

Subject: Data Structures CS301  
 Test: Midterm past Paper questions  
 Total Questions: 91

Question No.	Question Details	Total Marks
1	<p>ddd</p> <p><input checked="" type="checkbox"/> ddd</p> <p><input type="checkbox"/> dfdfdf</p> <p><input type="checkbox"/> dfd</p> <p><input type="checkbox"/> fdfdf</p>	1
2	<p>Deleting a leaf node in binary search tree involves setting _____ pointer/s of that node's parent as null.</p> <p><input checked="" type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p>	1
3	<p>A node cannot be deleted, when the node to be deleted has both left and right subtrees.</p> <p><input type="checkbox"/> True</p> <p><input checked="" type="checkbox"/> False</p>	1
4	<p>An array is a group of consecutive related memory locations.</p> <p><input checked="" type="checkbox"/> True</p> <p><input type="checkbox"/> False</p>	1
5	<p>Consider the following infix expression: <math>3 + 5 * 6 - 7 * (8 + 5)</math> Which of the following is a correct equivalent expression(s) for the above?</p> <p><input type="checkbox"/> <math>3\ 6\ 5 + * 7\ 5\ 8 + - *</math></p> <p><input type="checkbox"/> <math>3\ 6\ 5\ 7\ 5\ 8 + * + - *</math></p> <p><input type="checkbox"/> <math>3\ 5\ 6 + * 7\ 8\ 5 + - *</math></p> <p><input checked="" type="checkbox"/> <math>3\ 5\ 6 * + 7\ 8\ 5 + * -</math></p>	1

6	<p>The difference between a binary tree and a binary search tree is that ,a binary search tree has</p> <p><input type="checkbox"/> two children per node whereas a binary tree can have none, one, or two children per node</p> <p><input type="checkbox"/> in binary search tree nodes are inserted based on the values they contain</p> <p><input type="checkbox"/> in binary tree nodes are inserted based on the values they contain</p> <p><input type="checkbox"/> none of these</p>	1
7	<p>We can add elements in QUEUE From _____</p> <p><input type="checkbox"/> Front</p> <p><input checked="" type="checkbox"/> Rear</p> <p><input type="checkbox"/> From Both Rare and Front</p> <p><input type="checkbox"/> None of these</p>	1
8	<p>Which of the following abstract data types are NOT used by Integer Abstract Data type group?</p> <p><input type="checkbox"/> short</p> <p><input type="checkbox"/> Int</p> <p><input checked="" type="checkbox"/> float</p> <p><input type="checkbox"/> long</p>	1
9	<p>Which one of the following statements is correct?</p> <p><input checked="" type="checkbox"/> Array size is fixed once it is created</p> <p><input type="checkbox"/> Link List size is fixed once it is created</p> <p><input type="checkbox"/> Binary Search Tree size is fixed once it is created</p> <p><input type="checkbox"/> AVL Tree size is fixed once it is created</p>	1
10	<p>Linked lists are collections of data items "lined up in a row" , insertions and deletions can be made only at the front and the back of a linked list.</p> <p><input type="checkbox"/> True</p> <p><input checked="" type="checkbox"/> False</p>	1
11	<p>In a program a reference variable, say x, can be declared as</p> <p><input checked="" type="checkbox"/> int &amp;x ;</p> <p><input type="checkbox"/> int *x ;</p> <p><input type="checkbox"/> int x ;</p> <p><input type="checkbox"/> None of the given options</p>	1

