## DATA STRUCTURE MCQ:

1. Which if the following is/are the levels of implementation of data structure

A) Abstract level

B) Application level

C) Implementation level

D) All of the above

2. A binary search tree whose left subtree and right subtree differ in hight by at most 1 unit is called

A) AVL tree

B) Red-black tree

C) Lemma tree

D) None of the above

3. ……………….. level is where the model becomes compatible executable code

A) Abstract level

B) Application level

C) Implementation level

D) All of the above

4. Stack is also called as

A) Last in first out

B) First in last out

C) Last in last out

D) First in first out

5. Which of the following is true about the characteristics of abstract data types?

i) It exports a type.

ii) It exports a set of operations

A) True, False

B) False, True

C) True, True

D) False, False

6. …………… is not the component of data structure.

A) Operations

B) Storage Structures

C) Algorithms

D) None of above

7. Which of the following is not the part of ADT description?

A) Data

B) Operations

C) Both of the above

D) None of the above

8. Inserting an item into the stack when stack is not full is called …………
Operation and deletion of item form the stack, when stack is not empty is called
………..operation.

A) push, pop

B) pop, push

C) insert, delete

D) delete, insert

9. ……………. Is a pile in which items are added at one end and removed from the other.

A) Stack

B) Queue

C) List

D) None of the above

10. ………… is very useful in situation when data have to stored and then retrieved in reverse order.

A) Stack

B) Queue

C) List

D) Link list

11. Which of the following is not the type of queue?

A) Ordinary queue

B) Single ended queue

C) Circular queue

D) Priority queue

12. The property of binary tree is

A) The first subset is called left subtree

B) The second subtree is called right subtree

C) The root cannot contain NULL

D) The right subtree can be empty

13. State true or false.

i) The degree of root node is always zero.

ii) Nodes that are not root and not leaf are called as internal nodes.

A) True, True

B) True, False

C) False, True

D) False, False

14. Any node is the path from the root to the node is called

A) Successor node

B) Ancestor node

C) Internal node

D) None of the above

15. State true of false.

i) A node is a parent if it has successor nodes.

ii) A node is child node if out degree is one.

A) True, True

B) True, False

C) False, True

D) False, False

16. ………………. is not an operation performed on linear list

a) Insertion b) Deletion c) Retrieval d) Traversal

A) only a,b and c

B) only a and b

C) All of the above

D) None of the above

17. Which is/are the application(s) of stack

A) Function calls

B) Large number Arithmetic

C) Evaluation of arithmetic expressions

D) All of the above

18. A …………… is an acyclic digraph, which has only one node with indegree 0, and other nodes have

indegree 1.

A) Directed tree

B) Undirected tree

C) Dis-joint tree

D) Direction oriented tree

19. …………………. Is a directed tree in which outdegree of each node is less than or equal to two.

A) Unary tree

B) Binary tree

C) Dinary tree

D) Both B and C

20. State true or false.

i) An empty tree is also a binary tree.

ii) In strictly binary tree, the outdegree of every node is either o or 2.

A) True, False

B) False, True

C) True, True

D) False, False

## Answers:

D) All of the above

A) AVL tree

C) Implementation level

A) Last in first out

C) True, True

D) None of above

D) None of the above

A) push, pop

B) Queue

A) Stack

B) Single ended queue

D) The right subtree can be empty

C) False, True

B) Ancestor node

B) True, False

D) None of the above

D) All of the above

A) Directed tree

B) Binary tree

C) True, True