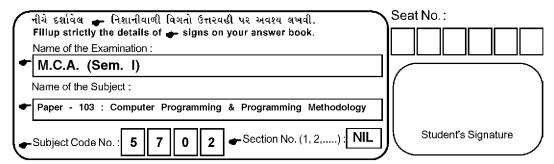# A-5702

M.C.A. (Sem. I) Examination

March / April - 2015

Paper - 103 : Computer Programming & Programming Methodology

Time : 3 Hours]   [Total Marks : 70

Instruction :

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **M.C.A. (Sem. I)**

Name of the Subject :

☛ **Paper - 103 : Computer Programming & Programming Methodology**

☛ Subject Code No. : | 5 | 7 | 0 | 2 | ☛ Section No. (1, 2,......) : **NIL**

Seat No. :

Student's Signature

1   Do as directed : (any two)   14

   (a)   Describe the four basic data types. How could we extend the range of values they represent?

   (b)   Describe the purpose of commonly used conversion characters in a scanf( ) function.

   (c)   Write a program to determine whether a given number is 'odd' or 'even' and print message NUMBER IS EVEN or NUMBER IS ODD. Do it with else option and without using else.

2   Do as directed : (any two)   14

   (a)   Explain call by value using proper example.

   (b)   Explain type casting and type promotion using proper example.

   (c)   Describe the usage and limitations of using getchar and scanf function for reading strings.

A-5702]   1   [Contd...

3 Do as directed : (any two) **14**

    (a)   Write a 'C' program that reads a floating-point number and then displays the right-most digit of the integral part of the number.

    (b)   Distinguish between the following:

        (i) Automatic and static variables.

        (ii) Scope and visibility of variables.

    (c)   State the problems we are likely to encounter when we pass global variables as parameters to functions.

4 Do as directed : (any two) **14**

    (a)   Give the general format of a structure definition. Also explain how to declare structure variables and how to access structure members?

    (b)   Define: pointer. How is a pointer initialized? What are the arithmetic operators that are permitted on pointers?

    (c)   Explain any 4 file handling functions using proper example.

5 Do as directed : **14**

    (a)   Explain any 7 string built-in functions using proper example.

    (b)   Describe the characteristics and purpose of escape sequence characters.

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