12	Which one of the following statement is NOT correct .	1
	<input checked="" type="checkbox"/> In linked list the elements are necessarily to be contiguous	
	<input type="checkbox"/> In linked list the elements may locate at far positions in the memory	
	<input type="checkbox"/> In linked list each element also has the address of the element next to it	
	<input type="checkbox"/> In an array the elements are contiguous	
13	Is a data structure that can grow easily dynamically at run time without having to copy existing elements?	1
	<input type="checkbox"/> Array	
	<input checked="" type="checkbox"/> List	
	<input type="checkbox"/> Both of these	
	<input type="checkbox"/> None of these	
14	Queue follows	1
	<input type="checkbox"/> Last in First out	
	<input type="checkbox"/> First in Last out	
	<input checked="" type="checkbox"/> First in First out	
	<input type="checkbox"/> None of these	
15	Parameters in function call are passed using,	1
	<input checked="" type="checkbox"/> Stack	
	<input type="checkbox"/> Queue	
	<input type="checkbox"/> Binary Search Tree	
	<input type="checkbox"/> AVL Tree	
16	Which statement of the following statements is incorrect?	1
	<input type="checkbox"/> Lists can be implemented by using arrays or linked lists	
	<input type="checkbox"/> A list is a sequence of one or more data items	
	<input type="checkbox"/> Stack is a special kind of list in which all insertions and deletions take place at one end	
	<input checked="" type="checkbox"/> Stacks are easier to implement than lists	
17	The operation for removing an entry from a stack is traditionally called:	1
	<input type="checkbox"/> delete	
	<input type="checkbox"/> peek	
	<input checked="" type="checkbox"/> pop	
	<input type="checkbox"/> remove	

18	<p>Suppose a pointer has been declared in main but has not assigned any variable address then</p> <p><input type="checkbox"/> That pointer points to First byte in main function</p> <p><input type="checkbox"/> That pointer contains a NULL value</p> <p><input checked="" type="checkbox"/> That pointer points to any memory address</p> <p><input type="checkbox"/> None of these</p>	1
19	<p>A Compound Data Structure is the data structure which can have multiple data items of same type or of different types. Which of the following can be considered compound data structure?</p> <p><input checked="" type="checkbox"/> Arrays</p> <p><input type="checkbox"/> LinkLists</p> <p><input type="checkbox"/> Binary Search Trees</p> <p><input type="checkbox"/> All of the given options</p>	1
20	<p>The tree data structure is a</p> <p><input type="checkbox"/> Linear data structure</p> <p><input checked="" type="checkbox"/> Non-linear data structure</p> <p><input type="checkbox"/> Graphical data structure</p> <p><input type="checkbox"/> Data structure like queue</p>	1
21	<p>Which one of the following is a valid postfix expression?</p> <p><input type="checkbox"/> <math>ab+c*d-</math></p> <p><input checked="" type="checkbox"/> <math>abc^++d-</math></p> <p><input type="checkbox"/> <math>abc+*d-</math></p> <p><input type="checkbox"/> <math>(abc^++)d-</math></p>	1
22	<p>When an operator is used in between two operands this is which type of notation</p> <p><input type="checkbox"/> Prefix</p> <p><input type="checkbox"/> Postfix</p> <p><input checked="" type="checkbox"/> Infix</p> <p><input type="checkbox"/> None of the Above</p>	1
23	<p>What will be the valid postfix notation of <math>A+B*C-D</math></p> <p><input type="checkbox"/> <math>ABC+*D-</math></p> <p><input checked="" type="checkbox"/> <math>ABC^++D-</math></p> <p><input type="checkbox"/> <math>ABCD+-*</math></p> <p><input type="checkbox"/> <math>AB+D*C</math></p>	1

24	Tree data structure is a	1
	<input type="checkbox"/> Linear	
	<input checked="" type="checkbox"/> Non Linear	
	<input type="checkbox"/> Circular	
	<input type="checkbox"/> None of Above	
25	Non recursive calls are faster than the Recursive calls.	1
	<input checked="" type="checkbox"/> True	
	<input type="checkbox"/> False	
26	Following are the linear data structures:-	1
	<input type="checkbox"/> Stacks	
	<input type="checkbox"/> Queues	
	<input checked="" type="checkbox"/> Both Stacks and Queues	
	<input type="checkbox"/> None of the above	
27	Highest Operators Precedence is of the following operator:-	1
	<input type="checkbox"/> Plus	
	<input type="checkbox"/> Minus	
	<input checked="" type="checkbox"/> Multiply	
	<input type="checkbox"/> Exponentiation	
28	Each node in a BST has Pointers:-	1
	<input type="checkbox"/> 1	
	<input checked="" type="checkbox"/> 2	
	<input type="checkbox"/> 3	
	<input type="checkbox"/> 4	
29	After creation of an array:-	1
	<input type="checkbox"/> Size can be increase but can not be decreased.	
	<input type="checkbox"/> Size can be decreased but can not be increased.	
	<input checked="" type="checkbox"/> Size can neither be increased nor be decreased.	
	<input type="checkbox"/> Size can be increased and can also be decreased	

