**LINKED LISTS**

1. Describe how a polynomial is represented using singly linked lists.
2. Explain the procedure to insert and delete element from sparse matrix.
3. Write an algorithm for representing the polynomial 6x6+ 4x3– 2x + 10 using linked lists.
4. What are the advantages of using a linked list rather than array?
5. Write an algorithm to insert new node at the beginning, at middle position and at the end of a singly linked list.
6. Explain following applications of a linked list for (i) representation of a polynomial expression (ii) sparse matrix manipulation.
7. Write an algorithm to delete an element anywhere from doubly linked list.
8. Discuss sparse matrix representation using linked list.
9. Define Single Linked List. Write algorithms to insert a node at the beginning, Ending, and at a given position.
10. Discuss the advantages and disadvantages of single-linked lists.
11. Discuss the implementation of a circular linked list.
12. Explain Circular Linked list with an example.
13. Differentiate the Single Linked list & Circular Linked list
14. What are the advantages and applications of Circular Linked List? Write the Pseudo code to perform all standard operations on Circular Linked List and Explain the same with neat diagrams wherever necessary.
15. With neat diagrams, explain the Insert and Delete operations on Doubly Linked List data structure.
16. Write the algorithm and explain the steps to perform the following operations on Doubly linked list.
17. Add an element at the beginning of the list.
18. Delete an element at the beginning of the list.
19. Add an element after an item of the list.
20. Delete an element from the end of the list.
21. Display the complete list in a backward manner.

23. Write the Pseudo code to create a Circular Linked list of ‘n’ nodes and display its contents in reverse order.

24. What are the drawbacks of Singly Linked list? Mention the advantages and Applications of Doubly Linked List? Give the memory representation of Doubly Linked list.

25. Write pseudo code and explain all possible types of Insertion and Deletion operations on Doubly Linked list with appropriate diagrams wherever necessary.

26. What are the advantages of Linked list over Arrays for implementing Stack data Structure? Explain the operations of Linked list implementation of Stack with neat Diagrams.