B.C.C.A.- Part-II Semester:-III

B.COM. (COMPUTER APPLICATION) PART TWO

SEMESTER-III

Paper I: STATISTICS TECHNIQUE AND BUSINESS MATHEMATICS

Theory: 80 Marks

Internal Assessment:20 Marks

Objectives- To Provide Basic Knowledge and Understanding of important Statistical Technique

Periods Allotment

UNIT I 16

Statistical Data Collection and Measures of Central Tendency

Meaning, Definition of Statistics, Function, Scope, Merits, Demerits, Importance of Statistics. Statistical Data Collection- Primary and Secondary Data, Methods of Data Collection, Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean, Harmonic Mean, Corrected Mean and Combined Mean

UNIT II 16

Dispersion and Skewness

Range, Quartile Deviation, Mean Deviation, Standard Deviation, Karl Pearson's and Bowley Coefficient of Skewness

UNIT III 16

Correlation Analysis

Simple Problems on Correlations, Two Way Method of Correlation, Concurrent Deviation Method of Correlation

UNIT IV 12

Business Mathematics-Profit or Loss and Percentage

BOOKS RECOMMENDED

- 1. Statistics- R. S. N. Pillia and V. Bhagavathi, S. Chand and Company
- 2. Basic of Computer and Statistical Techniques Dr. Rahul Sawlikar and Dr. S. B. Kishor, Das Ganu Prakashan, Nagpur ISBN –978-81-921757-8-2
- 3. Fundamental of Statistics- Elhancs D.N.
- 4. Standard Problems and Formulae of Statistics- Dr. Rahul Sawlikar and Dr.S.B.Kishor, Das GanuPrakashan, Nagpur- ISBN- 978-93-81660-24-9
- 5. Fundamental of Mathematical Statistics Gupta and Kapoor, Sultan Chand and Sons Publication ISBN-8180540049
- 6. Statistical Methods- S.P.Gupta, S. Chand and Company, New Delhi
- 7. Statistics, Theory, Method and Application- Sancheti and Kapoor.
- 8. Fundamental of Statistics A. K. Agrawal and Sahib Singh, PHI 4TH Edition.

PAPER-PATTERN OF B. COM. (COMPUTER APPLICATION) PART TWO SEMESTER III STATISTICSTECHNIQUE AND BUSINESS MATHEMATICS

Time = 3.00 Hours		Marks =80
Que. No. 1 on Unit 1st		
a) Theory		(8M)
b) Problem		(8M)
\ -	(OR)	(4.55.5)
c) Problem		(16M)
Que. No. 2 on Unit 2 nd		(0) (0)
a) Problem		(8M)
b) Problem		(8M)
a) Problem	(OR)	(16M)
c) Problem		(16M)
Que. No. 3 on Unit 3 rd		
a) Problem		(8M)
b) Problem		(8M)
\ D	(OR)	(4.53.5)
c) Problem		(16M)
Que. No. 4 on Unit 4 th		
a) Problem		(8M)
b) Problem		(8M)
	(OR)	
c) Problem		(8M)
d) Problem		(8M)
Que No. 5 Write Short Answers		
a) Theory on Unit 1st		(4M)
b) Theory on Unit 2 nd		(4M)
c) Theory on Unit 3 rd		(4M)
d) Theory on Unit 4 th		(4M)

B.COM. (COMPUTER APPLICATION) PART TWO

SEMESTER-III

Paper II: COST ACCOUNTING

Theory: 80 Marks

Internal Assessment: 20 Marks

Objectives- To Provide Basic Knowledge and Understanding of important Cost Accounting

To Business and Industry

Periods Allotment

UNIT I 15

Meaning, Importance, Nature and Scope of Cost Accounting, Methods and Types of Costing, Distinguish between Cost Accounting and Financial Accounting, Element of Cost and Allocation. Single or Output Costing, **Problems relating to Cost-Sheet and Tender**

UNIT II 15

Reconciliation Statement- Causes of Reconciliation Needs, Reasons for difference, Reconciliation of Profits Shown by Financial Accounting and Cost Accounting.

UNIT III 15

Process Costing- Feature of Process Costing, Advantages and Disadvantages, Principle of Process Costing, Application of Process Costing, Problems on Simple Process Including Normal And Abnormal Gain and Wastage. And Joint Product Costing and Sale of By –Product.

UNIT IV 15

Contract Costing- Features, Types of Contract Costing, Certified Work, Uncertified Work, Retention Money, Profits on Incomplete Contracts, Cost-Plus Contract, Treatment of Profits and Problems on One or Two Contracts for One Year Only, Placement of Important Items in the Balance- Sheet of Contract.

