KA-3704

First Year B.C.A. (Sem. I) (CBCS) Examination
September / October – 2012
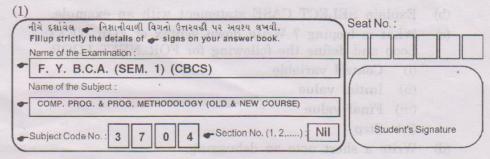### Computer Programming & Programming Methodology
(Old & New Course)

Time : Hours]   [Total Marks :

Instructions :

(1)

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

Name of the Examination :

✐ **F. Y. B.C.A. (SEM. 1) (CBCS)**

Name of the Subject :

✐ COMP. PROG. & PROG. METHODOLOGY (OLD & NEW COURSE)

✐ Subject Code No. : | 3 | 7 | 0 | 4 | ✐ Section No. (1, 2,......) : | Nil |

Seat No. :

Student's Signature

(2) Figures on right indicate marks.

(3) Do not interchange option

1   Answer the following in short :   10

  (i)   How can we convert a number to a string ?

  (ii)   What is computer program ?

  (iii) What is the range of values for BASIC variables that is declared of the data type LONG ?

  (iv)   What do you mean by self replacement technique.

  (v)   Write LET statement for

$$\sqrt{\left(Y^2+(3AB)\right)/2}$$

  (vi)   Write different ways of writing comments on BASIC program.

  (vii) Can we change the value of control variable in FOR LOOP ?

  (viii) Give difference between forward and backward jumping.

  (ix)   Write the purpose of ABS ( ) and SGN ( ) function.

  (x)   What is syntax error ? Give an example.

2   Explain the following any three :   **15**

    (a)   Different levels of programming language.

    (b)   Arithmetic operator and order Evaluation.

    (c)   Read, Data and Restore

    (d)   Benefits and limitations of drawing flowchart. Also draw flowchart to find whether a given number is odd and even.

3   Attempt any three :   **15**

    (a)   Write a note on various methods to store a value in variable.

    (b)   Explain SELECT CASE statement with an example.

    (c)   What is looping ? Write down syntax of FOR..NEXT Loop and define the following for FOR..NEXT LOOP

       (i)   Control variable

       (ii)   Initial value

       (iii)   Final value

       (iv)   Step

    (d)   Write a short note on debugging.

4   (a)   Find out any error (if any) other wise give output for   **5** following code.

       (i)   PRINT SQR (As (("delight"))

       (ii)   PRINT SGN (LEN("MOUSE") - LEN ("COMPUTER"))

       (iii)   A = 4.6

           PRINT LEN (A)

       (iv)   PRINT LEFT$ ("WINTER", 3) + RIGHT$ ("SHADOWS", 4)

       (v)   A = 10

           B = 20

           PRINT STR$ (A) + STR$ (B)

           PRINT A+B

    (b)   What do you mean by double subscripted variable ?   **4** Discuss in detail.

OR

    (b)   What is sorting ? Explain with example.   **5**

    (c)   Differentiate (any two)   **6**

       (i)   Compiler and Interpreter

       (ii)   STOP and End

       (iii)   ASC ( ) and CHR$ ( )

5 Attempt any three : 15

   (a) Write a program to display all odd numbers between two limits.

   (b) Write a program to find ROOTS of Quadratic Equation

   (c) Write a program to calculate the value of Fibonacci sequences for n term.

   (d) Write a program to display whether M by N matrix is an identity matrix or not.

   (e) Write a program to find addition of all positive and negative numbers from list of N numbers.