22218

12425

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) Define the term (i) Token (ii) Keyword.

(b) Give Syntax of do-while statement.

(c) State the use of break and continue statement.

(d) Define the term function.

(e) List any four advantages of pointer.

(f) Write program to find product of two numbers using pointer.

(g) Define structure with suitable example.

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

(a) Explain any four data types used in C with example.

(b) State the use of 'for' loop with syntax and draw flow chart of it.

(c) Explain the use of the following function with syntax :

(i) strcmp ( )

(ii) strlen ( ).

(d) Differentiate between call by value and call by reference methods for passing parameter.

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

(a) Enlist any four types of arithmetic operators used in C and give one example of each.

(b) Explain declaration and initialization of two-dimensional array with example.

(c) Explain meaning of following statement with reference to pointers :

a = &b; *a = b; int*a, b; b = 20;

(d) Explain array of structure with example.

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

(a) Write an algorithm and flow chart to swap the contents of two variables.

(b) Define array and explain how elements of array can be accessed.

(c) Write a program to perform addition, subtraction, multiplication and division using switch case statement for given data.

(d) Explain recursive function with suitable example.

(e) Write a 'C' program to declare a structure 'student' with members as Roll no., name and marks. Accept and display data for one instance.

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

(a) Write a program to add two 3×3 matrices.

(b) (i) Differentiate between while ( ) and do while ( ) (3 points).

(ii) Write a program to check whether given number is Positive or Negative.

(c) Write a 'C' program to add two numbers using function.

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

(a) Declare structure 'circle' containing data members as radius, area, perimeter. Accept radius for one variable from user and find out perimeter and area.

(b) Write a program to print table of a given number.

(c) Write a 'C' program to accept two numbers. Write a function add ( ) to display addition of entered number. Write function multiply ( ) to display multiplication of entered number.