30	BST is a Structure:-	1
	<input type="checkbox"/> Linear	
	<input checked="" type="checkbox"/> Non Linear	
	<input type="checkbox"/> Circular	
	<input type="checkbox"/> None of Above	
31	To check the depth of an AVL tree following time will be taken:-	1
	<input type="checkbox"/> $1.66 \log_2 n$	
	<input checked="" type="checkbox"/> $1.44 \log_2 n$	
	<input type="checkbox"/> $\log_2 (n+1) - 1$	
	<input type="checkbox"/> $1.66 \log_2 n (n+1)$	
32	In an AVL tree to delete a parent with two childs in a straight line following rotations will be required	1
	<input type="checkbox"/> Single	
	<input checked="" type="checkbox"/> Double	
	<input type="checkbox"/> Triple	
	<input type="checkbox"/> None.of the given options	
33	Which of the following is a non linear data structure?	1
	<input type="checkbox"/> Linked List	
	<input type="checkbox"/> Stack	
	<input type="checkbox"/> Queue	
	<input checked="" type="checkbox"/> Tree	
34	Consider the following infix expression. $5 + 6/2$ If one converts the above expression into postfix, what would be the resultant expression?	1
	<input type="checkbox"/> $56/ + 2$	
	<input checked="" type="checkbox"/> $5 6 2 / +$	
	<input type="checkbox"/> $/62 + 5$	
	<input type="checkbox"/> $5 6 / 2 +$	
35	There is/are case/s for rotation in an AVL tree,	1
	<input type="checkbox"/> 1	
	<input type="checkbox"/> 2	
	<input type="checkbox"/> 3	
	<input checked="" type="checkbox"/> 4	

36	Searching an element in an AVL tree take maximum in AVL tree,	1
	<input type="checkbox"/> $\log_2(n+1)$ time (where n is no. of nodes)	
	<input type="checkbox"/> $\log_2(n+1) - 1$	
	<input checked="" type="checkbox"/> $1.44 \log_2 n$	
	<input type="checkbox"/> $1.66 \log_2 n$	
37	Which of the following is "TRUE" about arrays,	1
	<input type="checkbox"/> We can increase the size of arrays after their creation.	
	<input type="checkbox"/> We can decrease the size of arrays after their creation.	
	<input type="checkbox"/> We can increase but can't decrease the size of arrays after their creation.	
	<input checked="" type="checkbox"/> We can neither increase nor decrease the array size after their creation.	
38	Four statements about trees are below. Three of them are correct. Which one is INCORRECT?	1
	<input type="checkbox"/> Trees are recursively defined multi-dimensional data structures tree	
	<input type="checkbox"/> The order of a tree indicates a maximum number of children allowed at each node of the	
	<input type="checkbox"/> A search tree is a special type of tree where all values (i.e. keys) are ordered	
	<input checked="" type="checkbox"/> If Tree1's size is greater than Tree2's size, then the height of Tree1 must also be greater than Tree2's height.	
39	Which one of the following operators has higher priority than all of others?	1
	<input checked="" type="checkbox"/> Multiplication operator	
	<input type="checkbox"/> Minus operator	
	<input type="checkbox"/> Plus operator	
	<input type="checkbox"/> Exponentiation operator	
40	A queue is a----- data structure, whereas a stack is a -----data structure.	1
	<input checked="" type="checkbox"/> FIFO, LIFO	
	<input type="checkbox"/> LIFO,FIFO	
	<input type="checkbox"/> both given options	
	<input type="checkbox"/> None of these	