BOOK RECOMMENDED

- 1. Cost Accounting- R. S. N. Pillia and V. Bhagavati, S. Chand and Company, New Delhi
- Cost and Management Accounting- Dr. Rahul Sawlikar, Dr. K.B.Moharir and Dr. Pradip Ghorpade, Rajani Prakashan, Nagpur. ISBN-978-93-82683-00-1
- 3. Cost Accounting-M. Khan And P.K. Jain, Tata McGraw Hill ISBN 13:978-0-07-040224-9
- Cost Accounting- Dr. R.K.Sawlikar and Dr. R.P.Ingole, Das Ganu Prakashan, Nagpur, ISBN-978-93-81660-40-9
- 5. Cost Accounting- S.N.Patil and A.N.Patil, Vishwa Publishers and Distributors, Nagpur. ISBN-81-86454-34-9
- 6. Cost and Management Accounting- Y.R.Mahajan, Pimplapure Prakashan, Nagpur
- 7. Cost Accounting-M.C.Shukla, T.S.Grewal, M.P.Gupta, S.Chand and Company, New Delhi
- 8. Practical Costing- B.S.Khanna, I.M.Pandey, G.K.Ahuja, S.C.L.Batra, S.Chand and Company, New Delhi
- Cost and Management Accounting (Marathi) Dr.Kishor Moharir, Sunita Moharir,
 Dr. Pradip Ghorpade, Dr. Vinod Waghale, Das Ganu Prakashan, Nagpur
- 10. Cost and Management Accounting (Marathi)-

Dr. Sudhir Bobhankar, Dr. Megha Kanetkar, Shri. Sainath Prakashan, Nagpur

- 11. Cost Account (Hindi) S.M.Shukla
- 12. Cost Account (Hindi) I.G.Gupta and Trivedi
- 13. Cost Account (Hindi) M.N.Arora, S.Chand and Company, New Delhi
- 14. Rathnam Costing Theory- P.V.Rathnam
- 15. Cost Accounting-V.K.Saxena, C.D.Vashist
- 16. Cost Accounting-Jawaharlal
- 17. Cost Accounting- S.P.Iyanger, Sultan Chand and Company, New Delhi
- 18. Cost and Management Accounting- ShashiK. Gupta, Kalyani Publisher, New Delhi
- 19. Cost Accounting-S.P.Jain and Narang

PAPER-PATTERN OF

B. COM. (COMPUTER APPLICATION) PART TWO SEMESTER III COST ACCOUNTING

Time = 3.00 Hours	Marks =80
Que No. 1 on Unit 1 st	
a) Theory	(8M)
b) Problem	(8M)
	(OR)
c) Problem	(16M)
Que No. 2 on Unit 2 nd	
a) Problem	(8M)
b) Problem	(8M)
	(OR)
c) Problem	(16M)
Que No. 3 on Unit 3 rd	
a) Problem	(8M)
b) Problem	(8M)
	(OR)
c) Problem	(16M)
Que No. 4 on Unit 4 th	
a) Problem	(8M)
b) Problem	(8M)
	(OR)
c) Problem	(16M)
Que No. 5 Write Short Answers	
a) Theory on Unit 1st	(4M)
b) Theory on Unit 2 nd	(4M)
c) Theory on Unit 3 rd	(4M)
d) Theory on Unit 4 th	(4M)

B.Com. (C.A.) - II SEMESTER- III

Paper III - PROGRAMMING LOGIC AND TECHNIQUE

(Marks-80)

UNIT-I: Language Evolution

Machine Language, Assembly Language, High Level Language. Translators: Compiler, Interpreter and Assembler. The Compilation Process, Linker, Loader, Study of Programming Languages (Function Oriented, Object Based, Event Based), Study of HLL, Characteristics of Good Language, Generation of Languages,

UNIT-II: Programming Construction Tools

Problem Analysis, Process Analysis, Conceptual Development of Solution. Development Tools: Algorithm: Advantage and Disadvantage of Algorithm, Flowcharts: Types of Flowcharts, Advantage and Disadvantage of Flowchart. Pseudo Code: Definition and Its Characteristics.

UNIT-III: Control Statements Basics of Programming Language: Usage of Character Set, Meaning of Keywords and Identifiers, Role of Data Types, Constants and Variables. Importance of Casting, Different Types of Operators and their Precedence, Expressions, Conditional Statements (One-Way, Two-Way and Multi-Way Conditional), Looping Statements (For, While, do-while), Usage of Exit, Continue, Break and Go to Statement.

