

## Assignment 4

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

1. What is Queue.
2. Define the term : Priority Queue. List its types.
3. Define Double ended Queue / Dequeue.
4. 'Queue full condition in a linear queue necessary implies that there is no free space in array'. State True / False.
5. What are different types of queue ?
6. List any two applications of queue in Computer.
7. List any two applications of queue in real life.

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

1. Write a 'C' function to add and delete element from Linear Queue. (Static Implementation)
2. Write a 'C' function to add and delete element from Linear Queue. (Dynamic Implementation)
3. Write a function for adding and deleting elements from a circular queue.
4. Write a function to add element in priority queue in which elements are stored in sorted order. (Ascending)
5. Differentiate between stack and queue.
6. What is circular queue and explain the need for a circular queue.