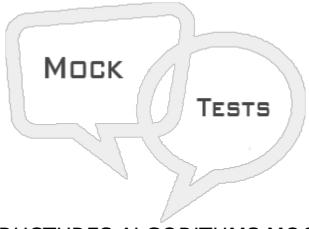
DATA STRUCTURES ALGORITHMS MOCK TEST

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This section presents you various set of Mock Tests related to **Data Structures Algorithms**. You can download these sample mock tests at your local machine and solve offline at your convenience. Every mock test is supplied with a mock test key to let you verify the final score and grade yourself.



DATA STRUCTURES ALGORITHMS MOCK TEST I

- A O1
- B On
- C Ologn
- $D O(n^2)$

Q 2 - What is the worst case run-time complexity of binary search algorithm?

- $A O(n^2)$
- $B O(n^{\log n})$
- $C O(n^3)$
- D On

Q 3 - Which of the following usees FIFO method

- A Queue
- B Stack
- C Hash Table
- D Binary Search Tree

Q 4 - A complete graph can have

A - n² spanning trees

 $C - n^{n+1}$ spanning trees D - nⁿ spanning trees Q 5 - Which one of the below is not divide and conquer approach? A - Insertion Sort B - Merge Sort C - Shell Sort D - Heap Sort Q 6 - Prefix notation is alsow known as A - Reverse Polish Notation **B** - Reverse Notation C - Polish Reverse Notation D - Polish Notation Q 7 - In order traversal of binary search tree will produce -A - unsorted list B - reverse of input C - sorted list D - none of the above Q 8 - In a min-heap: A - parent nodes have values greater than or equal to their childs B - parent nodes have values less than or equal to their childs C - both statements are true D - both statements are wrong Q 9 - A procedure that calls itself is called A - illegal call B - reverse polish C - recursive

B - n^{n - 1} spanning trees

D - none of the above

Q 10 - For a binar	ry search algorithm to work, it is necessary that the array list must be
A - sorted	
B - unsorted	
C - in a heap	
D - popped out of st	tack
Q 11 - push and p	oop functions are found in
A - queues	
B - lists	
C - stacks	
D - trees	
Q 12 - Queue data	a structure works on
A - LIFO	
B - FIFO	
C - FILO	
D - none of the abo	ve
Q 13 - Maximum I	number of nodes in a binary tree with height k, where root is height
A - $2^k - 1$	
B - $2^{k+1} - 1$	
$C - 2^{k-1} + 1$	
D - 2 ^k – 1	
Q 14 - Which one	of the below mentioned is linear data structure –
A - Queue	
B - Stack	
C - Arrays	
D - All of the above	
Q 15 - What data	structure is used for depth first traversal of a graph?
A - queue	
B - stack	
C - list	

D - none of the above		
Q 16 - What data structure is used for breadth first traversal of a graph?		
A - queue		
B - stack		
C - list		
D - none of the above		
Q 17 - What data structure can be used to check if a syntax has balanced paranthesis?		
A - queue		
B - tree		
C - list		
D - stack		
Q 18 - Postfix expression is just a reverse of prefix expression.		
A - True		
B - False		
Q 19 - Stack is used for		
A - CPU Resource Allocation		
B - Breadth First Traversal		
C - Recursion		
D - None of the above		
Q 20 - A circular linked list can be used for		
A - Stack		
B - Queue		
C - Both Stack & Queue		
D - Neither Stack or Queue		
Q 21 - A linked-list is a dynamic structure		
A - true		
B - false		

Q 22 - Minii	ım number of moves required to solve a Tower of Hanoi puzzle is		
A - 2 ^{n²}			
B - 2 ⁿ⁻¹			
C - 2 ⁿ - 1			
D - 2n - 1			
Q 23 - Whic	of the following is an example of dynamic programming approach?		
A - Fibonacci Series			
B - Tower of Hanoi			
C - Dijkstra S	rtest Path		
D - All of the	ove		
Q 24 - The f	lowing formula will produce		
$F_n = F_{n-1} + F_{n-2}$			
A - Armstron	A - Armstrong Number		
B - Fibonacci	eries		
C - Euler Nun	er		
D - Prime Nu	per		
Q 25 - Miniı	um number of queues required for priority queue implementation?		
A - 5			
B - 4			
C - 3			
D - 2			
	ANSWER SHEET		
Question N	nber Answer Key		
1	В		
2	D		
3	A		

В

В

D

4

5

6

7	С
8	A
9	C
10	A
11	C
12	В
13	В
14	D
15	В
16	A
17	D
18	В
19	C
20	C
21	A
22	C
23	D
24	В
25	D

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