* U A - 3 7 0 4 *

UA-3704

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

March/April – 2012

Computer Programming & Programming Methodology : Paper - 104

Time : 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 :

☛ **FIRST YEAR B. C. A. (SEM. - 1)**

Name of the Subject :

☛ **COMPUTER PROGRAMMING & PROGRAMMING METHODOLOGY - 104**

☛ Subject Code No. : **3 7 0 4** ☛ Section No. (1, 2,.....) : **NIL**

Seat No. :

Student's Signature

1 Answer the following in short : (any **ten**) **10**

(1) Define algorithm.

(2) What is computer program ?

(3) Explain the use of DIM statement.

(4) Give an example of logical operators.

(5) What is a debugging ?

(6) What is a relational expression ?

(7) Differentiate ASC( ) and CHR$( ) string functions.

(8) Write basic expression :

$M = nr^2 + ps$

(9) What is self replacement technique ?

(10) Give major factors responsible for program efficiency.

(11) Explain any 2 mathematical in built function.

(12) Give use of LOCATE statement.

2 (a) Differentiate the following : (any **two**) **4**

(1) STOP and END

(2) INPUT and READ statements

(3) Compiler and Interpreter

(4) INT( ) and FIX( )

(b) Consider the following code. Give error (if any), otherwise output. **4**

(1)
```
A$ = "LONDON"
PRINT ASC (MID$ (A$, 3,1))
```

(2)
```
LET A = 1.5
PRINT LEN (A)
```

(3)
```
PRINT SQR (LEN ("COMPUTER") – LEN ("MOUSE"))
```

(4)
```
FOR I = 1 TO 5 STEP–1
    PRINT I
NEXT I
```

(c) Explain program bugs in detail. **7**

OR

(c) Explain flowchart. Explain different symbols used in flowchart. Give its benefits and limitations. **7**

3 Explain the following in detail : **15**

(a) Read, Data and Restore.

OR

(a) Variables and Constants.

(b) Compare GOTO and ON.....GOTO statement.

OR

(b) Arithmetic expressions.

(c) Draw a flowchart to find roots of quadratic equation.

4 Explain following in detail : **15**

(a) What is branching ? Explain IF.....ElSE statement in detail.

OR

(a) Explain different levels of programming language.

(b) Explain FOR.....NEXT loop in detail.

(c) Write a program to print the reverse of a given string.

OR

(c) Write a program to find whether a given string is palindrome or not.

5 Answer the following : **15**

(a) Explain following built-in functions : (any **five**)

(i) MID$( )

(ii) INSTR( )

(iii) LEFT$( )

(iv) LEN( )

(v) ABS( )

(vi) SGN( )

(vii) TAB( )

(b) Write about multidimensional arrays.

OR

(b) Write a note on sorting.

(c) Write a program to find the count total number of odd elements in a one dimensional array.

OR

(c) Write a program to find transpose of a matrix.
