I Semester B.Sc. Examination, April/May 2021
(CBCS) (F + R) (2014 – 15 and Onwards)
COMPUTER SCIENCE – I
Programming Concepts Using 'C'

Time : 3 Hours　　　　　　　　　　　　　　　　　　Max. Marks : 70

Instruction : *Answer all Sections.*

SECTION – A

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

1) What are the advantages of high level language over machine language ?

2) Mention any two differences between compilers and interpreters.

3) Write an algorithm to find sum of two numbers.

4) Define flow chart. Mention the symbols used.

5) What is conditional operator ?

6) Differentiate between break and continue statement.

7) What is an array ? Define an array to store marks of 30 students in 3 subjects.

8) What is recursion ?

9) What is the purpose of using a pointer ?

10) Give any 2 differences between structures and union.

11) What are Unions ?

12) What are preprocessor directives ?

SECTION – B

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

13) Explain the different types of operators used in C.　　　　　　　**10**

14) a) Write a detailed note on C data types.　　　　　　　　　　　　**5**

　　b) Define algorithm. Write characteristics of algorithm.　　　　　**5**

15) a) Write and explain about switch statement. 5

b) Write a C program to perform arithmetic operations using switch. 5

16) a) Explain else-if-ladder with the help of flow chart. 5

b) Define and declare a structure. Write any three uses of structure. 5

17) a) What are string handling functions ? Explain their uses. 5

b) Define an array of strings. How to initialize one-dimensional array ? Explain with suitable examples. 5

18) a) Define pointer. How to declare and initialize a pointers ? 5

b) Write a C program to illustrate the use of pointers. 5

19) a) What are Macros ? Explain with example. 5

b) Write a C program to create a text file and print the same. 5

20) a) Write a short note on storage classes. 5

b) Write a C program to find the LCM and GCD of 2 numbers. 5