

**VIDYA VIHAR COLLEGE**  
**MAULANA MAZHARUL HAQUE ARABIC & PERSIAN UNIVERSITY, PATNA**

**BCA 2<sup>nd</sup> YEAR**

**INTERNAL ASSIGNMENT**

**SESSION : 2022-25**

**PAPER : IX**

**PROGRAMMING IN C++**

**[MAX MARKS : 20]**

The question paper is in consists two sections A & B. Section - A consists 05 short answer type questions. Each question is of 02 marks (word limit 100 words). Attempt all questions. Section - B consists of 02 descriptive type question. Each question is of 05 marks (word limit 300 words). Attempt all questions. Use graphs, charts and diagrams to explain your answer if necessary.

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**Section : A**

**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 2 = 10]**

- 1> What is structure in C++?
- 2> What is method overloading?
- 3> Explain Friend function with example?
- 4> Explain reference variable and also Inline function in C++?
- 5> Explain scope resolution operator in C++?

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> Discuss the Call by value and Call by reference concept of C++ with example?
  
- 2> Write a program to sort a number of strings using bubble sort. Input is a number of strings and the output is the sorted list based on the length of strings.  
For example:- If input is – jyoti, sareeka, pawan,, anisha, ram, savita.  
Then the output is:- ram, pawan, jyoti, anisha, savita, sareeka.

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**PAPER : X**

**SYSTEM ANALYSIS AND DESIGN**

**[MAX MARKS : 20]**

The question paper is in consists two sections-A & B. Section-A consists of 05 short answer type questions. Each question is of 02 marks (word limit 100 words). Attempt all questions. Section-B consists of 02 descriptive type questions. Each question is of 05 marks (word limit 300 words). Attempt all questions. Use graphs, charts and diagrams to explain your answer if necessary.

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**Section : A**

**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 2 = 10]**

- 1> What is System Analysis?
- 2> What is System Design?
- 3> Explain IS?
- 4> What is Feasibility Study?
- 5> Explain the terms---
  - i> Data Dictionary
  - ii> Decision Table
  - iii> Decision Tree

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> What is ER model? Explain the types of attributes in ER model diagram and also draw the ER diagram for Employee entity?
- 2> Explain the terms in detail:-
  - i> File Organization
  - ii> File Access
  - iii> Testing and Quality Assurance
  - iv> Integration testing and system testing
  - v> Criteria for software selection

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**PAPER : XI**

**DATA STRUCTURE**

**[MAX MARKS : 20]**

The question paper is in consists two sections-A & B. Section-A consists of 05 short answer type questions. Each question is of 02 marks (word limit 100 words). Attempt all questions. Section-B consists of 02 descriptive type questions. Each question is of 05 marks (word limit 300 words). Attempt all questions. Use graphs, charts and diagrams to explain your answer if necessary.

**Section : A**

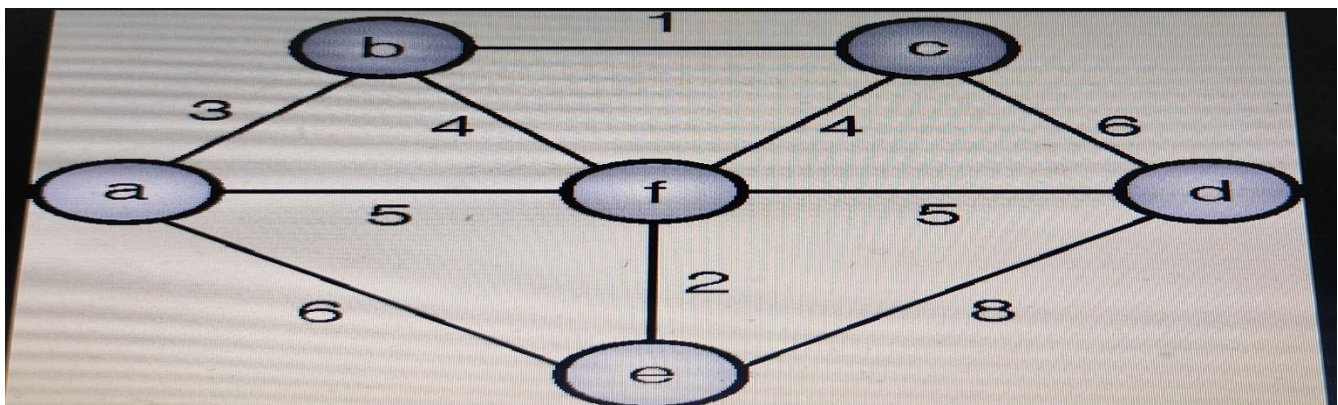
**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 2 = 10]**