UNIT-IV: Arrays

Arrays: Arrays, One dimensional array, Various Operation on Array (Insertion of Element, Deleting Element, Rotating List, Sorting, Searching, Merging Etc)and Two dimensional arrays(MatrixAddition,TransposeofMatrix,MatrixMultiplication),Modularprogramming and its features.

Books:

- 1. Anil V. Chouduri, "The Art of Programming through Flow chart and Algorithms", Laxmi Pub. ISBN-8170087791
- 2. Dr. S.B. Kishor, "Programming and Logic and Technique", University Press, ISBN: 978-81-7321-822-9
- 3. MaureenSprankle, "ProblemSolvingProgrammingConcepts", Pearson, 7th Edition, 2009 ISBN 81-317-0711-1
- 4. Behrouz Forouzan, "Basic of Computer Science", Cengage Leaning, ISBN 81-315-1118-9

References:

- 1) Donald Knuth," The Art of Computer Programming Vol-I,IIIII", Pearson.
- 2) Horowitz, Sahani, "Fundamental of Computer Algorithm", Orient Longman, ISBN 9788173716126

B.Com. (C.A.)-II SEMESTER-III

Paper IV - DATABASE MANAGEMENT SYSTEM CONCEPTS

(Marks-80)

UNIT-I: Database Environment

Basic Terminology, Data Processing, Traditional and DBMS Environment, Components of DBMS, Database Approach -Objectives, Benefits, Characteristics, Advantages of DBMS. Three Tier Architecture, Data Abstraction. **Database Administration:** Role, Functions, Responsibility

UNIT-II: Data Model and Design

Data Models, Record Based Logical Model, Relational Database Structure, Normalization, Normal forms, Functional Dependency, 1NF (First Normal Form), 2NF (Second Normal Form), 3NF (Third Normal Form), Relational Algebra, Codd's Rules

UNIT-III: Working With Ms-Access

Elements of an Access database - Tables, Queries, Forms, Reports, Macros. Introduction to Ms-Access, Designing Database, Crating Database using Wizard, Working with Table. **Field types**—Autonumber, Date/Time, Number, Text, Yes/No, Hyperlink. Creating Tables using Design View and Using wizard, Editing Table, Editing Records

UNIT-IV: Query and Form Designing

Query: Filtering Data, Studying different types of Queries, Specifying Criteria in Queries, Filter using multiple criteria. **Forms, Report and Macro:** Procedure to create a form, Reports and Macros

Books:

- 1) R. Panneerselvam," Database Management System ",PHI, 2006, ISBN: 81-203-2028-X
- 2) Dr. Madhulika Jain, Vinita Pillai, Shashi Singh and Satish Jain, "Introduction to Database Management", BPB, 2002, ISBN: 81-7656-638-1
- 3) Bioin C. Desai, "An Introduction to Database Management", GP Pub., 2006
- 4) Caleste Robinson, "Access 97", BPP, 1998, ISBN: 81-7029-928-4

References:

- 1) Abraham Silberschatz, Henry F. Korth, S. Sudarshan, "Database System Concept", McGraw Hill, 2002, ISBN: 0-07-228363-7.
- 2)S.B. Kishor," DDMS and Oracle", Das Ganu Prakashan, ISBN 978-93-81660-08-9
- 3) Sanjay Saxena, "MS Office 2007 in a Nutshell", Vikas Pub., 2011, ISBN-978-81-259-5036-3
- 4) Rutkosky, Seguin, Audrey, "Microsoft office 2007", BPB, ISBN-10:81-8333-228-5/13:978-81-8333-228-6

B.Com. (C.A.)-II SEMESTER-III Paper V - WEB DESIGNING

(**Marks-80**)

UNIT-I: Introduction to Web Technology

Introduction to Internet, Introduction to World Wide Web, Components of Web, Types of Web Sites, Role of Web Browser and Web Server, Types of Web Browser, Types of Web Server, Flow of Web Information, Objective of the Web Site, Basic Interface Design, Various Types of URLs, Process of Web Publishing.

UNIT-II: Basic of HTML and Tag

Introduction to HTML - Introduction, Features of HTML, Advantages & Disadvantages of HTML, HTML Editors, Step to Create and View HTML Document, Basic Structure of HTML Program

Tags & Attributes-Nesting of Tags, Classification of HTML Tags, Block Formatting Tags.

UNIT-III: List and Linking

List - Introduction to Lists, Unordered List, Ordered List, Definition List, Nested List, Difference Between Ordered and Unordered List.

Linking - Introduction, Type of Hyperlink Creation, Working with Links, Pathname and Types, Types of Linking or Anchors.

