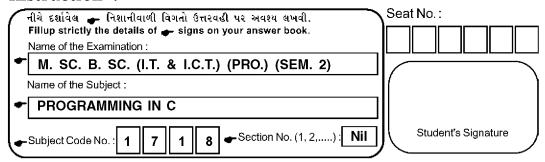# AC-1718

M. Sc. B. Sc. (I.T. & I.C.T.) (Programme) (Sem. II) Examination
April / May – 2015
Programming in C

Time : **3 Hours**]   [Total Marks : **70**

Instruction :

1   Answer following questions: (Any Six)   18

(1)   What do you mean by control string in Scanf() function? Explain various control characters used in control string for different datatype.

(2)   Explain operator associativity and precedence in C with example.

(3)   Explain execution flow of C program.

(4)   Explain pre increment and post increment operator with example.

(5)   Explain various ways to input string in C.

(6)   Differentiate between static and dynamic initialization of an array with example.

(7)   How will you get size of a variable in C? Is there any difference in size of signed and unsigned integer?

(8)   Differentiate between break and continue statement.

2   Answer following questions: (Any Three)   18
    (1)   Explain strstr(), strchr(), strrchr() and strncat() function
           with example.
    (2)   What do you mean by argc and argv in main (). Explain
           with example.
    (3)   What do you mean by dynamic memory allocation in
           C? Explain various functions available in C for dynamic
           memory allocation with example.
    (4)   What is recursion? Write a program to find factorial
           value of an integer by using recursion. Also discuss
           limitations of using recursion.

3   Answer following questions: (Any Three)   18
    (1)   How will you restrict user from modifying data passed
           in user defined function. Explain with example.
    (2)   Explain nested structure with example. What is the
           difference between structure and union?
    (3)   Explain different types of variable in C with its scope
           and visibility.
    (4)   What is file in C? When it is used? Explain various mode
           in which file can be opened? Write a program to copy
           data of one file into another file.

4   Answer following questions: (Any four)   16
    (1)   Write UDF to find smallest element of an array of 10
           integers.
    (2)   Write UDF to check whether a given string is palindrome
           or not.
    (3)   Write a program to sort an array of 10 integers.
    (4)   Write a program to take number from user and store
           it in file "Data". Read the data of file "Data" and store
           all even numbers in file "Even" and odd number in file
           "Odd".
    (5)   Write a program to multiply two numbers by using
           recursion.

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