1	Heap sort, quicksort, and merge sort are all asymptotically optimal, stable comparison based sort algorithms. A) True B) False C) true only for quicksort & merge sort D) true only for heap sort & quicksort	
2	Which is the category of bubble sort algorithm. A) Sorting by distribution B) Sorting by exchange C) Sorting by insertion D) Sorting by partition	
3	Where an item with the largest key will be stored in a min heap A) at the root B) at any internal node C) at any external node D) at any node in the last level of the tree	
4	What will be the result of last operation of given priority queue if number 1 is the highest priority Enqueue(3), Enqueue(6), Enqueue(2),dequeue, dequeue, Enqueue(5),Enqueue(1),dequeue, dequeue	
5	Out of different analysis paradigms normally we choose A) macro, apriori, worst case and asymptotic analysis B) micro, posterior, average case and empirical analysis C) macro, posterior, worst case and asymptotic analysis D) micro, apriori, worst case and empirical analysis	
6	if *v* is the number of vertices, *e* is the number of edges and *f* is the number of faces (regions bounded by edges, including the outer region) of a planar graph then as per the Euler's Formula A) v+f = 2+e B) v+e= 2+f C) e+f = 2+ v D) e+v = f-2	
7	Divide step is the dominating operation and Combine step is the dominant operation respectively in following A) Merge Sort, Quick Sort B) Quick Sort, Merge Sort C) Bubble Sort, Counting Sort D) Radix Sort, Selection Sort	
8	We interchange values of variables m and n, using replacement notation by t←m, m←n, n← t. So we use three assignments. If we want to rearrange (a, b, c, d) to (b, c, d, a) by a sequence of replacements. The new value of a is to be the original value of b & so on. How many assignments are required? A)3 B) 4 C) 5 D) 6	
9	In a Binary Search if the number to be found is at the first place in the list then it is an example of A) Best Case B) Worst Case C) Average Case	
10	Suppose we have computed a minimum spanning tree of graph and its weight. If we make a new graph by doubling the weight of every edge in the original graph, we still need Ω(E) time to compute the cost of the new MST of the new Graph. A) True B) False	