CS301 Data Structures

Update MCQS For Quiz-1 File

Solve By Vu Topper RM

80 To 100% Marks

A template is a function or class that is written with a _____data type.
Generic

Which of the following line of code is incorrect?
float *i = float new;

isFull() method of stack class will return true when:
stack is full

Before using the pop method of a stack, the user must call the _____ method.
IsFull();

In the calling function, after the execution of the function called, the program continues its execution from the _____after the function call.
Next line

Circular linked list solve the problem of _____ pointers/method of the doubly link list.
Add

What will be postfix expression of following infix expression?4*1↑7+2
41|7*2+

In which data structure elements are inserted at the back and removed from the front?
Queue

Trying to remove an element from an empty stack is called _____.
Underflow of stack

An efficient program executes faster and helps in _____ the usage of resources like memory and disk.
Minimizing

_____ is a collection of elements arranged in a linear order.
Stack

In singly linked list which node will keep track of starting position of the list.
Next node

Circular Linked List always has _____ NULL pointer/s in a node.
0

Linked List use _____ to store data.
Variable

To search an element which method of the list searches the entire list from beginning to end?
Find();

If we do not have to move too much in the list then use of which one type of list is not necessary/essential.
Circular linked list

Which of the following signature of the constructor function for a stack is correct as a generic data type?
Template<stack T>;

“set()” method of list class is used to:
Set the value of Null Nodes

Consider the linked list having data [6, 72, 35, 65, 25] stored in it. While current pointer is pointing to memory location having 72 stored in it. After calling remove() function on the following linked list current point will point to memory location having value?
6

Head node pointer always points to the _____ of the linked list?
Current node

There is no such node whose next field is NULL, which one of the given option supports the statement.
Circular link list

Which one of the following is not a one-step method in List Implementation using Array?
Find();

First element of an int array can be manipulated by using the index zero as
Int[0];

int * i = new int [10];Above given code will:
Allocate memory for 10 integers

A software solution is said to be efficient if it solves the problem _____ .
within its resource constraints.

Which kind of data structure is used to evaluate postfix expression?
Stack

Which of the following is the limitation of the array?
Fix size

Which of the following function don't belongs to the stack class?
crash()

Consider we have performed the following operations on a stack of size 5.
Push(10);Push(20);Push(30);Pop();Pop();Push(40);Push(50);Pop();After the completion of all operations, the number of element present on stack are _____.
4

Compiler uses which one of the following in Function calls,
Stack

Which of the following statement is correct for the variable "current--"?
current = current – 1

STL is a _____ that is a part of the official standard of C++.
Library

"new int[11]" will allocate memory for _____ integers.
11

We cannot remove items randomly from _____
stack and queue

To create a _____ we link the last node with the first node in the list.
Circularly-linked list

Question No:1 **(Marks:1)** **Vu-Topper RM**

Which one is the correct function call for the following function of calculating cube?

A. cube(num)
B. cube(*num)
C. cube(&num)
D. cube(&&num)

Question No:2 **(Marks:1)** **Vu-Topper RM**

In a complete binary tree, for 25000 nodes the depth will be-----

A. 14
B. 13
C. 12
D. 11

Question No:3 **(Marks:1)** **Vu-Topper RM**

In level-order traversal for Binary Search Tree, _____ data structure is used.

A. Queue
B. Stack
C. Tree
D. Heap

Question No:4 **(Marks:1)** **Vu-Topper RM**

If both left and right nodes of a node are NULL then this type of node is called a ------node.

A. Leaf
B. Node
C. Both
D. None of these

Question No:5 **(Marks:1)** **Vu-Topper RM**

For searching a particular number in Binary Search Tree (if it is not present), the maximum number of comparisons will be _____ comparison(s) at each level.

A. 1
B. 2
C. 3
D. 4

Question No:6 **(Marks:1)** **Vu-Topper RM**

In a complete binary tree the number of nodes at level 5 are

A. 32
B. 30
C. 23
D. 40

Question No:7 **(Marks:1)** **Vu-Topper RM**

While implementing non-recursive traversal for Binary Search Tree, we need to implement _____.

A. Stack
B. Tree
C. Heap
D. Pointer

Question No:8 **(Marks:1)** **Vu-Topper RM**

------- is used for Reference variables in C++.

