Code No. 174

Faculty of Arts

B.A. II-Year, CBCS-IV Semester Examinations, May 2018

Skill Enhancement Course

PAPER: Basic Computer Skills – II

Time: 2 Hours Max Marks: 40

Section-A

I. Answer any **Two** of the following questions (2x5=10 Marks)

1. Explain the usage and advantages of MS Excel.
2. List and Write advantages Formulas.
3. What is Internet? Discuss various advantages with Internet.
4. What is FAX? How do you use it?

Section-B

II. Answer the following questions (2x15=30 Marks)

5. (a) What are the features of a workbook. How do you Insert and delete a Worksheet?

(OR)

(b) What is Function? Explain different types of functions with example.

6. (a) i. What is Browser? Explain differences between various browsers.
ii. Explain the use of Internet in Research.

(OR)

(b) i. How do you create and use E Mail? Explain.
ii. Discuss the advantages of Voice mail.

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R-19

Code: 2601/R

Faculty of Arts, Commerce, Social Science and Business Management

B.A/B.Com/BBA/BA(L) I-Year, CBCS–II Semester Regular Examinations –January, 2021

PAPER: Basics of Computer Skills

Time: 1 Hour 30 Min

Max Marks: 40

I. Answer any TWO of the following questions (2x20=40 Marks)

1. Explain the components of Computer System in detail.
2. Define Operating System. Write the functions of Operating System. Name some Operating Systems.
3. What is a Spread sheet? Explain how to insert Formulae and Functions in a spread sheet.
4. Explain different types of Networks. And also write the applications of Internet.

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R-16

Code:1304/BL

Faculty of Science

B. Sc (Computer Science) I-Year, CBCS-I Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: OBJECT ORIENTED PROGRAMMING WITH C++

Time: 2 Hours

Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. What are the decision control statements? Explain in details with an example
2. Write a program to read an integer and display the value of that integer in decimal, octal and hex-decimal notation
3. Define pointers? Explain the how generic pointers are differ from null pointers and other pointer variables
4. Differentiate between call-by-value and call-by-reference using suitable example
5. Explain the following with example
   i) nested member function ii) static member function
6. Explain the constructor and destructor with the help of an example
7. How does operator overloading support the concept of polymorphism
8. Write a short note on virtual function and pure virtual function

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Code No. 212

Faculty of Arts and Sciences

B.A/B.Sc. (Computer Applications) I-Year, CBCS-II Semester Examinations, May 2018

PAPER: Computer Programming With 'C'

Time: 3 hours Max Marks: 80

Section-A

I. Answer any FIVE of the following questions (5x4=20 Marks)

1. Explain basic structure of C programs.
2. Explain overflow and Underflow of Data.
3. Explain Dynamic Arrays.
4. Explain Goto statement.
5. Explain string handling functions.
6. Explain the elements of user defined functions.
7. Explain initialization of pointer variables.
8. Explain command line Arguments

Section-B

II. Answer the following questions. (4x15=60 Marks)

9. (a) Explain logical and relational operators in C. Write a program using logical operators.

(OR)

(b) Explain variables declaration ,assigning values, variables as constants using a C program.

10.(a) Explain Nested If else statements using a program.

(OR)

(b) Explain Two dimensional Arrays in C with an example.

11.(a) Explain comparison of strings and write a program for it.

(OR)

(b) Explain Recursion and passing arrays to functions in detail.

12.(a) Explain pointers in detail.

(OR)

(b) Write a program to create a file and perform I/O operations.

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Code No.412

Faculty of Sciences

B.Sc (Biotechnology) I-Year, CBCS-II Semester Examinations, May 2018

PAPER: Basics of Nucleic Acids-Biostatistics-Computers

Time: 3 hours Max Marks: 80

Section-A

I. Answer any FIVE of the following questions (5x4=20 Marks)

1. Forms of DNA
2. Griffith's experiment
3. Reverse transcription
4. Telomerase
5. Concept of test and hypothesis in statistics
6. Simple regression and correlation
7. MS Word
8. PowerPoint basics

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) Explain Hershey and chase experiment to confirm DNA as genetic material in T2 bacteriophage.

(OR)

(b) Explain the features of Watson and crick model of double helical.

10. (a) Write in detail the mechanism of DNA replication in prokaryotes.

(OR)

(b) Describe the types of DNA repair mechanism in detail.

11. (a) Write about probability distribution for random and discrete variables.

(OR)

(b) Write about the concept of sampling and sampling distribution.

12. (a) Write about the usage of MS Power point.

(OR)

(b) Discuss about various biological data bases used in Bioinformatics.

