1.
A linear collection of data elements where the linear node is given by means of pointer is called?

A. Linked list
B. Node list
C. Primitive list
D. None of the above

Answer: A

2.
How do you search for a target key in a linked list?

A. To find the target key in a linked list, you have to apply sequential search.

B. To find the target key in a linked list, you have to apply divide and conqur algorithm.

C. Searching element in linked list is not possible in linear way.

D. none of this

Answer: A

3.
Using a doubly linked list helps to reverse the stack with ------- time complexity.

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

Answer: A

4.
Which of the following is two way lists?

A. Grounded header list
B. Circular header list
C. Linked list with header and trailer nodes
D. None of the above

Answer: D

5.
What is true about circular linked list?

A. deletion of a node can be achieved in O(1) time

B. it can be used for an implementation of Queue.

C. It saves time when we have to go to the first node
   from the last node.

D. B,C
E. A,B,C

Answer: E

6.
If you are working on a windows manager that allows users to cycle through windows by pressing ctrl+Tab which type of linked list will work great?

A. Singly Linear LinkedList
B. Circular LinkedList
C. Doubly Linear LinkedList
D. None of the above.

Answer: C

7.

Consider a small circular linked list. How to detect the presence of cycles in this list effectively?

A. Keep one node as head and traverse another temp node till the end to check if its next points to head

B. Have fast and slow pointers with the fast pointer advancing two nodes at a time and slow pointer advancing by one node at a time

C. Cannot determine, you have to pre-define if the list contains cycles

D. Circular linked list itself represents a cycle. So no new cycles cannot be generated

Answer: B

Hint: Advance the pointers in such a way that the fast pointer advances two nodes at a time and slow pointer advances one node at a time and check to see if at any given instant of time if the fast pointer points to slow pointer or if the fast pointer's 'next' points to the slow pointer. This is applicable for smaller lists.

8.

Real life example of Circular Doubly Linked List are

A. Escalator
B. Multimedia player
C. Railway Station
D. Booking Ticket
E. A,B,C

Answer: E

9.
How many pointers are contained as data members in the nodes of a circular doubly linked list of integers with five nodes?

A. 5
B. 8
C. 10
D. 15

Answer: C

10.
What is time complexity of deleting a node from first position in a doubly circular linked list?

A. O(n)
B. O(1)
C. O(n+1/2)
D. none of the above

Answer: B