A. &
B. @
C. #
D. *

Question No:9 **(Marks:1)** **Vu-Topper RM**

Left, right, info, and parent are the operations of _____ data structure.

A. Tree
B. Heap
C. Stack
D. Pointer

Question No:10 **(Marks:1)** **Vu-Topper RM**

If a function has recursive call as the last statement, it is known as ___.

A. Local
B. Last
C. Function
D. Tail recursive

Question No:11 **(Marks:1)** **Vu-Topper RM**

The abstract data type refers to the basic mathematical concept that defines the

A. Variable
B. Functions
C. Pointer
D. Data type

Question No:12 **(Marks:1)** **Vu-Topper RM**

When a function calls another function, the parameters and return address of the calling function are put in _____.

A. Stack
B. Tree
C. Heap
D. Pointer

Question No:13 **(Marks:1)** **Vu-Topper RM**

The balance of a node in a binary tree is defined as the height of its _____ sub tree minus height of its right sub tree.

A. Left
B. Right
C. Upper
D. Lower

Question No:14 **(Marks:1)** **Vu-Topper RM**

Function signatures are also called :

A. Function definition
B. Function prototype
C. Function overriding
D. Function overloading

Question No:15 **(Marks:1)** **Vu-Topper RM**

If we return the reference of a local variable from a function it will cause:

A. Dangling reference
B. reference overloading
C. duplication of local variable
D. deletion of local variable from memory

Question No:16 **(Marks:1)** **Vu-Topper RM**

In the perspective of memory organization each process is divided into _____ sections.

A. 2
B. 4
C. 6
D. 8

Question No:17 **(Marks:1)** **Vu-Topper RM**

The process of getting the value of a variable using pointers is called:

A. Referencing
B. Dereferencing
C. Memory allocation
D. Memory deallocation

Question No:18 **(Marks:1)** **Vu-Topper RM**

We allocate memory dynamically by using _____ operator.

A. New
B. This
C. Increment
D. Decrement

Question No:19 **(Marks:1)** **Vu-Topper RM**

_____ parameter passing (by value or by reference) is similar to PASCAL.

A. C++
B. JAVA
C. COBOL
D. FORTRAN

Question No:20 **(Marks:1)** **Vu-Topper RM**

Which of the following is known as "Last-In, First-Out" or LIFO Data Structure?

A. Tree
B. Stack
C. Heap
D. Pointer

Question No:21 **(Marks:1)** **Vu-Topper RM**

Following is a keyword of C++ _____

A. Delete
B. Update
C. Remove
D. Eliminate

Question No:22 **(Marks:1)** **Vu-Topper RM**

If the root of a tree is at level zero, its two children (subtrees) i.e. nodes will be at _____

A. Level 1
B. Level 2
C. Level 3
D. Level 4

Question No:23 **(Marks:1)** **Vu-Topper RM**

If the root of a tree is at level three in case of a complete binary tree i.e nodes will be at _____.

A. 4
B. 6
C. 8
D. 10

Question No:24 **(Marks:1)** **Vu-Topper RM**

Suppose we have the following values to be inserted in constructing AVL
tree,10,13,15,5,7,8 Tell when first rotation will take place,

A. After inserting the node 10
B. After inserting the node 15
C. After inserting the node 20
D. After inserting the node 25

Question No:25 **(Marks:1)** **Vu-Topper RM**

Which data structure is needed to convert infix expression to postfix expression?

A. Tree
B. Stack
C. Heap
D. Pointer

Question No:26 **(Marks:1)** **Vu-Topper RM**

In AVL tree during insertion, a single rotation can fix the balance in cases _____ and.

A. 1
B. 2
C. 3
D. 4

Question No:27 **(Marks:1)** **Vu-Topper RM**

Which type of rotation can balance the following AVL tree?

A. Single left
B. Single right
C. Double right-left
D. Double left-right

Question No:28 **(Marks:1)** **Vu-Topper RM**

If the root of a tree is at level two in case of a complete binary tree i.e nodes will be at _____.

A. 2
B. 4
C. 6
D. 8

Question No:29 **(Marks:1)** **Vu-Topper RM**

To search an element in ALV tree, it takes maximum 1.88 Log2n time.

A. False
B. True
C. In some cases
D. Searching cannot be performed in AVL tree

Question No:30 **(Marks:1)** **Vu-Topper RM**

Local variables of a function are stored in,

A. Stack
B. Tree
C. Heap
D. Pointer

Question No:31 **(Marks:1)** **Vu-Topper RM**

For making Binary Search Tree for Strings we need, _____ data type.