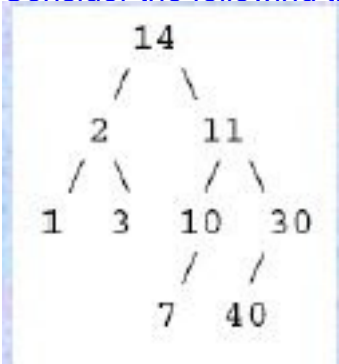
41	<p>Suppose that the class declaration of SomeClass includes the following function prototype.  <code>bool LessThan( SomeClass anotherObject );</code> Which of the following tests in the client code correctly compares two class objects alpha and beta?</p> <p><input type="checkbox"/> if (alpha &lt; beta)</p> <p><input checked="" type="checkbox"/> if (alpha.LessThan(beta))</p> <p><input type="checkbox"/> if (LessThan(alpha, beta))</p> <p><input type="checkbox"/> if (LessThan(alpha).beta)</p>	1
42	<p>Which one of the following statements is NOT correct?</p> <p><input checked="" type="checkbox"/> Array size can be changed after its creation.</p> <p><input type="checkbox"/> Link List size can be changed after its creation</p> <p><input type="checkbox"/> Binary Search Tree size can be changed after its creation</p> <p><input type="checkbox"/> AVL Tree size can be changed after its creation</p>	1
43	<p>Which one of the following calling methods does not change the original value of the argument in the calling function?</p> <p><input type="checkbox"/> None of the given options</p> <p><input checked="" type="checkbox"/> Call by passing the value of the argument</p> <p><input type="checkbox"/> Call by passing reference of the argument</p> <p><input type="checkbox"/> Call by passing the address of the argument</p>	1
44	<p>In an array list the current element is</p> <p><input checked="" type="checkbox"/> The first element</p> <p><input type="checkbox"/> The middle element</p> <p><input type="checkbox"/> The last element</p> <p><input type="checkbox"/> The element where the current pointer points to</p>	1
45	<p>In an array we can store data elements of different types.</p> <p><input type="checkbox"/> True</p> <p><input checked="" type="checkbox"/> False</p>	1
46	<p>An array is a group of consecutive related memory locations.</p> <p><input checked="" type="checkbox"/> True</p> <p><input type="checkbox"/> False</p>	1



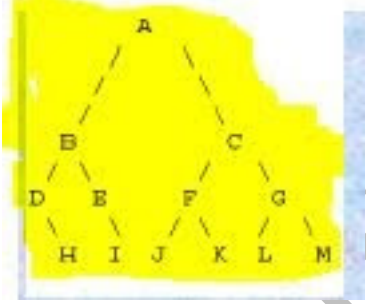
47	<p>The following are statements related to queues. (i) The last item to be added to a queue is the first item to be removed (ii) A queue is a structure in which both ends are not used (iii) The last element hasn't to wait until all elements preceding it on the queue are removed (iv) A queue is said to be a last-in-first-out list or LIFO data structure.</p> <p>Which of the above is/are related to normal queues?</p> <p><input type="checkbox"/> (iii) and (ii) only</p> <p><input type="checkbox"/> (i), (ii) and (iv) only</p> <p><input type="checkbox"/> (ii) and (iv) only</p> <p><input checked="" type="checkbox"/> None of the given options</p>	1
48	<p>Which of the following can be used to reverse a string value,</p> <p><input checked="" type="checkbox"/> Stack</p> <p><input type="checkbox"/> Queue</p> <p><input type="checkbox"/> Both of these</p> <p><input type="checkbox"/> None of these</p>	1
49	<p>_____ is the maximum number of nodes that you can have on a stack-linked list ?</p> <p><input type="checkbox"/> Zero</p> <p><input type="checkbox"/> <math>2n</math> (where <math>n</math> is the number of nodes in linked list)</p> <p><input checked="" type="checkbox"/> Any Number</p> <p><input type="checkbox"/> None of these</p>	1
50	<p>Consider the following sequence of push operations in a stack: <code>stack.push('7');</code>  <code>stack.push('8');</code> <code>stack.push('9');</code> <code>stack.push('10');</code> <code>stack.push('11');</code> <code>stack.push('12');</code></p> <p><input checked="" type="checkbox"/> 7 8 9 10 11 12</p> <p><input type="checkbox"/> 9 8 11 10 7 12</p> <p><input type="checkbox"/> 9 10 8 11 12 7</p> <p><input type="checkbox"/> 9 10 8 12 7 11</p>	1
51	<p>The operation for removing an entry from a stack is traditionally called:</p> <p><input type="checkbox"/> delete</p> <p><input type="checkbox"/> peek</p> <p><input checked="" type="checkbox"/> pop</p> <p><input type="checkbox"/> remove</p>	1

