CA) Course Offered by affiliated Colleges**  
**For the Students admitted during the academic year 2007 – 2008 onwards**

*General instructions*

The students should submit their records by using the format given below.

- Objective
- Requirements
- Functions to be performed
- Output

The students should simultaneously maintain a file to keep a record of the various documents used by them for the various practical exercises done by them.

**Distribution of internal assessment (25%)**

- 5** Marks for attendance
- 15** Marks for model exams
- 5** Marks for file and Record

**Internal 25 marks**

**University Practical Exam 75 marks**

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**List of computer practicals to be followed Semester - I**

**M.S. Office & SQL**  
**Computer Application Practical –I**

**I Semester Practical List (MS – Office & SQL)**

For semester I, Practical classes are to be conducted for 6 hours per week.

**M.S.OFFICE**

1. Type a document (like-Speech of a chairman in AGM, Budget speech of finance minister) and perform the following:

- Right align and bold face
- Center align and italics
- Justify and center alignment
- Also insert footnote and end note for the same.
- Change a paragraph into two column paragraph
- Insert page number at the bottom
- Insert date, time and heading in the header section.

2. Using mail merge, send an invitation/notice (by creating the invitation/notice) for the following situation (at least 5 addresses to be entered)  
(any one of the following)

- a) **For opening a new branch**
- b) **Inauguration of ATM**
- c) **Informing about new scheme or offer**

3. Preparation of Table using MS word – Sales Analysis for a period of five years for three products

**4. Using EXCEL prepare a table for (any one of the following)**

- a) **Employees payroll**
- b) **Sales data**
- c) **Students marks and perform the following functions**

**(Total, Average, Percentage, conditional sum and show the results in chart)**

5. Prepare an Excel sheet and apply the following statistical functions to analyze the data (Any one of the following)

- a) Mean, Median, Mode
- b) Standard Deviation
- c) Time Series

6. Prepare a questionnaire for a research problem by using MS WORD – use word art, reference, borders and shading and insert a table relevant to your research problem.

7. Prepare a PowerPoint presentation for (any one of the following)

- a) Product Advertisement
- b) Company Advertisement
- c) Annual General Meeting (Minimum 5 slides)

### **Requirements**

1. Using Hyperlink to all slides
2. Different animation effect for text and pictures
3. Fully automatic – timing – 2 minutes

8. Using Access prepare a table for (any one of the following)

- a) Pay Roll
- b) Student record
- c) Sales data
- d) Address database of customers

### **Requirements**

(By using Design view/ Wizard view)

1. One of the fields should be Primary Key
2. Apply sort option to display records (at least three different methods of sorting)
3. Generate reports by using different queries.

### **SQL**

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**1) Create a table - use name Software with the fields and insert the values:**

<b>Field name</b>	<b>field type</b>	<b>field size</b>
Programmer name	character	15
Title	character	20
Language used	character	15
Software cost	number	10 with 2 decimal places
Development cost	number	10
Software sold	number	3

**Queries:**

- Display the details of software developed by “PRAKASH”.
  - Display the details of the packages whose software cost exceeds “2000”.
  - Display the details of the software that are developed in “C++”.
  - What is the price of costliest software developed in “C”.
  - Display the details of the programmer whose language used is same as “Suresh”.
- 2) Create a table for a **Company** with the following fields and inserts the values:

<b>Field name</b>	<b>field type</b>	<b>field size</b>
Company name	character	15
Proprietor	character	15
Address	character	25
Supplier name	character	15
No of employees	number	4
GP percent	number	6 with 2 decimal places

**Queries:**

- Display all the records of the company which are in the ascending order of GP percent
  - Display the name of the company whose supplier name is “Telco”.
  - Display the details of the company whose GP percent is greater than 20 and order by GP percent
  - Display the detail of the company having the employee ranging from 300 to 1000
  - Display the name of the company whose supplier is same as like Tata’s.
- 3) Create a table named **Employee** with the following fields and insert the values:

<b>Field name</b>	<b>Field type</b>	<b>Field size</b>
Employee Name	character	15
Employee Code	number	6
Address	character	25
Designation	character	15
Grade	character	1
Date of Joining	Date	-
Salary	number	10 with 2 decimal places

**Queries:**

- Display name of the employees whose salary is greater than “10,000”.
- Display the details of employees in ascending order according to Employee Code