A. Int
B. Char
C. Float
D. Double

Question No:32 **(Marks:1)** **Vu-Topper RM**

We can make a lexicographic order of characters based on their ___.

A. ASCII values
B. Binary digits
C. Random choice
D. Memory addresses

Question No:33 **(Marks:1)** **Vu-Topper RM**

A BST generated from the data in ascending order is **_____.**

A. Linear
B. Un sorted

C. Balanced
D. Nonlinear

Question No:34 **(Marks:1)** **Vu-Topper RM**
The _____ of a node in a binary tree is defined as the height of its left subtree minus height of its right subtree.
A. Width
B. Level
C. Height
D. Balance

Question No:35 **(Marks:1)** **Vu-Topper RM**
All the objects created using _____ operator have to be explicitly destroyed using the delete operator.
A. New
B. Build
C. Create
D. Construct

Question No:36 **(Marks:1)** **Vu-Topper RM**
Which of the following is a nonlinear data structure?
A. Tree
B. Heap
C. Stack
D. Pointer

Question No:37 **(Marks:1)** **Vu-Topper RM**
Consider the following push operations of a Stack:
A. Stack.push(4);
B. Stack.push(6);
C. Stack.push(5);
D. Stack.push(8);

Question No:38 **(Marks:1)** **Vu-Topper RM**

~BinarySearchTree( ) is a _____.

A. Destructor

B. Constructor

C. Switch case

D. Template method call

Question No:39 **(Marks:1)** **Vu-Topper RM**

HOW many cases of rotation are there in AVL tree?

A. 2

B. 4

C. 6

D. 8

Question No:40 **(Marks:1)** **Vu-Topper RM**

____ tree has been named after two persons Adelson-Velskii and Landis.

A. AVL

B. RED

C. Tree

D. Binary search

Question No:41 **(Marks:1)** **Vu-Topper RM**

If there is a strictly complete binary tree of depth 3, the total number of nodes in it will be?

A. 2K

B. 0k

C. 1k

D. 3k

Question No:42 **(Marks:1)** **Vu-Topper RM**

There are _____cases of Rotation in AVL tree.

A. 2

B. 4

C. 6
D. 8

Question No:43 **(Marks:1)** **Vu-Topper RM**

If one converts the above expression into postfix, what would be the resultant expression?

A. 78/9+
B. 87/9+
C. +78/*
D. 9/78+

Question No:44 **(Marks:1)** **Vu-Topper RM**

In simple or singly linked list there is/are _____ pointer/s in each node.

A. One
B. Two
C. Four
D. Three

Question No:45 **(Marks:1)** **Vu-Topper RM**

The principal benefit of a linked list over a conventional array is that the order of the linked items may be_____ from the order that the data items are stored in memory.

A. Same
B. Different
C. Both
D. None of these

Question No:46 **(Marks:1)** **Vu-Topper RM**

The computer memory can be thought of as a/an

A. Tree
B. Array
C. Heap

D. Pointer

Question No:47 **(Marks:1)** **Vu-Topper RM**

Suppose we have a value for Queue: 2 1 4 6 3Where front is at 2 and rear is at 3, after dequeue one element from that Queue, what will be the resultant Queue?

A. 2146
B. 2141
C. 4621
D. 2147

Question No:48 **(Marks:1)** **Vu-Topper RM**

The -- is a decrement operator in C++ that decreases the value of the operand by _____.

A. One
B. Two
C. Five
D. Six

Question No:49 **(Marks:1)** **Vu-Topper RM**

In Left-Right case of rotation in _____ tree. A double rotation is performed.

A. AVL
B. VLA
C. EVL
D. LVA

Question No:50 **(Marks:1)** **Vu-Topper RM**

The _____of every node should be 1, 0 or -1 otherwise, it will not be an AVL tree.

A. Tree
B. AVL
C. Pointer

D. Balance

Question No:51 **(Marks:1)** **Vu-Topper RM**

In singly linked list a node comprises of _____ field/s.

A. Two
B. One
C. Six
D. Five

Question No:52 **(Marks:1)** **Vu-Topper RM**

int htdiff = height(root->getLeft()) height(root->getRight()); The above line of code is taken from AVL insert method. Complete it by selecting an appropriate symbol.

