



N-1404

First Year B. C. A. (Sem. I) Examination

October / November - 2011

Paper-104 : Computer Programming & Programming Methodology

Time : 3 Hours]

Total Marks : 70

Instruction :

नीचे दशांशिक निशानवाली विस्तृत उत्तरवही पर अवश्य कलमवी.
Fillup strictly the details of signs on your answer book.

Seat No. :

Name of the Examination :
 F. Y. B. C. A. Sem. I

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

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

Student's Signature

1 Answer the followings in short (any ten) 10

- (i) Explain the use of connector symbol in a flow chart.
- (ii) What is the range of values of BASIC variable that is declared of the data type LONG ?
- (iii) What is the use of LOCATE statement ?
- (iv) What do you mean by relational expression ? Give example.
- (v) Explain MOD operator of BASIC.
- (vi) Write the purpose of SQR and ABS function.
- (vii) Define source program.
- (viii) What is subscript ? Can we give subscript negative ?
- (ix) How comma (,) differs from semicolon (;) in PRINT statement ?
- (x) Can we store name and number in the same array ?
- (xi) Explain the use of RESTORE statement.
- (xii) What is the goal of program testing ?

2 Attempt any three :

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- (a) What do you mean by program efficiency ? Discuss any one source of program efficiency.
- (b) What is the arithmetic operator used in BASIC ? What is their natural hierarchy ? In what order are operations carried out within a hierarchical group ?
- (c) Explain INPUT and PRINT statement.
- (d) Write an algorithm to reverse a given string and draw flowchart.
- (e) Consider the following code. Give error (if any), otherwise output
 - (i) A\$="RAJ"
B\$="KAVI"
PRINT LEFT\$(A\$,2) + RIGHT\$(B\$,2)
 - (ii) A\$="PARIS"
B\$="ROME"
PRINT SGN(LEN(A\$)-LEN(B\$))
 - (iii) PRINT ASC (MID\$("Computer",4,1))
 - (iv) A\$= "This is my India"
PRINT SQR (LEN(A\$))
 - (v) PRINT 8/3
 - (vi) PRINT INT (-8.9)
PRINT FIX (-8.9)

3 Attempt any three :

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- (a) Give use of DIM statement.
- (b) Give different ways of writing comments. Also give difference in them.
- (c) Differentiate forward and backward jumping along with example.
- (d) Explain READ and DATA statement.
- (e) Explain IF....ELSE structure.

4 (a) Explain DO WHILE.....LOOP with suitable example. 15

OR

- (a) Explain WHILE.....WEND loops with suitable example.
- (b) What is array ? Explain single subscript and double subscripted array with examples. Also discuss advantages of array.

OR

- (b) Explain sorting giving example.
- (c) Write one or more basic statements :
 - (i) Dimension an array A of 100 cells.
 - (ii) Dimension 100 x 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 find minimum of n numbers.
- (b) Write a program to find sum of first N terms of following series :
 $1! + 2! + 3! + \dots + N!$
- (c) Write a program to display whether given number is odd or even.
- (d) Write a program to sort the given numbers in descending order.
- (e) Write a program to search a number from a 3x3 matrix.
