

1	Which of the following is not a stable sort a) Bubble Sort b) Insertion Sort c) Counting Sort d) Shell Sort	
2	Which of the following sorting algorithm can't be run in $O(n)$ using efficient algorithm a) Bubble Sort b) Insertion Sort c) Heap Sort d) Quick Sort	
3	"Every vertex not in the set is joined to at least one member of the set by some edge" is called a) Independent Set b) Vertex Cover c) Dominating Set d) Set Cover	
4	In case of insertion in a red black tree, we will have a a) Black Height Problem b) Red-Red Problem c) Red-Height Problem d) Red-Black Problem	
5	In the deletion of red black tree, when the parent is black and leaf child is red, then a) One of the node is repainted black b) One of the node is repainted black c) None of the node is repainted d) One of the node is repainted black and another is repainted red	
6	A binomial tree represented by 1001 will have a) 13 nodes b) 2 nodes c) 8 nodes d) 9 nodes	
7	Fibonacci Tree uses a) Arrays b) Single Linked List c) Doubly Linked List d) Doubly Circular Linked List	
8	Maximum Possible number of keys in a B Tree of order 6 can be a) 5 b) 6 c) 12 d) 11	
9	Bottom up approach, that reuses some of the calculations done previously is part of a) Divide and conquer b) Dynamic Programming c) Backtracking d) Greedy Programming	
10	What order should we insert the elements {1,2,... 7} into an empty AVL tree so that we don't have to perform any rotations on it?	

Roll Number:

Thapar University Patiala

Department of Computer Science & Engineering

ME-CS and IS (1st Semester) Quiz Nov 2013

Advance Data Structures

Time: 10 Mins; MM: 10

Name of Faculty: Deepak Garg

All questions carry equal marks. No negative marking. Write answer in the right column in capital A,B,C,D

1	Which of the following is not a stable sort e) Bubble Sort f) Insertion Sort g) Counting Sort h) Shell Sort	D
2	Which of the following sorting algorithm can't be run in $O(n)$ using efficient algorithm e) Bubble Sort f) Insertion Sort g) Heap Sort h) Quick Sort	D
3	"Every vertex not in the set is joined to at least one member of the set by some edge" is called e) Independent Set f) Vertex Cover g) Dominating Set h) Set Cover	C
4	In case of insertion in a red black tree, we will have a e) Black Height Problem f) Red-Red Problem g) Red-Height Problem h) Red-Black Problem	B
5	In the deletion of red black tree, when the parent is black and leaf child is red, then e) One of the node is repainted black f) One of the node is repainted black g) None of the node is repainted h) One of the node is repainted black and another is repainted red	A
6	A binomial tree represented by 1001 will have e) 13 nodes f) 2 nodes g) 8 nodes h) 9 nodes	D
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10	What order should we insert the elements {1,2,... 7} into an empty AVL tree so that we don't have to perform any rotations on it?	