1.
The time required to search an element in a linked list of length n is_____.

A. O (log n)
B. O (n)
C. O (1)
D. O(n^2)

Answer: A stdio

2.
Which statement is true about linkedlist?

A. If you based it on storage, a linked list is considered non-linear.
B. If you based it on access strategies, then a linked list is considered linear.
C. Linked list can be considered as only linear
D. A and B

Answer: D

3.
Do we really need a sentinel node?

A. They reduce complexity of the algorithm.
B. They increase operational speed.
C. to increase robustness of the data structure.
D. All of the above

Answer: D

4.Which data structure random access not possible ?

A. array
B. string
C. stack
D. linked list
Answer : D

5.
```
struct node
{
    int data;
    struct node * next;
}
typedef struct node NODE; NODE *ptr;
```
Which of the following c code is used to create new node?

A. ptr=(NODE*)malloc(sizeof(NODE));
B. ptr=(NODE*)malloc(NODE);
C. ptr=(NODE*)malloc(sizeof(NODE*));
D. ptr=(NODE)malloc(sizeof(NODE));

Answer: A

6.
Which of the following is true about linked list implementation of queue?

A. In push operation, if new nodes are inserted at the beginning of linked list, then in pop operation, nodes must be removed from end.
B. In push operation, if new nodes are inserted at the end, then in pop operation, nodes must be removed from the beginning.
C. Both of the above A and B
D. None of the above

Answer: C

7.
What is the time required in Doubly circular linked list while jumping from head to tail & from tail to head?
A. O(n)
B. O(1)
C. O(logn)
D. None of above

Answer: B

8.
What does the following function do for a given Linked List with first node as head?

```
void fun1(struct node* head)
{
  if(head == NULL)
    return;
  fun1(head->next);
  printf("%d  ", head->data);
}
```

A. Prints all nodes of linked lists
B. Prints all nodes of linked list in reverse order
C. Prints alternate nodes of Linked List
D. Prints alternate nodes in reverse order

Answer: B

9.
You are given pointers to first and last nodes of a singly linked list, which of the following operations are dependent on the length of the linked list?

A. Delete the first element
B. Insert a new element as a first element
C. Delete the last element of the list
D. Add a new element at the end of the list

Answer: C

10. What is the time complexity to count the number of elements in the linked list?

A. O(1)
B. O(n)
C. O(logn)
D. O(n2)

Answer: B