**ITM(SLS) Baroda University**
**School of Computer Science, Engineering and Technology**
**Semester VI**

# -: Question Bank :-

**Course Name :** Data Structures And Algorithms
**Course Name :** C2620C1
**Years :** 2019
**Chapters :** 2
**Total Questions :** 15

- ## Questions :-

1. Write a pseudocode for PUSH and POP operations of stack. **(Chapter : Linear Data Struture)**
2. Write algorithm for inserting an element in circular queue and deleting a node from a singly linked list. **(Chapter : Linear Data Struture)**
3. Illustrate the working of priority queue with suitable example. **(Chapter : Linear Data Struture)**
4. Write recursive algorithm to compute factorial of a given number. Which data structure can be used to implement this algorithm? **(Chapter : Linear Data Struture)**
5. Evaluate the following postfix expression in tabular form showing stack after every step. 7 6 + 4 * 4 10 + - 5 + **(Chapter : Linear Data Struture)**
6. List the advantages of a doubly linked list over singly linked list. **(Chapter : Linear Data Struture)**
7. Write a C program to reverse a string using stack. **(Chapter : Linear Data Struture)**
8. Write algorithms for PUSH and POP stack operations. **(Chapter : Linear Data Struture)**
9. Enlist applications of stack and queue. **(Chapter : Linear Data Struture)**
10. Evaluate the following postfix expression using stack. Show each step. 5 3 + 6 2 / * 3 5 * + **(Chapter : Linear Data Struture)**
11. Write a C functions for insertion and deletion operation in simple queue. **(Chapter : Linear Data Struture)**
12. Write an algorithm to delete an element from circular queue. Show the steps of insertion and deletion operation in sample circular queue. **(Chapter : Linear Data Struture)**
13. Describe the advantages of linked list over array. **(Chapter : Linear Data Struture)**

14. Write an algorithm to insert a node at last position in doubly linked list. **(Chapter : Linear Data Struture)**
15. Write an algorithm to print the singly linked list in reverse order using stack. **(Chapter : Linear Data Struture)**