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R-19

Code:1304/BL

Faculty of Science

B.Sc (Computer Science) I-Year, CBCS-I Semester Backlog Examinations, January 2021

PAPER: PROGRAMMING IN C

Time: 2 Hours Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. Describe generation and classification of programming languages, compiling, interpreting and software development.
2. Write algorithms and flowcharts for the following:
   i) Binary search
   ii) Factorial of N^{th} number
3. What are special control statements? Explain in detail with C programs.
4. Explain in detail about functions of ctype.h and string.h with C programs.
5. What are storage classes? Define inline functions. Explain these concepts with C programs.
6. Discuss about arrays and pointers and pointers and strings with C programs.
7. Define structure and union. Distinguish between structure and union. Write a C program to add two complex numbers by passing structure to a function.
8. (a) Write a C program to write all the members of an array of structures to a file using fwrite(). Read the array from the file and display on the screen.
   (b) Write a C program to count the total number of characters inside the source file.

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R-16

Code:3304/BL

Faculty of Science

B.Sc (Computer Science) II-Year, CBCS-III Semester Backlog Examinations, January 2021

PAPER: DATABASE MANAGEMENT SYSTEM

Time: 2 Hours Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. Explain the advantages of Database Systems over File Systems. Also write about various types of Database Users and Administrators.
2. a. Write about Database Languages.(8+12 marks)

   b. Explain the components of a Database System with a supporting diagram.
3. Explain the features of Entity-Relation Model and conversion of ER diagrams into Relational Schemas.
4. What are the features of a good relational design? Explain various normal forms.
5. Explain Server system architectures and Distributed systems.
6. Explain Set operations and Aggregate functions supported by SQL using sample queries.
7. Explain various types of Joins and Integrity constraints in SQL.
8. What are Views in SQL? Explain Triggers and Functions in SQL with examples.

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R-17

Code:3304/BL

Faculty of Science

B.Sc (Computer Science) II-Year, CBCS-III Semester Backlog Examinations, January 2021

PAPER: DATA STRUCTURES AND FILE PROCESSING

Time: 2 Hours Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. Discuss the ways of implementations of Stack.
2. Convert the expression (X*3+Y*3+Z*3) / (X+Y+Z) into postfix
3. Explain about the all operation performed on double linked list.
4. Explain in detail the operations performed on Queues.
5. Write about the binary tree traversals.
6. Explain Bubble sort and Insertion Sort will work trace them with suitable example.
7. Write about the collision resolution strategies
8. Discuss in detail about indexed sequential file operation.

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R-16

Code:3304/BL

Faculty of Science

B. Sc (Computer Science) II-Year, CBCS-III Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: DATABASE MANAGEMENT SYSTEM

Time: 2 Hours Max Marks: 80

I. Answer any **Four** of the following questions (4x20=80 Marks)

1. What are database languages? Explain about database design in detail.
2. What are database-system applications? Explain database architecture in detail.
3. Give an overview of design process. Explain about reduction to relation schemas.
4. Explain about algorithms for decomposition in detail.
5. Discuss in detail about parallel systems and distributed systems.
6. Consider the employee database given below, where the primary keys are underlined. Give an expression in SQL for each of the following queries.

   employee (employee name, street, city)
   works (employee name, company name, salary)
   company (company name, city)
   manages (employee name, manager name)

   i. Find the names and cities of residence of all employees who work for "First Bank Corporation".
   ii. Find the names, street addresses, and cities of residence of all employees who work for "First Bank Corporation" and earn more than $10,000.
   iii. Find all employees in the database who do not work for "First Bank Corporation".
   iv. Find all employees in the database who earn more than each employee of "Small Bank Corporation".
   v. Assume that the companies may be located in several cities. Find all companies located in every city in which "Small Bank Corporation" is located.
   vi. Find the company that has the most employees.
   vii. Find those companies whose employees earn a higher salary, on average, than the average salary at "First Bank Corporation".
7. Explain about intermediate constraints of intermediate SQL with examples.
8. Explain the following:

   i) Triggers ii) OLAP

R-17

Code:3304_R17/BL

Faculty of Science

B. Sc (Computer Science) II-Year, CBCS-III Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: DATA STRUCTURES AND FILE PROCESSING

Time: 2 Hours Max Marks: 80

I. Answer any **Four** of the following questions (4x20=80 Marks)

1. Define Stack. Discuss the representation of a Stack using Arrays.
2. Write an algorithm to convert Infix Expression to Postfix Expression.
3. What are the applications of Queue? Explain in detail.
4. Write a algorithms to create and display the Double Linked List.
5. Discuss in detail about Binary Tree.
6. Explain Bubble Sort and Selection sort with examples.
7. Explain various Collision Resolution Strategies.
8. Differentiate Indexed Sequential File Organization and Linked Organization.

