Professional Course Examination, Odd, **2021**
(3rd Semester)
BACHELOR OF COMPUTER APPLICATIONS
Paper No.: BCA/3/CC/18
(Data Structure using C Lab) (Revised)
(Practical)
Full Marks: 75
Time: 3 hours
The figures in the margin indicate full marks for the questions
SECTION-A
Answer any two questions

1. Write a C Program to simulate the working of a queue of integers using an array.

Provide the following operations.

    1) Insert
    2) Delete
    3) Display   **(10)**

2. Write a C program using Bubble Sort.   **(10)**

3. Write a C program to implement linear search.   **(10)**

4. Write a C Program to convert and print a given valid parenthesized infix arithmetic

expression to postfix expression. The expression consist of single character operands and

the binary operator +,-,* and /.   **(10)**

SECTION - B

Answer any two questions

5. Write a C Program using dynamic variables and pointers to construct a stack of integer
using linked list and to perform the following operations:
    1) Push
    2) Pop
    3) Display   **(15)**

6. Write a C Program to construct circular linked list and perform the following operations:

    1) insert
    2) delete
    3) Display   **(15)**

7. Write a C Program-

1) To construct a binary search tree of integers.
2) To traverse the tree using inorder
3) To display the elements in the tree   **(15)**

SECTION - C

8. Viva   **(15)**

9. Record Book   **(10)**