4 Lecture - CS301

Important Mcqs

1. **What is the time complexity of inserting an element at the beginning of a singly linked list?**
   a) O(n)
   b) O(log n)
   c) O(1)
   d) O(n^2)
   Answer: c) O(1)

2. **Which of the following is not a type of Linked List?**
   a) Singly Linked List
   b) Doubly Linked List
   c) Circular Linked List
   d) Binary Linked List
   Answer: d) Binary Linked List

3. **What is the time complexity of inserting an element at the end of a singly linked list?**
   a) O(n)
   b) O(log n)
   c) O(1)
   d) O(n^2)
   Answer: a) O(n)

4. **Which of the following is not a pointer used in Linked List?**
   a) head pointer
   b) tail pointer
   c) node pointer
   d) root pointer
   Answer: d) root pointer

5. **What is the time complexity of deleting an element from a singly linked list?**
   a) O(n)
   b) O(log n)
   c) O(1)
   d) O(n^2)
   Answer: a) O(n)

6. **Which of the following Linked List traversal technique involves recursion?**
   a) Linear traversal
   b) Binary traversal
   c) Depth First Traversal
   d) Breadth First Traversal
   Answer: c) Depth First Traversal

7. Which of the following is a disadvantage of using a doubly linked list?
   a) Faster traversal in both directions
   b) Requires more memory than singly linked list
   c) More difficult to implement than singly linked list
   d) Allows insertion and deletion of elements only at the beginning of the list
   Answer: b) Requires more memory than singly linked list

8. **Which of the following is not a type of node used in Linked List?**
   a) data node
   b) header node
   c) sentinel node
   d) tail node
   Answer: a) data node

9. **Which of the following Linked List method is used to reverse the order of elements in the list?**
   a) reverse()
   b) rotate()
   c) shuffle()
   d) sort()
   Answer: a) reverse()

10. **Which of the following is a type of circular linked list?**
    a) Circular doubly linked list
    b) Circular binary linked list
    c) Circular balanced linked list
    d) Circular heap linked list
    Answer: a) Circular doubly linked list