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R-19

Code: 1204/BL

Faculty of Commerce

B.Com. I-Year, CBCS - I Semester Backlog Examinations, January 2021

(For B.Com.CA)

PAPER: FUNDAMENTALS OF INFORMATION TECHNOLOGY

Time: 1Hour 30 Min

Max Marks: 50

I. Answer any FIVE of the following questions (5x10=50 Marks)

1. Write about generations of computers in detail.
2. Explain various Output Devices.
3. Explain about Computer Number System with suitable examples.
4. Explain various Secondary storage devices.
5. Explain the features of Machine, Assembly and High Level Language.
6. Explain the features of Word Processing Application.
7. Explain the functions of an Operating System.
8. Explain the features of Batch Processing Operating Systems.
9. Explain various LAN Topologies.
10. Explain various Computer Network Protocols.

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R-16

Code: 5304/BL

Faculty of Sciences

B. Sc (Computer Science) III-Year, CBCS-V Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: PROGRAMMING IN JAVA

Time: 2 hours

Max Marks: 60

I. Answer Any **Three** of the following questions (3x20=60 Marks)

1. How to declare Arrays in Java? Write a Java program to find matrix multiplication.
2. What are Interfaces? Compare and contrast between Abstract Classes Vs Interface.
3. What is Exception? How to handle Exceptions? Write a program to show the use of try, catch, throw and throws keywords.
4. Create a Thread by inheriting the Thread Class and explain the stages of a Thread.
5. Write a java program to create AWT application using Containers and Layouts.
6. How to establish a JDBC connection? Explain the types of JDBC Drivers.

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552

R-17

Code: 1304/BL

Faculty of Sciences

B. Sc (Computer Science) I-Year, CBCS-I Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: PROGRAMMING IN C

Time: 2 Hours Max Marks: 80

I. Answer any FOUR of the following questions (4x20=80 Marks)

1. What is a computer? Classify computers. Explain about memory hierarchy and operation overview of a CPU.
2. What is the structure of a C program? Explain C tokens, keywords and data types in detail.
3. Explain about special control statements with suitable examples.
4. Write the C code for the following problems:
   i) Program to print pyramid using numbers
   ii) Program to count the number of Vowels, Consonants and so on
5. Explain the following concepts with examples:
   i) Arrays and pointers
   ii) Pointers and strings
6. Write the following C programs using recursion:
   i) Generating Fibonacci series
   ii) Find GCD
7. Explain the following with examples:
   i) Declaring a structure and union its members
   ii) Array of structures
8. Write the following programs:
   i) C program to write all the members of an array of structures to a file using fwrite(). Read the array from the file and display on the screen.
   ii) C program to read name and marks of n number of students and store them in a file.

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R-16

Code:3304/BL

Faculty of Science

B.Sc (Computer Science) II-Year, CBCS-III Semester Backlog Examinations, January 2021

PAPER: DATABASE MANAGEMENT SYSTEM

Time: 2 Hours | Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. Explain the advantages of Database Systems over File Systems. Also write about various types of Database Users and Administrators.
2. a. Write about Database Languages.(8+12 marks)

   b. Explain the components of a Database System with a supporting diagram.
3. Explain the features of Entity-Relation Model and conversion of ER diagrams into Relational Schemas.
4. What are the features of a good relational design? Explain various normal forms.
5. Explain Server system architectures and Distributed systems.
6. Explain Set operations and Aggregate functions supported by SQL using sample queries.
7. Explain various types of Joins and Integrity constraints in SQL.
8. What are Views in SQL? Explain Triggers and Functions in SQL with examples.

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R-17

Code:3304/BL

Faculty of Science

B.Sc (Computer Science) II-Year, CBCS-III Semester Backlog Examinations, January 2021

PAPER: DATA STRUCTURES AND FILE PROCESSING

Time: 2 Hours | Max Marks: 80

I. Answer any **FOUR** of the following questions (4x20=80 Marks)

1. Discuss the ways of implementations of Stack.
2. Convert the expression (X*3+Y*3-Z*3) / (X+Y+Z) into postfix
3. Explain about the all operation performed on double linked list.
4. Explain in detail the operations performed on Queues.
5. Write about the binary tree traversals.
6. Explain Bubble sort and Insertion Sort will work trace them with suitable example.
7. Write about the collision resolution strategies
8. Discuss in detail about indexed sequential file operation.

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R-16

Code: 5304/BL

Faculty of Science

B. Sc (Computer Science) III-Year, CBCS-V Semester

Backlog Examinations –Sep/Oct, 2020

PAPER: WEB PROGRAMMING

Time: 2 hours

Max Marks: 60

I. Answer any **Three** of the following questions (3x20=60 Marks)

1. Explain how to create tables and frames in HTML using example program.
2. What are Cascading Style Sheets? Explain Embedded Style sheets with example program.
3. Explain the operators in JavaScript.
4. Explain the control structures in JavaScript.
5. Describe different Objects in JavaScript.
6. Describe some events in JavaScript Event Model.

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