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MCQs on Data Structure   **Sem.-III**

1] Data by itself is not useful unless

A] It is massive
B] It is processed to obtain information
C] It is collected from diverse sources
D] It is properly stated

2. Which of the following data structure is not linear data structure?

A) Arrays
B) Linked lists
C) Both of the above
D) None of the above

3. The disadvantage in using a circular linked list is ....

A) It is possible to get into infinite loop.
B) Last node points to first node.
C) Time consuming
D) Requires more memory space

4. A linear list in which each node has pointers to point to the predecessor and successors nodes is called as ..

A) Singly Linked List
B) Circular Linked List
C) Doubly Linked List
D) Linear Linked List

5. A .... is a linear list in which insertions and deletions are made to from either end of the structure.

A) circular queue
B) random of queue
C) priority
D) dequeue

6. In a priority queue, insertion and deletion takes place at ....

A) front, rear end
B) only at rear end
C) only at front end
D) any position

7. Which of the following is an application of stack?

A) finding factorial
B) tower of Hanoi
C) infix to postfix conversion
D) all of the above

9. The data structure which is one ended is ....

A) queue
B) stack
C) tree
D) graph

10. A list which displays the relationship of adjacency between elements is said to be

A) linear
B) non linear
C) linked list
D) trees

11. A binary tree whose every node has either zero or two children is called
a. Complete binary tree
b. Binary search tree
c. Extended binary tree
d. None of above

12. When converting binary tree into extended binary tree, all the original nodes in binary tree are
a. internal nodes on extended tree
b. external nodes on extended tree
c. vanished on extended tree
d. None of above

13. An algorithm that calls itself directly or indirectly is known as
a. Sub algorithm
b. Recursion
c. Polish notation
d. Traversal algorithm

14. In a Heap tree
a. Values in a node is greater than every value in left sub tree and smaller than right sub tree
b. Values in a node is greater than every value in children of it
c. Both of above conditions applies
d. None of above conditions applies

15. A connected graph T without any cycles is called
a. a tree graph
b. free tree
c. a tree
d. All of above

16. The in order traversal of tree will yield a sorted listing of elements of tree in
a. Binary trees
b. Binary search trees
c. Heaps
d. None of above

17. The application of heap tree is

a. To Sort the elements in array
b. To evaluate the mathematical expression
c. To search the element in array
d. None of these

18. The deletion mechanism in the stack is called as

a) PUSH　　　　　**b) POP**　　　　　c) Delete　　　d) None of these

19. LIFO mechanism is used in

a) Stack   b) Queue c) Array   d) linked list

20) The element which is inserted first will be removed last in the

a) Queue b) Array   c) Linked list **d) None of these**