A. Minus (-)
B. Add
C. Sub
D. Multiple

Question No:53 **(Marks:1)** **Vu-Topper RM**

Each operator in a postfix expression refers to the previous _____ operand(s).

A. Two
B. Three
C. Four
D. Five

Question No:54 **(Marks:1)** **Vu-Topper RM**

The _____ method of list will position the currentNode and lastCurrentNode at the start of the list.

A. Start
B. End
C. Middle
D. None of these

Question No:55 **(Marks:1)** **Vu-Topper RM**

_____ is utilized at the time of memory allocation in dynamic manner.

A. Heap
B. Stack
C. Array
D. Function

Question No:56 **(Marks:1)** **Vu-Topper RM**

What will be the result of evaluating following expression? 5+3*2/(6-3)

A. 1
B. 3
C. 7
D. 5

Question No:57 **(Marks:1)** **Vu-Topper RM**

Which of the following is the correct conversion of infix to postfix expression?

A. Z+B-(D-H)/K
B. ZB+DH-K/-
C. Z+B-(H-D)/K
D. Z+B-(D-H)

Question No:58 **(Marks:1)** **Vu-Topper RM**

The _____ of a binary tree is the maximum level of its leaves (also called the depth).

A. Width
B. Level
C. Height
D. Balance

Question No:59 **(Marks:1)** **Vu-Topper RM**

Memory address is stored in

A. Array
B. Int
C. Pointer
D. Function

Question No:60 **(Marks:1)** **Vu-Topper RM**

If numbers 5, 222, 4, 48 are inserted in a queue, which one will be removed first?

A. 5
B. 6
C. 7
D. 8

Question No:61 **(Marks:1)** **Vu-Topper RM**

Consider the following infix expression.

A. 7/8 + 9
B. 8/7+9
C. -7/8+9
D. 78/+9

Question No:62 **(Marks:1)** **Vu-Topper RM**

_____ is the major factor to see the efficiency of a program.

A. Time
B. Cost
C. Maintance
D. None of these

Question No:63 **(Marks:1)** **Vu-Topper RM**

There are four cases of rotation in an _____ tree.

A. AVL
B. Tree

C. Binary
D. Heap

Question No:64 **(Marks:1)** **Vu-Topper RM**

The back() method decreases the value of variable current by _____.

A. One
B. Two
C. Four
D. Three

Question No:65 **(Marks:1)** **Vu-Topper RM**

Each node in singly linked list contains_____

A. One Pointers
B. Two Pointers
C. Six Pointers
D. Five Pointers

Question No:66 **(Marks:1)** **Vu-Topper RM**

The _____ symbol is used when we want to get the value of a variable using pointer

A. *
B. @
C. &
D. #

Question No:67 **(Marks:1)** **Vu-Topper RM**

In which of the following function signatures, the value of variable "num" cannot be changed in function body?

A. int cube(int num)
B. int cube(int &num)
C. int cube(int *num)
D. int &cube(int num)

Question No:68 **(Marks:1)** **Vu-Topper RM**

Level-order traversal for Binary Search Tree can be implemented, ___.

A. Through max-heap

B. Only through recursive method

C. Only through not recursive method

Question No:69 **(Marks:1)** **Vu-Topper RM**

Through both recursive method call and non-recursive method call After deletion of a node from a binary search tree _____ traversal method should be maintained.

A. Inorder

B. Preorder

C. Post order

D. Level order

Question No:70 **(Marks:1)** **Vu-Topper RM**

A node in AVL tree can become imbalanced due to

A. insertion operation

B. deletion operation

C. both insertion and deletion operations

D. node does not imbalance due to insertion and deletion

Question No:71 **(Marks:1)** **Vu-Topper RM**

The _____ sign before the name of the variable means that the address of the variable is being

A. ::

B. #

C. II

D. &

Question No:72 **(Marks:1)** **Vu-Topper RM**

Which of the following tree is correct next step to balance the given AVL tree?

A. A
B. B
C. C
D. D

Question No:73 (Marks:1) Vu-Topper RM

_____ objects (objects accessed by pointers) are called anonymous objects.

A. Public
B. Private
C. Friend
D. Nameless

Question No:74 (Marks:1) Vu-Topper RM

The first statement in the given code is called as:

A. Binary Declaration
B. Pre Class Declaration
C. Forward Declaration
D. Post Class Declaration

Question No:75 (Marks:1) Vu-Topper RM

What will be level order traversal of the given BST ?

