

1.

BST can be traversed in which sequence, choose the correct match:

1. **PreOrder Traversal -**

Data --> Left Subtree --> Right Subtree

2. **InOrder Traversal -**

Right Subtree --> Data --> Left Subtree

3. **PostOrder Traversal -**

Data --> Left Subtree --> Right Subtree

A. Only 1

B. 1 & 2

C. 2 & 3

D. All three

Answer: B

2.

When two towns are expected to connect using road network and need to find shortest path to reach one town to another town then we can use algorithm developed by :

A. Prim's & Kruskal's

B. Dijkstra's & Bellman Ford

C. Only B

D. A & B

Answer: B

3.

Suppose graph represents family relationship between A & B. It is represented in such a way that it concludes A is elder to B in a family. Which graph can be it is ?

- A. Directed Graph**
- B. Undirected Graph**
- C. Cycle Graph**
- D. Loop Graph**

Answer: A

4.
Choose the incorrect statement mentioned about trees (assume that the height of the tree is h and root height is 0).

- A. The number of nodes n in a full binary tree is $2^{h+1} - 1$**
- B. The number of leaf nodes in a full binary tree is $2^h - 1$**
- C. The number of NULL links (wasted pointers) in a complete binary tree of n nodes is $n+1$**
- D. None of these**

Answer: B

5.
In a given graph of N vertices consider if no loop is present in pair of vertices. Then how many max edges can be present in a simple graph:

- A. $(N/2)$**
- B. $(V*N)$**
- C. $(N(N - 1)/2)$**
- D. $(V*(N/2))$**

Answer: C