- c) Display the total salary of the employees whose grade is “A”.
- d) Display the details of the employee earning the highest salary.
- e) Display the names of the employees who earn more than “Ravi”

4) Create a table named **Student** with the following fields and insert the values:

Field name	field type	field size
Student Name	character	15
Gender	character	6
Roll No.	character	10
Department Name	character	15
Address	character	25
Percentage	number	4 with 2 decimal places

**Queries:**

- a) Calculate the average percentage of the students.
- b) Display the names of the students whose percentage is greater than 80
- c) Display the details of the student who got the highest percentage.
- d) Display the details of the students whose percentage is between 50 and 70.
- e) Display the details of the students whose percentage is greater than the percentage of Roll No = 12CA01

5) Create the table **PRODUCT** with the following fields and insert the values:

Field name	Field type	Field size
Product no	number	6
Product name	character	15
Unit of measure	character	15
Quantity	number	6with 2 decimal places
Total amount	number	8 with 2 decimal places

**Queries:**

- a) Using update statements calculate the total amount and then select the record.
- b) Select the records whose unit of measure is “Kg”
- c) Select the records whose quantity is greater than 10 and less than or equal to 20
- d) Calculate the entire total amount by using sum operation
- e) Calculate the number of records whose unit price is greater than 50 with count operation

6. Create the table **PAYROLL** with the following fields and insert the values:

Field name	field type	field size
Employee no	number	8
Employee name	character	8
Department	character	10
Basic pay	number	8 with 2 decimal places

HRA	number	6 with 2 decimal places
DA	number	6 with 2 decimal places
PF	number	6 with 2 decimal places
Net pay	number	8 with 2 decimal places

**Queries:**

- a) Up date the records to calculate the net pay.
- b) Arrange the records of employees in ascending order of their net pay
- c) Display the details of the employees whose department is: sales”
- d) Select the details of employees whose HRA $\geq$ 1000 and DA $\leq$ 900
- e) Select the records in descending order

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**BHARATHIAR UNIVERSITY : COIMBATORE-46**  
**COMPUTER APPLICATIONS PRACTICAL LIST**  
**For M.COM (CA) Course Offered by Affiliated Colleges**  
**For the Students admitted during the academic year 2007 – 2008 onwards**

General Instructions

The students should submit their records by using the format given below.

- Objective
- **Requirements**
- **Functions to be performed**
- **Output**

The students should simultaneously maintain a file to keep a record of the various documents used by them for the various practical exercises done by them.

Distribution of internal assessment (25%)

**5 Marks for attendance**

**15 Marks for model exams**

**6 Marks for file and Record**

**Internal 25 marks**

**University Practical Exam 75 marks**

**List of computer practicals to be followed Semester - II**

**TALLY**

1. By using – Create Voucher & Ledger with adjustment (using F11 and F12 keys)
2. Prepare Trial Balance, Profit & Loss A/c and Balance Sheet (with minimum of any 5 adjustments)
3. Prepare Inventory statement using (Calculate Inventory by using all methods)  
(a) FIFO (b) LIFO (c) Simple Average Method (d) Weighted Average Method
4. Prepare a fund flow statement and give your opinion.
5. Prepare a cash flow statement and present your view.
- 6.** Analyze the performance of an organization by using Ratio (Minimum 5 Ratios are essential).

**C++**

1. Pay Roll calculation (Using simple program)
  2. Find out EOQ, Minimum Level, Maximum Level, Re-order level (Using simple program)
  3. Write a c++ program to calculate working capital using class and objects (member function should write inside and outside the class)
  4. Program to calculate contribution, P/v Ratio, BEP and Margin of safety using Functions.
  5. Calculate Simple Interest and compound interest using inline functions.
  6. Calculate Depreciation – by using constructors and Destructors
  7. Write a C++ program to calculate the sum and product of two complex numbers using operator overloading.
  8. Write a c++ program to prepare cost sheet using inheritance
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**III SEMESTER  
PAPER X - E-COMMERCE**

**UNIT I**

Introduction to E-Commerce – Electronic Commerce Frame work – Electronic commerce and Media convergence – The anatomy of E-Commerce Applications – Components of the I-Way – Network Access Equipment – Global Information Distribution Networks – Internet Terminology – NSFNET : Architecture and Components - National Research and Educational Network.

