



**SB-1404**

**First Year B. C. A. (Sem. I) Examination**  
**March / April – 2011**  
**Paper - 104 : Computer Programming & Programming Methodology**

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दशांशविक निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.		Seat No. :
Name of the Examination : <b>F. Y. B. C. A. (Sem. 1)</b>		<input type="text"/>
Name of the Subject : <b>104 : Computer Programming &amp; Programming Methodology</b>		<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;">           Student's Signature         </div>
Subject Code No. : <b>1 4 0 4</b>	Section No. (1, 2,.....) : <b>Nil</b>	

- (2) Figure on right indicates marks.
- (3) Do not interchange option.

1 Answer the followings in short : 10

- (1) How can we convert a number to a string ?
- (2) What is computer program ?
- (3) What is the range of values for BASIC variable that is declared of the data type LONG ?
- (4) What do you mean by self-replacement technique ?
- (5) Write LET Statement for the following :  

$$\sqrt{Y^2 + (3 AB))/2}$$
- (6) Write different ways of writing comments in BASIC program.
- (7) Can we change the value of control variable in FOR Loop ?
- (8) Give difference between forward and backward jumping.
- (9) Write the purpose of ABS() and SGN() function.
- (10) What is syntax error ? Give an example.

2 Explain following : (any three) 15

- (a) Different levels of programming language.
- (b) Arithmetic operator and order of evaluation.
- (c) Read, Data and Restore.
- (d) Benefits and limitations of drawing flowchart.

- 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 in relation to a FOR ...NEXT loop :
    - (i) Control Variable
    - (ii) Initial Value
    - (iii) Final value
    - (iv) Step
  - (d) Write a short note on debugging.
- 4** Do as directed : **15**
- (a) Find out error (if any), otherwise give output for the following code : (any five)
    - (i) PRINT ASC ("hello")
    - (ii) PRINT SQR (LEN (MID\$ ( "GUJARAT" , 2, 3 )))
    - (iii) A=2.3  
PRINT LEN(A)
    - (iv) PRINT 8\3
    - (v) PRINT SGN (LEN( "VAPI" ) –LEN ( "SURAT" ))
    - (vi) PRINT LEFT\$ ( "SURAT" ,3) + RIGHT\$ ("RAJ",2)
  - (b) What do you mean by "double subscripted variables" ? Discuss its applications.
- OR**
- (b) What is sorting ? Explain with example.
  - (c) Write one or more basic statements :
    - (i) Dimension an array A of 100 cells.
    - (ii) Dimension 100×200 matrix X.
    - (iii) Calculate  $a(1,1) * a(2,2) * a(3,3) \dots a(M,M)$   
(only code)
- 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 terms.
  - (d) Write a program to display whether input M by N matrix is an identity matrix or not.
  - (e) Write a program to merge the contents of two one dimensional arrays in third array.