1. A linear list of elements in which deletion can be done from one end (front) and insertion can take place only at the other end (rear) is known as a?
   a) Queue b) Stack c) Tree d) Linked list
2. The data structure required for Breadth First Traversal on a graph is?
   a) Stack b) Array c) Queue d) Tree
3. A queue is a
   a) FIFO list b) LIFO list` c) Ordered array d) Linear tree
4. In Breadth First Search of Graph, which of the following data structure is used?
   a) Stack b) Queue c) Linked list d) None
5. If the elements “A”, “B”, “C” and “D” are placed in a queue and are deleted one at a time, in what order will they be removed?
   a) ABCD b) DCBA c) DCAB d) ABCD
6. Data structure, where items can be inserted or deleted at both the ends but not in the middle.
   a) Queue b) Circular queue c) Dequeue d) Priority queue
7. A normal queue, if implemented using a array(C lang) of size MAX_SIZE, gets full when
   a) Rear = MAXSIZE – 1 b) Rear = front c) Front = (rear + 1) mod MAXSIZE d) Front=rear+1
8. In linked list implementation of a queue, where does a new element be inserted?
   a) At the head of link list b) At the centre position in the link list
   c) At the tail of the link list d) None of the mentioned
9. In linked list implementation of a queue, front and rear pointers are tracked. Which of these pointers will change during an insertion into a NONEMPTY queue?
   a) Only front pointer b) Only rear pointer c) Both front and rear pointer d) None
10. In linked list implementation of a queue, front and rear pointers are tracked. Which of these pointers will change during an insertion into EMPTY queue?
    a) Only front pointer b) Only rear pointer c) Both front and rear pointer d) None
11. In linked list implementation of a queue, from where is the item deleted?
    a) At the head of link list b) At the centre position in the link list
    c) At the tail of the link list d) None of the mentioned
12. In linked implementation of a queue, the important condition for a queue to be empty is?
    a) FRONT is null b) REAR is null c) LINK is empty d) None of the mentioned
13. The essential condition which is checked before insertion in a linked queue is?
    a) Underflow b) Overflow c) Front value d) Rear value

14. The essential condition which is checked before deletion in a linked queue is?

    a) Underflow b) Overflow c) Front value d) Rear value

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

    a) In insertion operation, if new nodes are inserted at the beginning of linked list, then in delete operation, nodes must be removed from end

    b) In insert(push) operation, if new nodes are inserted at the end, then in delete operation, nodes must be removed from the beginning

    c) Both a and b d) None of the mentioned

16. With what data structure can a priority queue be implemented?

    a) Array b)linked List c) Heap d) All of the mentioned

17. What is the time complexity to insert a node based on key in a priority queue?

    a) O(nlogn) b) O(logn) c) O(n) d) O(n2)

18. What is the time complexity to insert a node based on position in a priority queue?

    a) O(nlogn) b) O(logn) c) O(n) d) O(n2)

19. What is a dequeue?

    a) A queue with insert/delete defined for both front and rear ends of the queue

    b) A queue implemented with a doubly linked list

    c) A queue implemented with both singly and doubly linked lists

    d) None of the mentioned

20. _____ is the time complexity of deleting rear end of a DEQ implemented in a singly linked list?

    a) O(nlogn) b) O(logn) c) O(n) d) O(n2)

21. After performing these set of operations, what does the final list contain?

    InsertFront(10);InsertFront(20);InsertRear(30);DeleteFront();InsertRear(40);InsertRear(10); DeleteRear(); InsertRear(15); display();

    a) 10 30 10 15 b) 20 30 40 15 c) 20 30 40 10 d) 10 30 40 15