Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	What is a key limitatio of Greedy Algorithms.	A. Too complex B. Always optimal C. Not always optimal D. High memory use
2	Why is bubble sort not for large datasets.	A. Needs more memory B. O (n2) time complexity C. Works on sorted data only D. Can't handle numbers
3	How does Divide and conqurr work	A. Make local choices B. Break, sole, combine C. Store subproblem results D. Try all options, backtrack
4	An algorithm with a time complexity of O(n log n):	A. Bubble sort B. Binary Search C. Merge Sort D. Insertion sort
5	NP hard problems are	A. Easy to solve B. Alway solvable C. As hard as NP problem D. In class P
6	Which is an NP complete problem.	A. Sorting B. Knapsack C. GCD finding D. Binary search
7	Sovable problems differ becasue they.	A. Take exponential time B. Need better hardware C. Halt with a result D. Have no input
8	Which alorithm finds node relationships in a graph.	A. Bubble sort B. Linear Search C. BFS D. Selection sort
9	Whcih is a sorting algorithms.	A. Linear search B. Qucik sort C. DFS D. BFS
10	The meanig of NP in computational complexity is.	A. Non deterministic polynomial time B. Negative polynomial time C. No trivial polynomial time D. Numerical polynomial time
11	How does Linear search work	A. Halve search interval B. Check each item one by one C. Explore branch deeply D. Use queue for nodes
12	What do sorting algorithm mainly do.	A. Network routing B. Arrange data C. Find node links D. Search data
13	Easy to verify but hard to solve problem are in.	A. NP B. P C. NP hard D. Undecidable
14	Problems in NP and NP-hard are called.	A. P B. BPP C. NP Complete D. Tractable
15	Which is solved by dynamic programming.	A. Coin change B. Fibonacci sequence C. Merge sort

		D. Puzzle solving
16	What does space complexity measure.	A. Execution time B. Memory usage C. Number of steps D. Result accuracy
17	What is generate and Test algorithm	A. Tests all options B. Picks one solution C. skips testing D. Uses no logic
18	Which technique is used in Merge sort.	A. Greedy B. Divide and conqurer C. Dynaimc Programming D. Back tracking
19	Which problem gives yes /no answer.	A. Search B. Decision C. Optimization D. Counting
20	A seenario where Dynaimic progrmming proves most useful	A. Problem withou overlapping sub problems B. Problems solved by making local choices C. Problems with overlapping sub problems and optimal sbstructure D. Problem divided into independent sub problems