10 mark QUESTIONS

S.No.	TOPIC – SORTING
1.	Demonstrate Bubble Sort on an array of numbers
2.	Demonstrate Insertion Sort on an array of numbers
3.	Demonstrate Selection Sort on a list of numbers
4.	Demonstrate Shell Sort on a list of numbers
5.	Demonstrate Quick Sort on a list of numbers
6.	Demonstrate Radix Sort on a list of numbers

S.No.	TOPIC – SEARCHING
7.	Given a target value, perform Sequential Search on an array of numbers
8.	Given a target value, perform Binary Search on an array of numbers

S.No.	TOPIC – STACK
9.	Demonstrate the working of a stack, implement it as an array
10.	Implement the stack as a linked list

S.No.	TOPIC – QUEUES
11.	Demonstrate the working of an ordinary queue, implementing it as a linked list
12.	Implement the circular queue as a linked list

S.No.	**TOPIC – LINKED LISTS**
13.	For a singly linked list show the following operations: Insert, Display and Delete node
14.	For a singly linked list show the following operations: Insert, Display and Search for a node
15.	For a singly linked list show the following operations: Insert, Display and Count the number of nodes
16.	For a singly linked list show the following operations: Insert, Display and Reverse the list
17.	For a singly linked list show the following operations: Insert, Display and Sort the list
18.	For a circular linked list show the following operations: Insert, Display and Delete node
19.	For a circular linked list show the following operations: Insert, Display and Search for a node
20.	For a circular linked list show the following operations: Insert, Display and Count the number of nodes
21.	For a circular linked list show the following operations: Insert, Display and Reverse the list
22.	For a circular linked list show the following operations: Insert, Display and Sort the list
23.	For a doubly linked list show the following operations: Insert, Display and Delete node

24.	For a doubly linked list show the following operations: Insert, Display and Search for a node
25.	For a doubly linked list show the following operations: Insert, Display and Count the number of nodes
26.	For a doubly linked list show the following operations: Insert, Display and Reverse the list
27.	For a doubly linked list show the following operations: Insert, Display and Sort the list

S.No.	**TOPIC – HASHING (Values given are as an example, change as required)**
28.	Use direct hashing method to insert the keys 99, 33, 23, 44, 56, 43, 19 into an array of size 10. Use linear probe method to resolve any collisions.
29.	Use subtraction hashing method to insert the keys 99, 33, 23, 44, 56, 43, 19 into an array of size 10. Use linear probe method to resolve any collisions.
30.	Use modulo division hashing method to store the keys 55, 65, 20, 12, 66, 26, 90 in an array of size 13. Use linear probe method to resolve any collisions.

S.No.	**TOPIC – GRAPHS**
31.	Represent a graph using an adjacency matrix.