23242

3 Hours / 70 Marks Seat No.

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.

Marks

1. Attempt any FIVE of the following : **10**

(a) Draw and label any two different symbols used in flow chart.

(b) State two differences between do while and while loop.

(c) Give the syntax of if-else statement.

(d) List the two mathematical functions used in C programming.

(e) Define pointer and state the use of pointer.

(f) Define structure.

(g) Give the syntax to declare a pointer variable with example.

2. Attempt any THREE of the following : **12**

(a) Explain switch case statement with example.

(b) State any four datatypes with their range.

(c) Define Array. State any two advantages of array.

(d) Explain strcat ( ) and strlen ( ) function with example.

3. **Attempt any THREE of the following :** 12

(a) Write an algorithm and draw flow chart for addition of two numbers.

(b) Explain for loop with example.

(c) Compare call by value and call by reference.

(d) Explain declaration of structure with example.

4. **Attempt any THREE of the following :** 12

(a) Explain Arithmetic operators with example.

(b) Write a program to display largest number among three numbers.

(c) Write a program to access the array elements using pointer.

(d) Describe declaration and initialization of two dimensional array.

(e) Write 'C' program to create a structure with members as day, month and year. Assign initial values to that structure and display it.

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

(a) Write a program to find factorial of number.

(b) Write a program to add two numbers using function.

(c) Write a 'C' program to find largest number from an array of 10 numbers.

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

(a) Write a program for addition of two 3×3 matrix.

(b) Explain recursive function with example.

(c) Declare a structure book having elements as book_number, book_title, book_price for one book using 'C' programming.

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