

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)
B.C.A. Sem-I :SUMMER- 2022
SUBJECT : C PROGRAMMING-I

Day : Friday
Date : 10/6/2022

S-18753-2022

Time : 02:00 PM-05:00 PM
Max. Marks : 60

N.B.:

- 1) Q 4 from Section I is COMPULSORY.
 - 2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
 - 3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
 - 4) All question CARRY EQUAL marks.
 - 5) Answers to Both the sections to be written in SAME answer book.
 - 6) Draw a labeled diagram WHEREVER necessary.
-

SECTION - I

Q.1) Answer the following: (6 Marks X 2 = 12)

- a) Explain following input and output functions with suitable example: 1) getchar() 2) putchar()
- b) How the do-while loop varies from the while loop?

Q.2) Answer the following: (6 Marks X 2 = 12)

- a) What is recursion? Write a recursive function in C to display factorial of given number.
- b) Define operator. Explain arithmetic and logical operators in C.

Q.3) Explain the following: (6 Marks X 2 = 12)

- a) Explain the concept of array of structure with appropriate example.
- b) What is pointer? Explain various arithmetic operations can be performed on pointer with example.

Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X 3 = 12)

- a) Implicit and explicit type conversion
- b) switch statement
- c) A concept of Call by value
- d) Standard library functions of strings
- e) Static storage class

SECTION - II

Q.5) Answer the following: (12 Marks X 1 = 12)

- a) Write a C program to read and display the information of 10 students in the class. Then edit the details of particular student and redisplay the entire information.

Q.6) Answer the following: (6 Marks X 2 = 12)

- a) Write a function Factorial() to find factorial of given number.
- b) Write a program in C to read n number of values in an array and display the sum of all elements.

Q.7) Explain the following: (6 Marks X 2 = 12)

- a) Write a C program to print following Floyd's triangle.

```
1
2 3
4 5 6
7 8 9 10
```

- b) Write a C program to read and print student details using structure pointer.