**UNIT II**

Electronic Commerce and World Wide Web: Architectural Frame work for E-Commerce – WWW Architecture – Hypertext Publishing – Consumer Oriented Applications – Mercantile Process Models – Consumer’s Perspective – Merchant’s Perspective – Electronic Payment Systems (EPS) – Types - Designing EPS - Smart Cards and EPS – Credit Cards and EPS.

**UNIT III**

Electronic Data Interchange (EDI) : Applications – Security and Privacy Issues – Software Implementations – Value Added Networks – Internal Information System – Work-flow Automation and Coordination – Customization– Supply Chain Management .

**UNIT IV**

Marketing on the Internet: Advertising on the Internet – Charting the On-Line Marketing Process – E-Commerce Catalogs or Directories – Information Filtering – Consumer-Data Interface: Emerging Tools.

**UNIT V**

Multimedia and Digital Video: Concepts – Digital Video and E-Commerce – Video Conferencing – Frame Relay – Cell Relay – Asynchronous Transfer Mode – Mobile Computing Frame Work – Wireless Delivery Technology – Mobile Information Access Devices – Cellular Data Communication Protocols – Mobile Computing Applications.

**Note:** Question paper shall cover 100% theory.

**Books for Reference:**

1. Frontiers of Electronic Commerce- Ravi Kalakota, Andrew Winston, Addison Wesley, 1998.
2. E-Commerce- A Managerial perspective- P.T. Joseph
3. Designing Systems for Internet Commerce- G. Winfield Treese Lawrence C. Stewart
4. E-Commerce the Cutting Edge Of Business- Kamelesh K Bajaj, Debjani Nag
5. E Business Road Map for Success- Dr. Ravi Kalakota, Marcia Robinson

**PAPER XI - VISUAL BASIC**

**UNIT - I**

First steps with Microsoft VB6: Integrated Development Environment - First program in VB - Introduction to forms: Common properties, methods and events.

## **UNIT - II**

Intrinsic Controls: Text box controls, Label and frame controls, command button, check box and option button controls, list box and combo controls, picture and image controls, drive-list box, dir-list box and file list box controls and other controls, control arrays.

## **UNIT - III**

Variables & Procedures: Scope & Lifetime of variables, native datatypes, aggregate datatypes - Arrays-VB for application and VB libraries: Control flow, Working with numbers, Strings, Date and Time.

## **UNIT - IV**

Databases: Data access SAGA, VB Data Base Tools, ADO Data Binding, Data Environment designer, crash course in SQL.

Database Programming: ADO at work-setting up a connection, Processing data.

## **UNIT - V**

Tables and Reports-Datagrid control, Flexgrid control, Data Report - Data Report Designer.

## **Books for Reference**

1. Visual Basic 6 Programming, Black Book- Steven Holzner, Dreamtech Press Publisher, New Delhi
2. Programming Microsoft Visual Basic- Francesco Balenda, WP Publications and Distributors.
3. Visual Basic 6-Gary Cronell, TataMcGraw Hill Publishing Compnay Ltd.
4. Visual Basic 6 – How to Program, H.M.Deitel., P.J.Deital and T.R.Nieto

## **PAPER XII - FINANCIAL MANAGEMENT**

### **UNIT – I**

Financial Management: Meaning, Nature, scope and objectives – Role and functions of financial management – Financial decisions – Relationship between risk and return – sources of finance – short-term and Long-term finance.

### **UNIT – II**

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

### **UNIT – III**

Leverages: Financial Leverage – Operating leverage – EBIT and EPS analysis – Theories of Capital Structure – Net income approach – Net operating income Approach. MM Hypothesis – Determinants of capital structure- Capitalisation – Over and Under capitalisation- Merits and Demerits.



#### **UNIT – IV**

Leasing: Nature and Types- Advantages and Disadvantages-Dividend Theories: Walter's model – Gordon and MM's models – Dividend policy - Forms of Dividend – Determinants of dividend policy.

#### **UNIT – V**

Working Capital Management – Cash Management – Receivables Management – Inventory Management – Determinants and Computation of Working Capital.

