

S No.	Questions	Answers
1	Which of the following standard algorithms is not a Greedy algorithm? a) Dijkstra b) Prim's Algorithm c) Huffman coding d) Bellman Ford	
2	Select the worst case complexity of performing UNION operation on Binary Heap, Binomial Heap, Fibonacci Heap respectively: a) $\log n, \log n, 1$ b) $\log n, \log n, \log n$ c) $n, \log n, 1$ d) $n, \log n, \log n$	
3	What is the average case Space complexity of Skip Lists? a) $\Theta(\log n)$ b) $\Theta(n)$ c) $\Theta(n \log n)$ d) $\Theta(n^2)$	
4	Are DFS and Preorder traversal, when applied on a tree, same? a) True b) False c) Can't say d) It depends on various other factors	
5	Height of a Red-Black Tree with n keys is less than or equal to a) $\lg(n+1)$ b) $\lg(n) + 1$ c) $2 \lg(n+1)$ d) $2 \lg(n) + 1$	
6	Does Prim's and Kruskal's algorithm always return same Minimum Cost Spanning Tree? a) True b) False	
7	After inserting 14, 17, 11, 7, 53, 4, 13, 12 in an empty AVL tree, number of rotations performed are: a) 2 b) 3 c) 4 d) 5	
8	Strassen's Matrix Multiplication and Chain Matrix Multiplication has following time complexities, respectively: a) $O(n^{3.8072}), O(n^2)$ b) $O(n^{\log 7}), O(n^2)$ c) $O(n^{3.8074}), O(n^3)$ d) $O(n^{\log 7}), O(n^3)$	
9	Best Case Time complexity and Worst Case Space complexity of Cocktail Sort is: a) $O(n), O(1)$ b) $O(n), O(n)$ c) $O(n^2), O(1)$ d) $O(n^2), O(n)$	
10	Which of the following applications may use a stack? Paranthesis balancing program Tree Traversal Syntax analyzer for a compiler Breadth First Search a) i and ii b) ii and iii c) i, ii and iv d) i, ii and iii e) All	
11	At the time of insertion the new node is inserted as a Red Colored node b) Black Colored node c) Colorless node d) Depends upon the number to be inserted	