MCA/D-16
PROGRAMMING IN C
Paper : MCA-14-11

Time Allowed: 3 Hours   Maximum Marks: 80

Note: Attempt five questions in all. Selecting at least one question from each Unit.
Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) Describe with diagram the body of a "C Program".

    (b) Discuss the features of elementary data types (name, format specifier,
         memory requirement, range of permitted values, operations performed)

    (c) List and explain the purpose with syntax of at least 05 inbuilt functions.

    (d) Explain the terms : declaration of function, definition of function, calling
         function, called function, calling statement with respect of functions.

    (e) Differentiate between variable and pointer type variable, (declaration syntax,
         purpose)

    (f) List and explain the purpose of any 5 predefined string functions.

    (g) What is the purpose of Unions?

    (h) What do you mean by Macro? Explain with example.

Unit- I

2. Explain the purpose and syntax with example of different storage classes for
    declaring variables.

3. Explain the purpose of header files by creating a header file which has definition
    of function for finding the square of an integer.

Unit-II

4. Explain various conditional statements with syntax and example.

5. Write a program to find the sum of all prime numbers between a range 2 to 50

Unit-III

6. Write a program to find square of all elements of array by passing the array to function and return the complete array to the main function, print the resultant array in main function.

7. Explain the purpose and utility of array of pointers

Unit-IV

8. Differentiate between Structure and Union.

9. Explain the various types of Files and File related functions.