52	<p>The operation for adding an entry to a stack is traditionally called :</p> <p><input type="checkbox"/> add</p> <p><input type="checkbox"/> append</p> <p><input type="checkbox"/> insert</p> <p><input checked="" type="checkbox"/> push</p>	1
53	<p>In C what is the operation that you can not do with primitive types?</p> <p><input type="checkbox"/> Assign a value to primitive type using a literal</p> <p><input type="checkbox"/> Declare primitive types to be constant using the Const keyword</p> <p><input checked="" type="checkbox"/> Create a new instance of primitive type with New keyword</p> <p><input type="checkbox"/> None of these</p>	1
54	<p>Suppose that the class declaration of SomeClass includes the following function prototype. <code>bool LessThan( SomeClass anotherObject );</code> Which of the following tests in the client code correctly compares two class objects alpha and beta?</p> <p><input type="checkbox"/> <code>if (alpha &lt; beta)</code></p> <p><input checked="" type="checkbox"/> <code>if (alpha.LessThan(beta))</code></p> <p><input type="checkbox"/> <code>if (LessThan(alpha, beta))</code></p> <p><input type="checkbox"/> <code>if (LessThan(alpha).beta)</code></p>	1
55	<p>Suppose <code>currentNode</code> refers to a node in a linked list (using the Node class with member variables called <code>data</code> and <code>nextNode</code>). What boolean expression will be true when <code>cursor</code> refers to the tail node of the list?</p> <p><input checked="" type="checkbox"/> <code>(currentNode == null)</code></p> <p><input type="checkbox"/> <code>(currentNode-&gt;nextNode == null)</code></p> <p><input type="checkbox"/> <code>(nextNode.data == null)</code></p> <p><input type="checkbox"/> <code>(currentNode.data == 0.0)</code></p>	1
56	<p>A tree is an AVL tree if</p> <p><input type="checkbox"/> Any one node fulfills the AVL condition</p> <p><input type="checkbox"/> At least half of the nodes fulfill the AVL condition</p> <p><input checked="" type="checkbox"/> All the nodes fulfill the AVL condition</p> <p><input type="checkbox"/> None of the given options</p>	1

57	In which of the traversal method, the recursive calls can be used to traverse a binary tree ?	1
<input checked="" type="checkbox"/>	In preorder traversal only	
<input type="checkbox"/>	In inorder traversal only	
<input type="checkbox"/>	In postorder traversal only	
<input type="checkbox"/>	All of the given options	
58	Doubly Linked List always has one NULL pointer.	1
<input type="checkbox"/>	True	
<input checked="" type="checkbox"/>	False	
59	A subscript of an array may be an integer or an integer expression.	1
<input checked="" type="checkbox"/>	True	
<input type="checkbox"/>	False	
60	“+” is a _____ operator.	1
<input type="checkbox"/>	Not an	
<input type="checkbox"/>	Unary	
<input checked="" type="checkbox"/>	Binary	
<input type="checkbox"/>	Ternary	
61	“+” is a _____ operator.	1
<input type="checkbox"/>	Not an	
<input type="checkbox"/>	Unary	
<input checked="" type="checkbox"/>	Binary	
<input type="checkbox"/>	Ternary	
62	A binary search tree should have minimum of one _____ node/s at each level,	1
<input type="checkbox"/>	One	
<input checked="" type="checkbox"/>	Two	
<input type="checkbox"/>	Three	
<input type="checkbox"/>	Four	
63	We access elements in AVL Tree in,	1
<input type="checkbox"/>	Linear way only	
<input checked="" type="checkbox"/>	Non Linear way only	
<input type="checkbox"/>	Both linear and non linear ways	
<input type="checkbox"/>	None of the given options	

