22374

12425 03 Hours / 70 Marks Seat No.

- Instructions (1) All Questions are Compulsory.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.
 - (5) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (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 different operator used in C.
- b) Define array with suitable example.
- c) State the syntax to declare pointer variable with example.
- d) List features of 'C' preprocessor.
- e) Draw and Label symbols used in flow chart. (Any two)
- f) State any four math library functions with its use.
- g) State file inclusive directive and its importance in C.

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| 2. | | Attempt any THREE of the following: | 12 |
| | a) | Explain increment and decrement operator with example. | |
| | b) | Explain do-while loop with example. | |
| | c) | Explain any four string functions with example. | |
| | d) | List the categories of functions and explain any one with example. | |
| 3. | | Attempt any THREE of the following: | 12 |
| | a) | State four arithmetic operations on pointer with example. | |
| | b) | Differentiate between Macro and function. | |
| | c) | Develop a simple 'C' program for addition and multiplication of two integer numbers. | |
| | d) | State the significance of 'break' and 'continue' statements in 'C' | |
| | e) | Distinguish between call by value and call by reference. (Any four points) | |
| 4. | | Attempt any THREE of the following: | 12 |
| | a) | Write a program to accept a string as input and determine its length without using string function. | |
| | b) | Develop a program to find diameter, circumference and area of circle using function. | |
| | c) | Develop a program to swap two numbers using pointer and add swaped numbers also print their addition. | |
| | d) | Explain the use of conditional operator with example. | |
| | e) | Write a program to accept the value of year as input and print whether it is a leap year or not. | |
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| 5. | Attempt any TWO of the following: | 12 |
| a) | Write a program to calculate sum of all even numbers between 1 to 100 | |

- b) Write a program for addition of two 3×3 matrices.
- c) Develop a program to find factorial of a number using recursion.

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

12

- a) Write a program to print day of the week name by taking number from 1 to 7 using switch case.
- b) Design a program in 'C' to read the n numbers of values in an array and display it in reverse order.
- Write a program to declare structure student having data member rollno, name and percentage. Accept data for two students and display it.