

(Answer any one question)

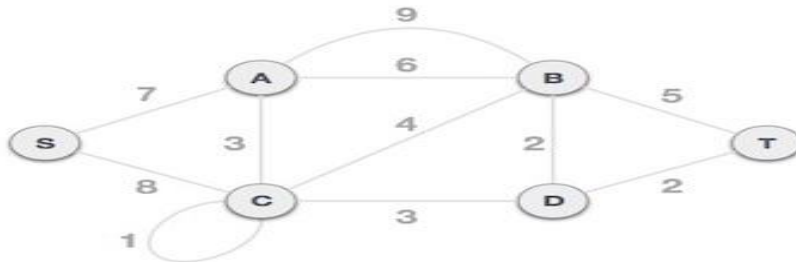
1. a. What is an array?
 - b. Why array is called linear?
 - c. What are the Advantages and disadvantages of Array?
 - d. How to get largest and smallest number in an array?

2. a. What is stack?
 - b. Application of stack.
 - c. $(A + B * (C - D)) / E$. convert it into prefix and postfix.
 - d. Write an algorithm to perform PUSH operation

3. a. What is queue?
 - b. What are the disadvantages of simple queue?
 - c. Write an algorithm to perform insert operation in circular queue.
 - d. Write sort note about priority queue.

4. a. write an algorithm to perform selection sort?
 - b. What is big O notation?
 - c. What is open hashing?
 - d. write sort note about recursion.

5. a.



Find out minimum spanning tree using Prim's algorithm.

- b. What is Full and complete binary tree?
 - c. Write down difference between BFS and DFS.
 - d. What is ADT?
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6. a. Write an algorithm to perform inorder, preorder and postorder traversal in a binary tree.
 - b. Draw binary tree using
Inorder Traversal: 7 9 4 2 5 1 3 6 8
Preorder Traversal: 1 2 4 7 9 5 3 6 8
 - c. What are the advantages of doubly linked list over single linked list.