

Q: 3) Consider a simple undirected connected weighted graph with at least 3 vertices. If A is the adjacency matrix of the graph, then the number of 3-cycles in the graph is given by the trace of A^3 divided by 6.

Data Structure Interview QNS -

1) What is data structure? (2022 = QNS 1, 2021 = QNS 1)

2) What is an array?

3) What is a multidimensional array?

4) What is linked list?

5) What are the advantages of LL over arrays?

6) What is a doubly linked list? What are its advantages over singly LL?

7) What are the applications of a LL?

8) What is a stack? What are the applications of a stack?

9) What are the basic operations performed on a stack?

10) What is queue?

11) What are the basic operations of a queue?

12) What is a tree data structure?

13) Define the basic terminology in tree data structure?

14) What are binary trees?

15) What are tree traversals? What are its types?

16) What is a Binary search tree?

17) What is a full binary tree & complete binary tree?

18) What are B-trees?

19) What is a graph data structure?

20) What is the difference between directed & undirected graph?

21) Heaps

22) Graphs

23) Greedy algorithm

24) Backtracking

25) Dynamic programming

26) Bit manipulation

27) Segment trees

28) Array

29) String

30) Searching

31) Sorting

32) Stacks

33) Queue

34) Linked list

35) Tree

36) BST

37) Basic graphs (SCB)

For PBE (Product based companies)

→ Array

→ Strings

→ Searching & Sorting

→ Backtracking

→ Linked list

→ Stacks & Queues

→ Trees/BST

→ Graphs

→ DP

→ Tries

→ Segment trees (basic)

→ Bit manipulation

38) All types of trees & its details.

39) About BFS, boundary traversal & diagonal traversal.

40) Insert the node in increasing order.

4.1 Theorem, lemma, properties of all trees.

41) mainly 4 types of tree imp (BT, BST, AVL, B-tree)
just define & write down the operations of others
remaining trees.

remaining trees.

The differences between different types of
organisms are called differences.

Paint 188
Prints 108
Paintings 108
Prints 118