TCET 2026 Test Series:

Questions:

Technical

Q.1) What is a linked list?

[A] A collection of data elements in a contiguous memory location

[B] A collection of nodes, where each node contains data and a reference to the next node

[C] A type of stack data structure

[D] A dynamic array

Q.2) In a singly linked list, what does the next pointer in the last node point to?

[A] It points to the first node

[B] It points to the second node

[C] It points to NULL

[D] It points to itself

Q.3) Which of the following is true for a circular linked list?

[A] Last node points to the head node

[B] It has no NULL pointers

[C] It can be singly or doubly linked

[D] All of the above

Q.4) What is the main advantage of using a doubly linked list over a singly linked list?

[A] Requires less memory

[B] Can be traversed in both forward and backward directions

[C] Simpler implementation

[D] Faster insertion at the beginning

Q.5) Which operation is more efficient in a linked list compared to an array?

[A] Searching for an element

[B] Accessing an element by index

[C] Inserting an element at the middle

[D] Sorting the elements

Q.6) What is the difference between a singly linked list and a doubly linked list?

[A] Singly linked list has more memory overhead than doubly linked list

[B] Singly linked list has only forward traversal, while doubly linked list supports both forward and backward traversal

[C] Singly linked list allows deletion of nodes, but doubly linked list does not

[D] Doubly linked list cannot store data

Q.7) Which type of linked list is best suited for implementing a queue?

[A] Singly linked list with head and tail pointers

[B] Circular linked list

[C] Doubly linked list

[D] Both a and b

Q.8) Which of the following is a disadvantage of a linked list over an array?

[A] Linked lists are more dynamic

[B] Memory usage is more due to pointers

[C] Insertion and deletion are easier in a linked list

[D] Linked lists can grow or shrink as needed

Q.9) What is the best way to represent a polynomial using a linked list?

[A] Using a doubly linked list with coefficients and exponents as separate fields

[B] Using a circular linked list

[C] Using a singly linked list with coefficients and exponents stored in each node

[D] Using an array

Q.10) How do you reverse a singly linked list efficiently?

[A] Using recursion

[B] Using a stack to store nodes

[C] Iteratively changing the direction of pointers

[D] Creating a new list and copying elements

Q.11) Which of the following is true about a binary tree?

[A] Each node has at most two children.

[B] Each node has exactly two children.

[C] Each node has at least one child.

[D] None of the above.

Q.12) What is the height of a tree with only a single node?

[A] 0

[B] 1

[C] -1

[D] Undefined

Q.13) A binary search tree is a binary tree with the following property:

[A] The left subtree contains only nodes with keys greater than the root.

[B] The right subtree contains only nodes with keys less than the root.

[C] All nodes in the left subtree have keys smaller than or equal to the root, and all nodes in the right subtree have keys greater than or equal to the root.

[D] All nodes in the left subtree have keys smaller than the root, and all nodes in the right subtree have keys greater than the root.

Q.14) Which traversal method visits nodes in the order of left subtree, root, and then right subtree?

[A] Preorder

[B] Postorder

[C] Inorder

[D] Level Order

Q.15) What is a full binary tree?

[A] A binary tree in which every node has either 0 or 2 children.

[B] A binary tree in which every level is fully filled except the last level.

[C] A binary tree with exactly one leaf node.

[D] None of the above.

Q.16) Which of the following is an application of trees?

[A] Expression evaluation.

[B] GIS System

[C] File system organization.

[D] All of the above.

Q.17) Which of the following traversals of a binary tree visits nodes in the order: root, left, right?
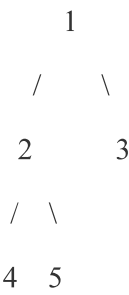
[A] Inorder

[B] Preorder

[C] Postorder

[D] Level-order

Q.18) What is the sequence of nodes visited in an inorder traversal of the following binary tree?

```
        1
       / \
      2   3
     / \
    4   5
```

[A] 1, 2, 4, 5, 3

[B] 4, 2, 5, 1, 3

[C] 1, 2, 3, 4, 5

[D] 4, 5, 2, 3, 1

Q.19) In which traversal is the root visited last?

[A] Preorder

[B] Postorder

[C] Inorder

[D] Level-order

Q.20) Which of the following statements is true about complete, strict, and nearly complete binary trees?

[A] A strict binary tree is a binary tree where every node has either 0 or 2 children.

[B] A complete binary tree is a binary tree where all levels except possibly the last are completely filled, and all nodes are as far left as possible.

[C] A nearly complete binary tree is the same as a complete binary tree.

[D] Both A and B are correct.

TCET 2026 Test Series:

Answers:

Technical

Q.1)B   Q.2)C   Q.3)D   Q.4)B   Q.5)C   Q.6)B   Q.7)D   Q.8)B   Q.9)C   Q.10)B   Q.11)A   Q.12)B   Q.13)D   Q.14)C   Q.15)A   Q.16)D   Q.17)B   Q.18)B   Q.19)B   Q.20)D

TCET 2026 Test Series:

Explanations:

Technical

Q.1) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.2) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.3) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.4) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.5) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.6) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.7) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.8) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.9) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.10) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.11) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.12) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.13) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.14) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.15) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.16) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.17) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.18) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.19) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.20) Explanation:

Multiple Choice Type Question: ** Explanation not Available **

TCET 2026 Test Series:

Answers And Explanations:

Technical

Q.1) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.2) C

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.3) D

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.4) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.5) C

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.6) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.7) D

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.8) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.9) C

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.10) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.11) A

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.12) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.13) D

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.14) C

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.15) A

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.16) D

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.17) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.18) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.19) B

Explanation:

Multiple Choice Type Question: ** Explanation not Available **

Q.20) D

Explanation:

Multiple Choice Type Question: ** Explanation not Available **