**Answer all questions.**

1. Define Data Structures. Also explain its importance and real time applications.
2. Define ADT and explain it in detail.
3. Explain Stack Application.
4. Explain Queue Application.
5. What are the advantages of circular linked list.
6. Compare Array and Linked list with all parameters.
7. Define linked list and Explain types of linked list.
8. Define self referential structure.
9. Explain how to find the performance of programe.
10. Distinguish between Linear search and Binary search

**GROUP-I**

1. Define ADT and explain the steps for implementing them on stacks and queues.
2. Write a algorithm convert infix notation into postfix notation and convert

(A+B\*(C-D)/E+F^P) infix expression to postfix expression.

1. Implement QUEUE program using linked list.
2. Explain about operations on single linked list in details.

**GROUP-II**

1. Write about Stacks and Queues in details with all possible operations.

2. Write Algorithm searching of a node into a single linked list.

3. Write a algorithm convert infix notation into prefix notation and convert

(A+B\*(C-D)/E+F^P) infix expression to prefix expression.

4. What is a Linked List. Explain its properties and classifications in detail

**GROUP-III**

1. Implement STACK and its operation using Linked list .

2. Explain Insertion and deletion of a node into a single linked list.

3. Write Algorithm find length of a single linked list.

4. Write a algorithm convert infix notation into prefix notation and convert

A+B^C-D/(E+F^G) infix expression to postfix expression.