A. 1435286
B. 6281534
C. 1234568
D. 1243568

Question No:76 (Marks:1) Vu-Topper RM

The insertion operation in AVL tree, generally takes more time than insertion operation in simple binary search tree"

A. Always correct
B. Is always incorrect
C. Can be correct in some cases only

D. Insertion time is same in AVL and BST

Question No:77 **(Marks:1)** **Vu-Topper RM**

When a node to be deleted from a BST has both left and right child, after deletion its _____ node will replace this node.

A. Successor
B. Predecessor
C. inorder Successor
D. Preorder successor

Question No:78 **(Marks:1)** **Vu-Topper RM**

In a strictly complete binary tree, the number of _____ at any level k will be 2k.

A. Sets
B. Link
C. Nodes
D. Children

Question No:79 **(Marks:1)** **Vu-Topper RM**

In the perspective of memory organization every process executing, the last part of the memory is for the _____ of the program.

A. Stack
B. Data
C. Heap
D. Code

Question No:80 **(Marks:1)** **Vu-Topper RM**

What will be output of the given C++ code?

```
Char lhs[]= “Army”;
Char rhs[]= “Army”;
cout<<strcmp(lhs,rhs);
```

A. 0
B. Syntax Eroor

C. Negative number
D. Positive number

Question No:81 **(Marks:1)** **Vu-Topper RM**
At a particular node, the difference in heights of its left and right subtree gives the _____ of the
A. Height
B. Balance
C. Left subtree
D. Right subtree

Question No:82 **(Marks:1)** **Vu-Topper RM**
In AVL tree insertion occurs on the inside in cases _____ and 3 which a single rotation cannot fix.
A. 1
B. 2
C. 5
D. 4

Question No:83 **(Marks:1)** **Vu-Topper RM**
In the perspective of memory organization every process executing, the second part of the memory is for the _____ of the program.
A. Stack
B. Data
C. Static code
D. None of these

Question No:84 **(Marks:1)** **Vu-Topper RM**
One should be careful about transient _____ that are stored by reference in data structures.
A. Tree
B. Stack
C. Objects

D. Function

Question No:85 **(Marks:1)** **Vu-Topper RM**

Which of the following is correct syntax to pass a constant variable by reference to a function?

A. int display(int const val)
B. int display(const int val)
C. int display(const &int val)
D. Int display (const int& val)

Question No:86 **(Marks:1)** **Vu-Topper RM**

Which of the following data structure is/are linear type?

A. AVL tree
B. Graph
C. Heap and Stack
D. Binary Search Tree

Question No:87 **(Marks:1)** **Vu-Topper RM**

Making the tree unbalanced, it violates the _____ rule.

A. AVL
B. Stack
C. Queue
D. Linked list

Question No:88 **(Marks:1)** **Vu-Topper RM**

What will be the return type of the findMin method in the statement given below?

Int& findMin()const;

A. integer pointer
B. integer variable
C. constant integer
D. Integer reference

Question No:89 **(Marks:1)** **Vu-Topper RM**

_____ of an empty AVL tree is defined to be -1.

A. Size
B. Width
C. Height
D. Length

Question No:90 **(Marks:1)** **Vu-Topper RM**

Which one of the following case is the most complicated case to delete a node from BST?

A. No case is complicated
B. Node to be deleted is the leaf node
C. Node to be deleted has either left child or right child
D. Node to be deleted has both the left and right children

Question No:91 **(Marks:1)** **Vu-Topper RM**

If we delete node 2 from the given BST then which node will replace it?

A. 1
B. 3
C. 5
D. 7

Question No:92 **(Marks:1)** **Vu-Topper RM**

To create a reference variable, we need to use _____ sign.

A. Dollar
B. Sigma
C. Asterisk
D. Ampersand

Question No:93 **(Marks:1)** **Vu-Topper RM**

In Binary Search Tree, deleting a node is easy if it is a _____ node.

