

22226

22223

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following:** **10**
- a) List the symbols used in flowchart. (any four)
 - b) Give the use of printf().
 - c) Give the syntax of for loop.
 - d) Define array.
 - e) List any two string handling function.
 - f) Explain pointer with example.
 - g) Define algorithm.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Write a 'C' program to find greatest number among three numbers.
 - b) Explain Go-to statement with example.
 - c) Write 'C' program to add two distances given in kilometer using structure.
 - d) Write a program to calculate sum of all elements stored in given array using pointers.
- 3. Attempt any THREE of the following:** **12**
- a) Explain use of comment in C language.
 - b) Explain any two math function with syntax and give example of each.
 - c) Describe use of header files in C language.
 - d) Explain call by value with an example.
- 4. Attempt any THREE of the following:** **12**
- a) Write a 'C' program to determine whether a given number is prime or not and also draw flowchart for this program.
 - b) Explain formatted input-output function with example in C.
 - c) Explain do-while loop in C with proper example.
 - d) Write a 'C' program for multiplication of two 3×3 matrices.
 - e) Write a 'C' program to generate Fibonacci series for a given number using recursion.

5. Attempt any TWO of the following:**12**

- a) Write a 'C' program to print following pattern

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

- b) Explain how to initialize and define structure in 'C' programming.
- c) Develop a 'C' program to find sum of all elements stored in given array using pointers.

6. Attempt any TWO of the following:**12**

- a) Write a 'C' program to find the largest and smallest number in a given array.
- b) Write a 'C' program to find factorial of a number using recursion.
- c) Write a 'C' program to demonstrate access structure members using pointer.
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