

22218

# 12223

# 3 Hours / 70 Marks

Seat No.		
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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.

Marks

## 1. Attempt any FIVE:

 $5 \times 2 = 10$ 

- (a) List any four relational operators.
- (b) Give the syntax of switch case statement.
- (c) State the use of break and continue statement.
- (d) Define the term function.
- (e) State any two advantages of pointer.
- (f) State the use of '&' and '\*' operators used in/with pointer.
- (g) Write any two features of structure.

# 2. Attempt any THREE:

 $3 \times 4 = 12$ 

- (a) State the use of %d and %f. Also write example with printf statement to show use of mentioned format specifiers.
- (b) Compare while and do-while loop (4 points).
- (c) Define the term array. Give Syntax to declare an array. Also write two advantages of array.
- (d) Differentiate between call by value and call by reference method for passing parameter (4 points).



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## 3. Attempt any THREE:

 $3 \times 4 = 12$ 

- (a) Describe with suitable example difference between pre-increment and post-increment operators.
- (b) Describe declaration and initialization of two-dimensional array with suitable example.
- (c) Describe pointer arithmetic with any two operations.
- (d) Describe the use of Enumerated data type with example.

#### 4. Attempt any THREE:

 $3 \times 4 = 12$ 

- (a) Write an algorithm and draw flowchart to find whether number entered is even or odd.
- (b) Write a C program to check the number entered is positive or negative and display message accordingly.
- (c) Write a 'C' program to add two  $3 \times 3$  matrices.
- (d) Write a 'C' program using pointer to swap the value of two integer numbers.
- (e) Describe with suitable example initializating and accessing structure members using pointer.

#### 5. Attempt any TWO:

 $2 \times 6 = 12$ 

- (a) Describe the use of nested if-else statement with syntax and example.
- (b) Write a 'C' program to read string from keyboard and find whether it is palindrome or not.
- (c) Write a 'C' program to display Fibbonacci series using recursion.

#### 6. Attempt any TWO:

 $2 \times 6 = 12$ 

- (a) Write a 'C' program to accept two strings from user. Display length of both the strings. Also concatenate two strings and display the output.
- (b) Write a 'C' program to accept two numbers. Write a function add() to display addition of entered numbers and function mult() to display multiplication of entered numbers.
- (c) Write a 'C' program to declare structure 'employee' having data members as empid, empname and empaddress. Accept this data for 5 employees and display it.