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

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

- |                                     |                              |   |
|-------------------------------------|------------------------------|---|
| 1. Financial Management             | - Prasanna Chandra           |   |
| 2. Financial Management             | - I.M.Pandey                 |   |
| 3. Financial Management             | - Khan & Jain                | : |
| 4. Financial Management             | - S.N.Maheswari              |   |
| 5. Financial Management             | - Van Horne                  |   |
| 6. Principles of Managerial Finance | - L.J.Gitman & Dr.M.Manickam |   |

### **PAPER- XIII COMPUTER APPLICATIONS PRACTICAL III – VB**

#### **IV SEMESTER PAPER XIV - INVESTMENT MANAGEMENT**

#### **UNIT – I**

Nature, Meaning and scope of Investment – Importance of Investment – Factors influencing Investment – Investment media – Features of investment Programme – Investment Process – Development of Financial system in India.

#### **UNIT – II**

Capital Market – New issue Market and stock exchange in India – B.S.E – N.S.E – OTCEI – Kinds of Trading activity – Listing of Securities – SEBI and its Role and guidelines.

#### **UNIT – III**

Fundamental and Technical Analysis – Security evaluation – Economic Analysis – Industry Analysis – Company Analysis – Technical Analysis – Portfolio Analysis.

#### **UNIT – IV**

Investment Alternatives – Investment in Equity Shares, Preference shares, Bonds, Government Securities – Mutual Funds – Real Estate – Gold – Silver – Provident fund – Unit Trust – National Savings Scheme – LIC.

#### **UNIT – V**

Portfolio Management – Nature, Scope – SEBI Guidelines to Portfolio Management – Portfolio Investment Process – Elements of Portfolio Management – Portfolio Revision – Needs and Problems.

**Note:** The question paper shall cover 100% Theory.

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

- |                          |   |                        |
|--------------------------|---|------------------------|
| 1. Investment Management | - | Francis Cherunlillum   |
| 2. Investment Management | - | Khan and Jain          |
| 3. Investment Management | - | Preeti Singh           |
| 4. Investment Management | - | V.K.Balla              |
| 5. Investment Management | - | V.Gangadha Ramesh Babu |

### **PAPER XV - DIRECT TAXES**

#### **UNIT – I**

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

#### **UNIT – II**

Computation of Income from Salaries and Income from House property.

#### **UNIT – III**

Computation of Profits and Gains of Business or profession – Calculation of Capital gain.

#### **UNIT – IV**

Computation of Income from other sources – Set-Off and Carry Forward of Losses - Deduction from Gross Total Income – Assessment of Individuals.

#### **UNIT – V**

Income Tax Authorities – Procedure for Assessment – Collection of Tax.

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

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

- |                              |   |               |
|------------------------------|---|---------------|
| 1. Direct Taxes              | - | B.B. Lal      |
| 2. Income Tax Law & Practice | - | Gaur & Narang |

- |                              |   |                   |
|------------------------------|---|-------------------|
| 3. Income Tax Law & Practice | - | Dr.H.C.Mehorotra  |
| 4. Tax Laws                  | - | Dingar Pagare     |
| 5. Income Tax                | - | Bhagavathi Prasad |

## **PAPER XVI - JAVA PROGRAMMING AND HTML**

### **UNIT – I**

History of java-Java features-Java and internet-Java and www-Java language: Introduction – Simple java program structures-JVM.

### **UNIT – II**

Constants-Variables-Data types-Arithmetic, relational, logical, assignment operators- if, if...else, else...if ladder-while, do, for-jumps in loops-Defining a class-Creating objects-Method declaration-fields declaration.

### **UNIT – III**

One dimensional array-creating an array-Strings-Multiple Inheritance-Creating threads-Extending thread classes-Stooping and blocking a thread-Life cycle of a thread.

### **UNIT – IV**

HTML-History of HTML-HTML generation-HTML documents-Anchor tag-Hyperlinks-Sample HTML documents.

### **UNIT – V**

Head and body section-Header section-Title-Prologue-Links- Colourful webpage-Comment line-Sample HTML documents-Lists-Ordered lists-Unordered lists-Nested lists.

### **Books for Reference:**

1. Programming with java-A primer- E.Balagurusamy, TMH Publications, 3<sup>rd</sup> Edition.
2. World Wide Web design with HTML - C.Xavier TMH Publications, 2000.
3. The Complete Reference Java2- Patrick Naughton and Herbert Schildt , 3<sup>rd</sup> Edition TMH Publications, 2000.
4. Programming with java2- C.Xavier, Scitech Publications, 2000.

## **PAPER - XVII PROJECT WORK & VIVA VOCE**

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