TDC Even Semester Exam., 2019

COMPUTER SCIENCE

(Pass)

(4th Semester)

Course No. : BCSP–402

(Programming with C and Data Structure)

$\dfrac{Full\ Marks\ :\ 30}{Pass\ Marks\ :\ 10}$

Time : 3 hours

The figures in the margin indicate full marks for the questions

PART—1

Perform **one** experiment from each Group

GROUP—A

(Programming with C)

(*Marks* : 10)

— — — — — — — — — — — — — — — — — — —

1. Write a C program to find factors of a number. 10

(2)

2. Write a C program to find sum of n numbers. 10

— — — — — — — — — — — — — — — — — — —

3. Write a C program to remove duplicate elements in an array. 10

— — — — — — — — — — — — — — — — — — —

4. Write a C program to reverse a string using a pointer. 10

— — — — — — — — — — — — — — — — — — —

5. Write a C program to swap two numbers using a pointer. 10

— — — — — — — — — — — — — — — — — — —

6. Write a C program to print Fibonacci series using recursion. 10

— — — — — — — — — — — — — — — — — — —

GROUP—B

(Data Structure)

(*Marks* : 10)

— — — — — — — — — — — — — — — — — — —

1. Write a C program to create a linked list and display the elements in a list. 10

2. Write a C program to implement a queue data structure using a linked list.   10

— -

3. Write a C program to insert and delete a node in a binary tree.   10

— -

4. Write a C program to demonstrate inorder, pre-order and post-order traversals.   10

— -

5. Write a C program to add two polynomials.   10

— -

6. Write a C program to implement a stack using an array.   10

— -

Laboratory notebook.   5

Viva voce.   5

★ ★ ★