

N.B.:(1) Question No 1 is Compulsory.

(2) Attempt any three questions out of the remaining five.

(3) All questions carry equal marks.

(4) Assume suitable data, if required and state it clearly.

- Q.1** Attempt the following [20]
- a** Write a C program to convert binary number into decimal number. 5
  - b** What is the concept of Array in C? 5
  - c** Write a C program to reverse the digits of given number.(eg.If given number is 479 then its reverse is 974) 5
  - d** Differentiate between Structure and Union. 5
- Q.2** Solve any Two [20]
- a** Write a program to find the second largest element of an array. 10
  - b** Explain any five string functions with example. 10
  - B** Write a C program to display following pattern using nested loops. 10
- ```
4444
333
22
1
```
- Q.3** Solve any Two [20]
- a** What is recursion? Write a program using recursion to display Fibonacci series using recursion. 10
  - b** Explain Multidimensional array with example 10
  - c** Write an algorithm for solving quadratic equation. 10
- Q.4** Solve any Two [20]
- a** Explain call by value and call by reference with example 10
  - b** What is Flowchart? Draw all basic symbols of flowchart and write its purpose. 10
  - c** Explain ant two types of operators in C 10
- Q.5** Solve any Two [20]
- a** Write a C program to count Lower Case, Upper Case, Numbers and Spaces from a given statement. 10
  - b** Explain switch statement. 10
  - c** Explain of C program construct, Explain use of Header File. What if we do not use statement `#include <stdio.h>`. 10
- Q.6** Write short note on [20]
- a** Control structures in C 5
  - b** Formatted i/o statement 5
  - c** Files in C 5
  - d** Applications of C programming. 5

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