

## Assignment 4

### Q.A. Answer the following questions in one or two lines :

1. Define Linked List.
2. What are applications of Linked List.
3. Write node structure of doubly linked list.
4. 'Linked List can only be traversed sequentially'. State True / False.
5. "The elements of linked list are stored sequentially". State True / False.
6. "Linked list is a non linear data structure according to access pattern". State True / False.
7. What are the advantages of double linked list over singly linked list.
8. Define generalized linked list.
9. Write the node structure for a singly circular linked list.
10. What is circular linked list.

### Q. B. Answer the following questions :

1. Differentiate between array and linked list.
2. Write a node structure for generalized linked list. Draw GLL for ((a,(b,c)),d,e).
3. Write a function to create a list and return the pointer of first node of the list.
4. Write a function to perform addition of elements at even position in a doubly link list of integers.
5. Write a function to delete specific element from a singly linked list.
6. Write a function to calculate average of elements in a singly linked list of integers.
7. Write a function to insert a node in a doubly linked list at a given position.
8. Write a function to add a number at the end of the singly linked list.
9. Write a function to reverse a singly linked list.
10. Write a function to check whether two singly linked lists of integers are equal.