

312303

12425

03 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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following : 10
- Write the syntax of do while loop.
 - Define token and identifier.
 - Define array and Give its two characteristics.
 - Explain '*' and '&' operators used in pointer.
 - Write the syntax and use sqrt() function of <math.h> header file.
 - List any four relational operators.
 - Draw and label different symbols used in flowchart.

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Write a program to declare structure employee having data members name, age, street and city. Accept data for two employees and display it.
 - b) Differentiate between while and do while loop.
(Write four points)
 - c) Write algorithm and draw flowchart for finding largest number among three numbers.
 - d) Explain recursion with example.
- 3. Attempt any THREE of the following :** **12**
- a) Explain strlen() and strcat() string handling function from standard library.
 - b) Define pointer. How to declare and initialize pointer ?
 - c) Explain arithmetic and shift operators with example.
 - d) Explain declaration and initialization of one dimensional array using example.
- 4. Attempt any THREE of the following :** **12**
- a) Write a program to calculate sum of all even numbers between 1 to 20.
 - b) Explain getchar(), putchar(), malloc(), calloc() functions.
 - c) Write a program to accept two integer from user and perform addition, subtraction, multiplication and division operations using pointer.
 - d) Give any four difference between call by value and call by address.
 - e) Draw the flowchart for checking given number is divisible by 5 or not.

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

- a) Write a program using for loop to print

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*  
* *  
* * *  
* * * *
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- b) Define structure. Give its features. Explain how it can be declared and initialized. Explain Type def and enum.
c) Write a program to find factorial of n numbers using function.

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

- a) Write a program to print fibonacci series starting from 0 to 1.
b) Write a program to print values of variables and their addresses.
c) Write a program to sort elements of an array in ascending order.
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