UNIT-IV: Advanced HTML

Graphics in Web Page - Image Tag, Align Images, Embedding Inline Images and External Images,

Tables - Basic table tags and their related attribute

Frames- Frames, <Frame> and <Frameset> tags, Form designs, Form Controls, Text controls, password fields, radio buttons, and check boxes. Reset and submit buttons, form control selection, option processing and text area.

Books:

- 1) Greenstein and Feinman," Electronic Commerce", TMH, 2000, TMH, ISBN-0-07-042141-2,.
- 2) BhushanDewan, "E-Commerce by", S.Chand, 2001, First Ed., ISBN 81-219-2083-3,
- 3) Powel, "Complete Reference in HTML" 4TH Ed., TMH

References:

- 1) Complete HTML, BPB,2010, ISBN-13:978-0-07-070194-6.
- 2) C.Xavier, "Web Technology and Design", TMH, 2010, ISBN-13:978-81-224-1450-9
- 3) S.B. Kishor, "Web Designing", Das Ganu, ISBN: 978-93-81660-05-8
- 4) Curt Robbins, "Learning HTML 4.0", BPB Pub., ISBN -81- 7556-481-8
- 5) Ivan Bayross, "Web Enabled Commercial", BPB Pub., ISBN-81-8333-008-8

B.Com. (C.A.)-II SEMESTER-III

Paper VI - MIS AND SYSTEM ANALYSIS

(Marks-80)

UNIT -1

System Concept, definition, System approach, characteristics, System Elements - Input, Output. Environment Boundary Interface, feedback, Control. Types of Systems, Business system. Data vs information, information and decision making, Value of information, quality of information. Introduction to MIS, definition, need, objectives, benefits, functions, characteristics, Structure of MIS, information requirements at various levels of Management Activities.MIS vs data processing. Types of MIS: IPS, OAS, DSS, Expert system (organization, features & advantages) Functional MIS for marketing, finance, human resource, production & service industry

UNIT -2

System Development Life Cycle (SDLC) concept & stages. Need, determining user's information requirements- Information gathering - Sources & Methods (Interviews, questionnaires, observation, document analysis). System analysis, planning approach- elements, objectives, constraints, feasibility study, Tools of data recording, DFDs, data dictionary, decision tree, decision table, cost benefit analysis.

UNIT-3

Output input design, form design, process design, process specification, file design, program design, module integration, storage requirement .selection of hardware and software, software controls, system flow chart, user view of processing, modeling input output data. Procedure design, design documentation, user feedback, Project planning & control.

UNIT-4

Testing and Implementation

Testing: Code testing, specification testing, types of tests, verification and validation systems security and privacy, control measures, disaster recovery plan, system audit, Documentation: user's System. Operations manual, Role and qualities of system analyst as a change agent implementation - Methods of change over, transition and conversion, change management, user training. Post implementation maintenance & review.

Books

- 1. Elias Award, "System Analysis & Design", Golgotha Publication, 2nd Edition,
- 2. Edward," System Analysis & Design ", Tata McGraw Hill.
- 3. Rajaraman," Analysis and Design of Information System", PHI Publication, ISBN 8120312270
- 4. S.B. Kishor, "MIS and System Analysis", Das Ganu, ISBN: 978-93-81660-09-6

Reference Books:

- 1. Kendall & Kendall, "System Analysis & Design ",PHI Publication, 5th Edition,ISBN-8120321553
- 2. Dennis, "System Analysis & Design", Wiley Student Publication, 3rd Ed. ISBN-9788126508808

B.Com. (C.A.) - II SEMESTER- III

PRACTICAL -I: DATABASE MANAGEMENT SYSTEM CONCEPTS MS-ACCESS

A] Create table Student (Student_no, Student_name, and Course) in MS-ACCESS with the following details and perform following operations.

Student_no	Student_name	Course
101	Sunil	Vb
102	Anshu	Vb.Net
103	Sonam	Tally
104	Shital	Vb.Net

- 1. Use Column width as best fit.
- 2. Set Studentno as a Primary Key.
- 3. Insert at least 10 students' records.
- 4. Display all the students whose name begin with letter 'S'.
- 5. Display the query view and take out the print out.
- 6. Add new fields such as Fees, Date_adm ,Date_of_birth, .Address)
- 7. Add data to above newly fields.
- 8. Select Studentname, Course and Fees from student table.
- 9. Delete all the students who were admitted on specific date.
- 10. Update fees to increase it by thrice.
- 11. Select all the students of VB.NET paying course fees of 4000.
- 12. Update table by replacing the course name to TALLY wherever the course fees is 3500.
- 13. Delete the record where Student name is SONAM.
- 14. Display the studentname, studentno who was born on '14/6/1996'
- 15. Replace the Address of student say, ANSHU to PUNE.
- 16. Remove all the records where number of students is less than 2 for particular course.
- B] Create the Tables in which

Stud_per_Detail(Stud_no, Stud_name, Sex, date_of_birth, Address, Ph_no) and Stud_off_detail(Stud_no,Course,Fees,date_Adm).