64	<p>The nodes with no successor are called _____</p> <p><input type="checkbox"/> Root Nodes</p> <p><input checked="" type="checkbox"/> Leaf Nodes</p> <p><input type="checkbox"/> Both of these</p> <p><input type="checkbox"/> None of these</p>	1
65	<p>Consider the following tree.</p>  <pre> graph TD     14 --&gt; 2     14 --&gt; 11     2 --&gt; 1     2 --&gt; 3     11 --&gt; 10     11 --&gt; 30     10 --&gt; 7     10 --&gt; 40 </pre> <p>How many of the nodes have at least one sibling?</p> <p><input type="checkbox"/> 8</p> <p><input type="checkbox"/> 7</p> <p><input type="checkbox"/> 5</p> <p><input checked="" type="checkbox"/> 6</p>	1
66	<p>I have implemented the queue with a linked list, keeping track of a front pointer and a rear pointer. Which of these pointers will change during an insertion into an EMPTY queue?</p> <p><input type="checkbox"/> Neither changes</p> <p><input type="checkbox"/> Only front pointer changes.</p> <p><input checked="" type="checkbox"/> Only rear pointer changes.</p> <p><input type="checkbox"/> Both change.</p>	1
67	<p>Each node in doubly link list has,</p> <p><input type="checkbox"/> 1 pointer</p> <p><input checked="" type="checkbox"/> 2 pointer</p> <p><input type="checkbox"/> 3 pointer</p> <p><input type="checkbox"/> 4 pointer</p>	1

68	Which one is a self- referential data type?	1
	<input type="checkbox"/> Stack	
	<input type="checkbox"/> Queue	
	<input type="checkbox"/> Link list	
	<input checked="" type="checkbox"/> All of these	
69	A queue where the de-queue operation depends not on FIFO, is called a priority queue	1
	<input type="checkbox"/> False	
	<input checked="" type="checkbox"/> True	
70	Suppose currentNode refers to a node in a linked list (using the Node class with member variables called data and nextNode). What statement changes currentNode so that it refers to the next node?	1
	<input type="checkbox"/> currentNode ++;	
	<input type="checkbox"/> currentNode = nextNode;	
	<input type="checkbox"/> currentNode += nextNode;	
	<input checked="" type="checkbox"/> currentNode = currentNode->nextNode;	
71	A tree is an AVL tree if	1
	<input type="checkbox"/> Any one node fulfills the AVL condition	
	<input type="checkbox"/> At least half of the nodes fulfill the AVL condition	
	<input checked="" type="checkbox"/> All the nodes fulfill the AVL condition (	
	<input type="checkbox"/> None of the given options	
72	Which one of the following calling methods does not change the original value of the argument in the calling function?	1
	<input type="checkbox"/> None of the given options	
	<input checked="" type="checkbox"/> Call by passing the value of the argument	
	<input type="checkbox"/> Call by passing reference of the argument	
	<input type="checkbox"/> Call by passing the address of the argument	
73	Each operator in a postfix expression refers to the previous _____ operand(s).	1
	<input type="checkbox"/> One	
	<input checked="" type="checkbox"/> Two	
	<input type="checkbox"/> Three	
	<input type="checkbox"/> Four	

74	Which one of the following statement is NOT correct .	1
<input checked="" type="checkbox"/>	In linked list the elements are necessarily to be contiguous	
<input type="checkbox"/>	In linked list the elements may locate at far positions in the memory	
<input type="checkbox"/>	In linked list each element also has the next to it	
<input type="checkbox"/>	In an array the elements are contiguous	
75	AVL Tree is,	1
<input checked="" type="checkbox"/>	Non Linear data structure	
<input type="checkbox"/>	Linear data structure	
<input type="checkbox"/>	Hybrid data structure (Mixture of Linear and Non Linear)	
<input type="checkbox"/>	None of the given options.	
76	We access elements in AVL Tree in,	1
<input type="checkbox"/>	Linear way only	
<input checked="" type="checkbox"/>	Non Linear way only	
<input type="checkbox"/>	Both linear and non linear ways	
<input type="checkbox"/>	None of the given options.	
77	Consider the following binary search tree (BST):  <p>If node A in the BST is deleted, which two nodes are the candidates to take its place?</p>	1
<input type="checkbox"/>	J and I	
<input type="checkbox"/>	H and E	
<input type="checkbox"/>	D and E	
<input checked="" type="checkbox"/>	L and M	