A. Left
B. Leaf

C. Root
D. Right

Question No:94 **(Marks:1)** **Vu-Topper RM**
Which of the following function(s) is/are used for function call by using pointers?

```
void func1(int& num) {
num++;
}
void func2(int* num){
num++;
}
```

A. Func2
B. Func1
C. Both
D. None of these

Question No:95 **(Marks:1)** **Vu-Topper RM**
A zigzag rotation is performed. In Left-Left case of rotation in AVL tree.
False
Ture

Question No:96 **(Marks:1)** **Vu-Topper RM**
The lifetime of a transient object cannot exceed that of the application.
True
False

Question No:97 **(Marks:1)** **Vu-Topper RM**
AVL tree is nonlinear data structure.
True
False

Question No:98 **(Marks:1)** **Vu-Topper RM**
AVL tree is linear data structure.
False
True

Question No:99 **(Marks:1)** **Vu-Topper RM**
AVL tree is a binary search tree
True
False

Question No:100 **(Marks:1)** **Vu-Topper RM**
Elements in a queue data structure are added from_____ and removed from _____
Rear end. front end

Question No:101 **(Marks:1)** **Vu-Topper RM**
Which of the following traversal method traverses the binary tree in sorted order?
inOrder() method

Question No:102 **(Marks:1)** **Vu-Topper RM**
In which traversal method, the recursive calls can be used to traverse a binary tree?
In preorder traversal

Question No:103 **(Marks:1)** **Vu-Topper RM**
Which of the following is TRUE for search operations in a binary tree as compared to linked list or an array?
It increases the number of comparisons

Question No:104 **(Marks:1)** **Vu-Topper RM**
In a tree, we link the nodes in such a way that it _____ a linear structure.

Does not remain

Question No:105 **(Marks:1)** **Vu-Topper RM**
When a function calling itself is called as _____.
Recursion

Question No:106 **(Marks:1)** **Vu-Topper RM**
In a program a reference variable with name "x" can be declared as
int &x;

Question No:107 **(Marks:1)** **Vu-Topper RM**
A binary tree is said to be a _____ binary tree if every non-leaf node in a binary tree has nonempty left and right subtrees.
Strictly binary tree

Question No:108 **(Marks:1)** **Vu-Topper RM**
We can calculate the _____ of a subtree by counting its levels from the bottom.
Height

Question No:109 **(Marks:1)** **Vu-Topper RM**
In C++, we place the class interface in _____file.

A. .h
B. .cpp
C. .ccp
D. .hhh

Question No:110 **(Marks:1)** **Vu-Topper RM**
In which traversal method root node is visited at last step?
Post-order Traversal

Question No:111 **(Marks:1)** **Vu-Topper RM**
For a complete binary tree with n numbers of nodes, the depth is calculated as _____
log2(number of nodes+1)-1

Question No:112 **(Marks:1)** **Vu-Topper RM**
A _____ is a tree in which every level, except possibly the last, is completely filled.
Complete binary tree

Question No:113 **(Marks:1)** **Vu-Topper RM**
Local variables defined inside function body are ____ automatically at the end of function execution.
Destroyed

Question No:114 **(Marks:1)** **Vu-Topper RM**
BinarySearchTree () is----------?
Destroyed

Question No:115 **(Marks:1)** **Vu-Topper RM**
Sub-tree of binary search tree should be _____.
Binary search tree

Question No:116 **(Marks:1)** **Vu-Topper RM**
Josephus problem is resolved by the implementation of_____.
Circular linked list

Question No:117 **(Marks:1)** **Vu-Topper RM**
In which of the following tree for each node, the value of root node is greater than left child and smaller than right child ?
Binary search tree

Question No:118 **(Marks:1)** **Vu-Topper RM**
If we use singly linked list to implement list, then there is an issue that it gives difficulty when we:
We will increase its size

Question No:119 **(Marks:1)** **Vu-Topper RM**
In a list, tail() method of current pointer _____
Moves the "current"pointer to the very last element

Question No:120 **(Marks:1)** **Vu-Topper RM**
Two common models of simulation are _____ and _____.
Time –based simulation and Event- based simulation

Question No:121 **(Marks:1)** **Vu-Topper RM**
When add() operation of a linked list is called the following action is done
A new node is made

Question No:122 **(Marks:1)** **Vu-Topper RM**
What will be the postfix expression of following infix expression?
A B + C D/ + E –

Question No:123 **(Marks:1)** **Vu-Topper RM**
Stack and Queue can be implemented using _____,
Singly Link List

Question No:124 **(Marks:1)** **Vu-Topper RM**
What will be postfix expression of the following infix expression?
Infix Expression
Abc*+d-

Question No:125 **(Marks:1)** **Vu-Topper RM**

_____ method returns the top element of the stack without removing it.

Top()

Question No:126 **(Marks:1)** **Vu-Topper RM**

In tree, the search operation is _____ as compared to the linked list.

