Reg. No. | | | | | | | | | |

BSCCSC 152

Credit Based Second Semester B.Sc. Degree Examination, September 2022

(2018-19 and Earlier Batches)

COMPUTER SCIENCE

Paper – II : Programming in C

Time : 3 Hours Max. Marks : 80

PART – A

1. Answer **any ten** of the following : **(10×2=20)**

   a) What is the difference between a variable and constant ?

   b) What is the use of sizeof() operator ?

   c) Write the syntax of else if ladder statement.

   d) Name any four keywords in C.

   e) Specify the process of executing a C program.

   f) How do you define symbolic constants ?

   g) How do you initialize array at run time ?

   h) Differentiate between x++ and ++x with example.

   i) How to declare and initialize a pointer variable ?

   j) Differentiate between structure and union.

   k) Define recursion.

   l) How is a file declared ? How a file can be closed ?

PART – B

Note : Answer **one full** question from **each** unit.

Unit – I

2. a) What are fundamental data types supported by C language ? Explain it.
   b) What are the different logical operators available in C ? Explain with syntax and example.
   c) Explain scanf() and printf() functions with syntax and example. **(5+5+5)**

3. a) Draw flowchart to find largest of three numbers.
   b) Explain different types of C tokens in C language.
   c) Explain various features of C language. **(5+5+5)**

Unit – II

4. a) Explain different types of decision making statements of C.
   b) Explain the use of break and continue statements with examples.
   c) Write a C program to read 'n' numbers and find whether an element exists or not ? If exists, print its position. **(5+5+5)**

5. a) What is meant by looping ? Explain any two looping statements with example.
   b) How do you declare and initialize one dimensional array ?
   c) What is an array ? Explain declaration and initialization of one dimensional array with example. **(5+5+5)**

Unit – III

6. a) Differentiate the following with examples :
      i) Actual parameter and formal parameter
      ii) Local and global variables.
   b) Explain the general syntax of a user defined function with arguments and no return value. Give example.
   c) Explain the following storage classes :
      i) Register
      ii) Static **(5+5+5)**

7. a) Explain any four string functions with syntax and example.

   b) Explain the different ways to read a string from keyboard.

   c) Write a C program to find the factorial of a number using a recursive function. **(5+5+5)**

Unit – IV

8. a) What is a structure ? How do you define and access the members of a structure ? Explain with an example.

   b) What is a macro ? Explain argumented macro with syntax and example.

   c) Write a note on Pointer. **(5+5+5)**

9. a) What is the primary advantage of using a data file ? What are the different modes of opening a file in C ?

   b) What do you mean by the following terms ? Give example.

      i) Nested structures

      ii) Union.

   c) Explain the use of the following functions :

      i) fopen()

      ii) fprintf()

      iii) getw()

      iv) putw(). **(5+5+5)**