- 1. Select Stud_Name, Address from Stud_Per_Detail and Stud_no, Course, Fees from Stud_off_datail.
- 2. Create a report view for above query.

- 3. Append the records of above tables Stud_Per_Detail to Stud_History where Student Date of Birth is 14/06/1996.
- 4. Print the table design view and datasheet view.
- C] Create a table Donar(Donar_no,Donar_name,BG,Sex) by using following instruction.
 - 1. Use Columnar Layout.
 - 2. Use Blueprint style.
 - 3. Give the title for Form as Donar Details Form.
 - 4. Enter 5 records.
 - 5. Print the Form view.

B.Com. (C.A.) - II SEMESTER- III PRACTICAL -II: WEB DESIGNING

- 1) Demonstrate of Logical Format Tag.
- 2) Demonstrate of Physical (Formatting) style tag
- 3) Demonstration of Level of Headings
- 4) Demonstration of Block Alignment
- 5) Demonstration of ADDRESS tag.
- 6) Demonstrate the Font Face, Color and Size.
- 7) Demonstrate the <HR> Tag
- 8) Demonstrate the Alignment
- 9) Demonstrate the Scrolling tab using Mercury.
- 10) Demonstrate of Order List
- 11) DEMONSTRATE FOR INTERNAL LINKING

GONDWANA UNIVERSITY

GADCHIROLI

COURSES OFFERED

- ARTS
- **COMMERCE**
- SCIENCE

ARTS

- 1. ENGLISH
- 2. MARATHI
- 3. HINDI

COMMERCE

- 1. ECONOMICS
- 2. STATISTICS
- 3. ACCOUNTS
- 4. SCIENCE
- 1. PHYSICS
- 2. CHEMISTRY
- 3. MATHEMATICS

12) DEMONSTRATE THE USE OF TABLE

COLLEGE

COLLEGE					
	FYJC			SYJC	
ARTS	COMMERCE	SCIENCE	ARTS	COMMERCE	SCIENCE
58	150	90	75	200	100

13) DEMONSTRATION OF BROWSING BY CATEGORY

BROWSE BY CATEGORY

- <u>WINDOWS</u> <u>OFFICE</u> <u>DEVELOPER</u>
- <u>IT PROFESSIONALS</u> <u>BUSINESS USER</u> <u>HOME USER</u>
- HARDWARE GAMES AND XBOX TRIAL SOFTWARE
- ALL PRODUCTS

14) PROGRAM FOR DESIGNING A SIMPLE FORM

<u>N</u> AME					
<u>A</u> DDRESS					
$\overline{\mathbf{D}}\mathbf{OB}$					
<u>H</u> OBBIES	☑S	PORT			
	☑ C	HESS			
	SA	AVE			
15) Demonstrate	the Master pag	ge to link anoth	er page.		
16) Demonstrate l	ink to website				
17) Demonstrate t	o compose ma	il.			
18) Demonstrate t	o show or load	d inline image s	say sunset.j	peg	
19) Demonstrate o	of Image Hype	rlink			
20) Demonstrate o	of Basic table.				
21) Demonstration	of cell paddin	ng attributes			
22) Demonstration	n of Link in the	e page.			
23) A HTML Pro background and a	_	_		e should contain	Γitle,green
24) // DEMONST	RATION OF	BROWSING E	BY CATEG	ORY	
*******OUTPUT	-******				
BROWSE BY CA	TEGORY				
WINDOWS		OFFICE	•	DEVELOPER	
• IT PROFESS	SIONALS •	BUSINESS USE	<u>R</u> •	HOME USER	
• <u>HARDWAR</u>	<u>E</u> •	GAMES AND X	BOX •	TRIAL SOFTWARE	
ALL PRODU	<u>ICTS</u>				
26) PROGRAM F	OR DESIGNI	NG A SIMPLI	E FORM		

*******OUTPUT*******

NAME	
<u>A</u> DDRESS	
$\overline{\mathbf{D}}\mathbf{OB}$	
H OBBIES	☑ SPORT
	☑ CHESS
	SAVE