Very fast

Question No:127 **(Marks:1)** **Vu-Topper RM**

In_____, a programmer uses two pointers in the node, i.e. one to point to next node and the other to point to the previous node.

Linked list

Question No:128 **(Marks:1)** **Vu-Topper RM**

A queue is a data structure where elements are

Inserted and removed from both ends

Question No:129 **(Marks:1)** **Vu-Topper RM**

The stack implementing an array causes worst case behavior when the insertion and deletion of an element done from

Beginning of an array

Question No:130 **(Marks:1)** **Vu-Topper RM**

If a node is inserted in outer side of a node in binary search tree then to make it AVL tree,

We may have to apply single rotation

Question No:131 **(Marks:1)** **Vu-Topper RM**

Stack.push(15) will push 15 on _____.

Top of the stack

Question No:132 **(Marks:1)** **Vu-Topper RM**
During the execution of a process, operating system constructs four things for that process. Which of the following is not part of that process?
Liked list

Question No:133 **(Marks:1)** **Vu-Topper RM**
Suppose there are three nodes tree with three numbers 14, 4, 15. Following is not a permutation, or combination for output them.
(4,4, 15)

Question No:134 **(Marks:1)** **Vu-Topper RM**
The type of expression in which operator succeeds its operands is_____expression.
Postfix

Question No:135 **(Marks:1)** **Vu-Topper RM**
The function calls are made with the help of_____.
Queue

Question No:136 **(Marks:1)** **Vu-Topper RM**
In case of insertion of right inner node in BST,
Left rotation then right to make AVL

Question No:137 **(Marks:1)** **Vu-Topper RM**
Which operation of queue data structure is used to get front element from the queue and then remove it from the queue?
Remove()

Question No:138 **(Marks:1)** **Vu-Topper RM**
In _____ various cells of memory are not located continuously.
Linked list

Question No:139 **(Marks:1)** **Vu-Topper RM**
Which operation of queue data structure is used to insert an element into the Queue?
Enqueuer()

Question No:140 **(Marks:1)** **Vu-Topper RM**
From Operating System point of view, the recursive function calls are made with the help of _____.
Queue

Question No:141 **(Marks:1)** **Vu-Topper RM**
Array cells are _____ in computer memory.
Contiguous

Question No:142 **(Marks:1)** **Vu-Topper RM**
Leaf node of binary search tree contains _____
One null pointer

Question No:143 **(Marks:1)** **Vu-Topper RM**
dequeue() operation of queue data structure is used to _____
remove an element from the front and return it

Question No:144 **(Marks:1)** **Vu-Topper RM**
The depth of a binary tree is
Maximum level of a leaf

Question No:145 **(Marks:1)** **Vu-Topper RM**
Which of the following operation returns but do not removes top value of the stack?
Top

Question No:146 **(Marks:1)** **Vu-Topper RM**
In doubly linked list a node consists of three parts:
2 pointer and 1 object

Question No:147 **(Marks:1)** **Vu-Topper RM**
Last node in circular linked list contains
No null pointer

Question No:148 **(Marks:1)** **Vu-Topper RM**
A_____ model attempts to model a real-world phenomenon
Simulation

Question No:149 **(Marks:1)** **Vu-Topper RM**
Factorial is an example of _____function.
Recursive

Question No:150 **(Marks:1)** **Vu-Topper RM**
Which one of the following calling method does not change the original value of the argument in the calling function?

A. Call by passing as name
B. Call by passing as value
C. Call by passing as pointer
D. Call by passing as reference

Question No:151 **(Marks:1)** **Vu-Topper RM**
In level-order traversal for Binary Search Tree, we visit the nodes at each level before proceeding to the next level, in a _____ order.
Left –to –right

Question No:152 **(Marks:1)** **Vu-Topper RM**
Binary Search Tree voilates the condition of AVL tree when any node has balance equal to
1or-1

Question No:153 **(Marks:1)** **Vu-Topper RM**

_____ is when function is calling to itself.

Recursion

Question No:154 **(Marks:1)** **Vu-Topper RM**

Which of the following function don't belongs to the stack class?