- 1> What is Time Complexity and Space Complexity in Data structure?
- 2> What is meant by AVL?
- 3> What is Binary Search?
- 4> Define Linked List and its types.
- 5> What is Sparse Matrix in Data Structure?

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> What is Heap tree. And solve the Min and Max Heap Tree.  
23, 10, 15, 19, 33, 05, 18
- 2> What is Spanning Tree. And solve Kruskal's Algorithm in this question.



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**SESSION : 2022-25**

**PAPER : XIII      DATA COMMUNICATION & COMPUTER NETWORK**

**[MAX MARKS : 20]**

The question paper is in consists two sections-A & B. Section-A consists of 05 short answer type questions. Each question is of 02 marks (word limit 100 words). Attempt all questions. Section-B consists of 02 descriptive type questions. Each question is of 05 marks (word limit 300 words). Attempt all questions. Use graphs, charts and diagrams to explain your answer if necessary.

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**Section : A**

**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 02 = 10]**

- 1> What is Data Communication?
- 2> Explain Analog and digital Communication?
- 3> Define Data communication using Modem?
- 4> Explain one basic component of network?
- 5> What is SSTM?

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> What is error detection and correction and also explain all detection methods with example (LRC, VRC, CRC, Checksum)?
- 2> What is TCP/IP Model and also explain its layer's in detail?

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**INTERNAL ASSIGNMENT**

**SESSION : 2022-25**

**PAPER : XIV      RELATIONAL DATABASE MANAGEMENT SYSTEM**

**[MAX MARKS : 20]**

The question paper is in consists two sections-A & B. Section-A consists of 05 short answer type questions. Each question is of 02 marks (word limit 100 words). Attempt all questions. Section-B consists of 02 descriptive type questions. Each question is of 05 marks (word limit 300 words). Attempt all questions. Use graphs, charts and diagrams to explain your answer if necessary.

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**Section : A**

**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 2 = 10]**

- 1> What is Database Management System?
- 2> What is Data Model?
- 3> Explain feature and component of SQL?
- 4> What is DML in SQL?
- 5> What is Joins and how Joins is use in SQL?

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> Explain Normalization and its types in detail.( 1NF, 2NF,3NF,BCNF)
- 2> What is Data Constraints. Explain each types of data constraints (Primary, foreign, Not null, null, Default, Unique, Candidate, Check) with example?

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**PAPER : XV**

**VISUAL BASIC . NET**

**[MAX MARKS : 20]**

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**Section : A**

**1. Short answer type questions (maximum limit 100 words). Attempt all questions. [05 x 02 = 10]**

- 1> What is .Net Framework?
- 2> Briefly explain CTS in vb.net?
- 3> Write a vb.net program that display customer names and their salary (use array and for loop) call customer name and his/her salary must be sequential.
- 4> What is sub procedure in vb.net with example?
- 5> What is operator precedence in vb.net with example?

**Section : B**

**2. Descriptive type questions (maximum limit 250 - 300 words). Attempt all questions. [02 x 5 = 10]**

- 1> Define Label control and Button control in vb.net. Also create a program to display the label control in vb.net. And create a program to display a message on the window form using the button control in vb.net?
- 2> What is Event Handling and its types with proper example?