1) Linked link are not superior to STL vectors

**1. True**

2. False

2) Deleting a node in a linked list is a simple matter of using the delete operator to free the node’s memory

1. **True**
2. False

3) The advantage of link list over array is

**1. Link list can grow and shrink in size during the time**

2. Less space is required for storing elements

3. Both 1 and 2 are correct

4. None of the above

4) Which one of the following algorithm is NOT an example of Divide and conquer technique

1. Quick Sort

2. Merge Sort

**3. Bubble Sort**

4. Binary Search

5) The inorder traversal of some binary tree produces the sequence DBEAFC, and the

postorder transversal of the same tree produced the sequence DEBFCA. Which of the following is correct preorder transversal sequence?

1. DBAECF
2. ABEDFC
3. **ABDECF**
4. None of the above

6) How many cycles should be contained in a tree?

**1. 0**

2. at least 1

3. any number

4. None of the above

7) If graph G has no edges then corresponding adjacency matrix is

1. unit matrix

**2. zero matrix**

3. matrix with all 1’s

4. None of the above

8) What is not true for linear collision processing?

1. It is easier to program

2. It may include more collision

3. It requires space for links

**4. All are true**

9) In an adjacency matrix parallel edges are given by

1. Similar columns

2. Similar rows

3. Not representable

4. None of the above

10) The element at the root of heap is

1. largest

2. smallest

**3. depending on type of heap it may be smallest or largest**

4. None of the above

11) The end at which a new element gets added to queue is called

1. Front

**2. Rear**

3. Top

4. Bottom

12) If we traverse a following tree in Pre order then what will be traversal

1. ABDGCEHIF

2. ABDGHEICF

3. ABDGFCIEH

4. None of the above

13) A graph is said to be a tree, if it satisfies which of the properties:

**1. If it is connected and there are no cycles in the graph.**

2. If it is not connected and there are cycles in the graph

3. If it connected and there are cycles in the graph

4. None of the above

14) Hashing refers to the process of deriving

1. A record key from storage address

**2. Storage address from a record key**

3. A floating-point code from a record key

4. None of the above

15) The inorder traversal of some binary tree produces the sequence DBEAFC, and the postorder

traversal of the same tree produced the sequence DEBFCA. Which of the following is a correct

preorder traversal sequence?

1. DBAECF

2. ABEDFC

**3. ABDECF**

4. None of the above

16) What is not true for linear collision processing?

1. It is easier to program

2. It may include more collision

3. It requires space for links

**4. All are true**

17) In an adjacency matrix parallel edges are given by

1. Similar columns

2. Similar rows

3. Not representable

4. None of the above

18) The element at the root of heap is

1. largest

2. smallest

**3. depending on type of heap it may be smallest or largest**

4. None of the above

19) A dynamic data structure where we can search for desired records in O(log2n) time is

1. heap

2. binary search tree

3. circularly linked list

4. array

20) We can efficiently reverse a string using a

1. linear queue

2. circular queue

**3. stack**

4. doubly linked list

21) Deleting a node in a linked list is a simple matter of using the delete operator to free the node’s

memory.

**1. True**

2. False

23) The inorder traversal of some binary tree produces the sequence DBEAFC, and the postorder

traversal of the same tree produced the sequence DEBFCA. Which of the following is a correct

preorder traversal sequence?

1. DBAECF

2. ABEDFC

**3. ABDECF**

4. None of the above

24) What is not true for linear collision processing?

1. It is easier to program

2. It may include more collision

3. It requires space for links

**4. All are true**

25) In an adjacency matrix parallel edges are given by

1. Similar columns

2. Similar rows

3. Not representable

4. None of the above

26) The element at the root of heap is

1. largest

2. smallest

**3. depending on type of heap it may be smallest or largest**

4. None of the above