NS – 353

I Semester B.A./B.Sc. Examination, November/December 2016
(Semester Scheme) (CBCS) (F+R)
(2014-15 and Onwards)
COMPUTER SCIENCE – I
Programming Concepts Using C

Time : 3 Hours Max. Marks : 70

Instruction : *Answer* ***all*** *the Sections.*

SECTION – A

I. Answer **any 10** questions. **Each** question carries **2** marks : **(2×10=20)**

1) What is an algorithm ? Write its features.
2) What is the difference between prefix increment and postfix increment ? Illustrate with an example.
3) Compare printf ( ) and puts ( ) functions.
4) Write the difference between entry controlled and exit-controlled loops.
5) What are formal parameters ? Explain.
6) Explain an array with example.
7) What are the possible operations on strings ? List them.
8) What are static variables ? Explain it.
9) Differentiate between a character and a string with an example.
10) What is a pointer ? How it is declared ?
11) Explain command line arguments.
12) Compare printf and fprintf functions.

SECTION – B

II. Answer **any 5** questions. **Each** question carries **10** marks : **(5×10=50)**

13) a) Write an algorithm for largest of three numbers. **4**
b) Write the different data types available in C. Give an example for each. **6**

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14) a) What are different symbols used in flow chart ? Explain their usage. 5

b) Write the basic structure of an C program. Illustrate with an example. 5

15) a) Explain the different format specifiers for printf ( ) and scanf ( ) functions. 4

b) Explain switch-case statement with an example. 6

16) a) Explain the working of if ( ) and if-else ( ) statements with an example. 4

b) Write a C program to generate a range of prime numbers using a function. 6

17) a) Write a C program to transpose a given matrix. 5

b) Explain any five mathematical library functions with an example. 5

18) a) Write a C program to find the largest and smallest of numbers. Use 1-D array. 5

b) Write a C program to demonstrate the call by reference method. 5

19) a) Explain four storage classes of C. 5

b) Differentiate between a structure and a union with an example. 5

20) a) Explain file access models in 'C' ? 5

b) What are macros ? Explain with an example. 5