



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)

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)

Name of the Subject :
104 : Computer Programming & Programming Methodology

Subject Code No. : **1 4 0 4** Section No. (1, 2,.....) : **Nil**

Seat No. :

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Student's Signature

- (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.

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[Contd...

- 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.
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