78	_____ is a binary tree where every node has a value, every node's left subtree contains only values less than or equal to the node's value, and every node's right subtree contains only values that are greater than or equal?	1
	<input type="checkbox"/> Strictly Binary Tree	
	<input checked="" type="checkbox"/> Binary Search tree	
	<input type="checkbox"/> AVL tree	
	<input type="checkbox"/> All of these	
79	The expression $AB+C^*$ is called?	1
	<input type="checkbox"/> Prefix expression	
	<input checked="" type="checkbox"/> Postfix expression	
	<input type="checkbox"/> Infix expression	
	<input type="checkbox"/> None of these	
80	Suppose we have a circular array implementation of the queue class, with ten items in the queue stored at data[2] through data[11]. The CAPACITY is 42, i.e., the array has been declared to be of size 42. Where does the push member function place the new entry in the array?	1
	<input type="checkbox"/> data[1]	
	<input type="checkbox"/> data[2]	
	<input type="checkbox"/> data[11]	
	<input checked="" type="checkbox"/> data[12]	
81	In the linked list implementation of the stack class, where does the push member function places the new entry on the linked list?	1
	<input checked="" type="checkbox"/> At the head	
	<input type="checkbox"/> At the tail	
	<input type="checkbox"/> After all other entries that are smaller than the new entry.	
	<input type="checkbox"/> After all other entries that are greater than the new entry.	
82	Suppose n is the number of nodes in a complete Binary Tree then maximum steps required for a search operation are,	1
	<input checked="" type="checkbox"/> $\log_2(n+1) - 1$	
	<input type="checkbox"/> $\log_2(n+1)$	
	<input type="checkbox"/> $\log_2(n) - 1$	
	<input type="checkbox"/> $\log_2(n)$	

83	What is the maximum depth of recursive calls a function may make?	1
	<input type="checkbox"/> 1	
	<input type="checkbox"/> 2	
	<input type="checkbox"/> n (where n is the argument)	
	<input checked="" type="checkbox"/> There is no fixed maximum	
84	Here is the start of a C++ class declaration: <code>class foo { public: void x(foo f); void y(const foo f); void z(foo f) const; ...</code> Which of the three member functions can alter the PRIVATE member variables of the foo object that activates the function?	1
	<input type="checkbox"/> Only x can alter the private member variables of the object that activates the function.	
	<input type="checkbox"/> Only y can alter the private member variables of the object that activates the function.	
	<input type="checkbox"/> Only z can alter the private member variables of the object that activates the function.	
	<input type="checkbox"/> Two of the functions can alter the private member variables of the object that activates the function.	
85	When should you use a const reference parameter?	1
	<input type="checkbox"/> Whenever the parameter has huge size.	
	<input checked="" type="checkbox"/> Whenever the parameter has huge size, the function changes the parameter within its body, and you do NOT want these changes to alter the actual argument.	
	<input type="checkbox"/> Whenever the parameter has huge size, the function changes the parameter within its body, and you DO want these changes to alter the actual argument.	
	<input type="checkbox"/> Whenever the parameter has huge size, and the function does not change the parameter within its body.	
86	The tree data structure is a	1
	<input type="checkbox"/> Linear data structure	
	<input checked="" type="checkbox"/> Non-linear data structure	
	<input type="checkbox"/> Graphical data structure	
	<input type="checkbox"/> Data structure like queue	
87	In the call by value methodology, a copy of the object is passed to the called function.	1
	<input checked="" type="checkbox"/> True	
	<input type="checkbox"/> False	



88	<p>Consider the function X as under</p> <pre>int X (int&amp; Value) { return Value; }</pre> <p>Now a and b are integers in a calling function. Which one of the following is a valid call to the above function X.</p>	1
	<input type="checkbox"/> a = X (b) ;	
	<input checked="" type="checkbox"/> a = X (&b) ;	
	<input type="checkbox"/> a = X (*b) ;	
	<input type="checkbox"/> None of the given options	
89	<p>The data of the problem is of 2GB and the hard disk is of 1GB capacity, to solve this problem we should</p>	1
	<input type="checkbox"/> Use better data structures	
	<input checked="" type="checkbox"/> Increase the hard disk space	
	<input type="checkbox"/> Use the better algorithm	
	<input type="checkbox"/> Use as much data as we can store on the hard disk	
90	<p>A queue where the de-queue operation depends not on FIFO, is called a priority queue</p>	1
	<input checked="" type="checkbox"/> True	
	<input type="checkbox"/> False	
91	<p>No Question Found</p>	1
	<input type="checkbox"/> No option found!	
	<input type="checkbox"/> No option found!	

Signature:

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