Crash()

Question No:155 **(Marks:1)** **Vu-Topper RM**

copy() method of list data structure _____

Set one list to be a copy of another

Question No:156 **(Marks:1)** **Vu-Topper RM**

Following is true in case of using Recursive method calls

The code becomes very short

Question No:157 **(Marks:1)** **Vu-Topper RM**

_____is a self-balancing tree.

Binary Search Tree

Question No:158 **(Marks:1)** **Vu-Topper RM**

While implementing stack with an array and to achieve LIFO behavior, we used push and pop elements at _____.

The start of the array

Question No:159 **(Marks:1)** **Vu-Topper RM**

Generalized code written for a class is called:

Template

Question No:160 **(Marks:1)** **Vu-Topper RM**

Which of the following statement is false?

Pointers store the next data element of a list

Question No:161 **(Marks:1)** **Vu-Topper RM**
Want and de-allocatmg memory for linked lest nodes does take hrne than pre-allocated array
More

Question No:162 **(Marks:1)** **Vu-Topper RM**
Suppose you are writing a class for Node class and forgot to write the constructor of the class, then
Compiler will automatically generate a default constructor

Question No:163 **(Marks:1)** **Vu-Topper RM**
Which of the following is the correct option for priority Queue?
The type of queues that is FIFO i.e. the person who comes first should leave first.

Question No:164 **(Marks:1)** **Vu-Topper RM**
add(12) method of linked list class will:
Add 12 as value in linked list

Question No:165 **(Marks:1)** **Vu-Topper RM**
In singly linked list “next” field of node contains:
Address of next node

Question No:166 **(Marks:1)** **Vu-Topper RM**
Which of the following line of code is incorrect?
The lifetime of a transient object can exceed that of the application which is accessing it.

Question No:167 **(Marks:1)** **Vu-Topper RM**
A list is the collection of items of the _____
Same type

Question No:168 **(Marks:1)** **Vu-Topper RM**
back() method of List class is used to:
Moves the "current" pointer to backward one element.

Question No:169 **(Marks:1)** **Vu-Topper RM**
_____ is the maximum height of the AVL tree.
A. 1.44
B. Log2n
C. 1.44log2n
D. 4.44log22

Question No:170 **(Marks:1)** **Vu-Topper RM**
length() method of List class is used to:
Return the length of the list

Question No:171 **(Marks:1)** **Vu-Topper RM**
Allocating and de-allocating memory for linked list nodes does take _____ time than pre-allocated array.
More

Question No:172 **(Marks:1)** **Vu-Topper RM**
In which case of insertion we require double rotation to make the AVL tree balance.
None

Question No:173 **(Marks:1)** **Vu-Topper RM**
In array list the worst case of removing an element is
To remove an element from the end of the list

Question No:174 **(Marks:1)** **Vu-Topper RM**
Whenever we call a function, the compiler makes a stack, the top element of the stack is _____ of the function.
Return Address

Question No:175 **(Marks:1)** **Vu-Topper RM**
Whenever we call a function, the compiler makes a _____ that it uses to fulfill this function call.
Stack

Question No:176 **(Marks:1)** **Vu-Topper RM**
_____ rule applies for evaluating operators of same precedence in an expression
None

Question No:177 **(Marks:1)** **Vu-Topper RM**
The postfix form of the expression A + B * C and (A + B) * C will be _____.
Same

Question No:178 **(Marks:1)** **Vu-Topper RM**
If we use array to implement list, then there is an issue that it gives difficulty when:
We will access value randomly

Question No:179 **(Marks:1)** **Vu-Topper RM**
During in-order traversal using recursive calls, if we found a node is NULL. It means this node will satisfy following condition.
It will not have left child

Question No:180 **(Marks:1)** **Vu-Topper RM**
Which one the following is more closer to AVL tree, (chose the best option)
Binary Search Tree

Question No:181 **(Marks:1)** **Vu-Topper RM**
In internal memory organization of a process, there is some area of memory for static data that holds _____ variables.

Both Static and Global

Question No:182 **(Marks:1)** **Vu-Topper RM**
Which one is not the property of binary tree?
Sibling node should be same parent

Question No:183 **(Marks:1)** **Vu-Topper RM**
What's wrong with following loop? while((i < 10) && (i > 24)) { }
The Condition is always false

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے