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	What is the main advantage of Dynamic Programming.	A. Avoid redundant work B. Locally optmal results C. Sole independent problems D. Explore all options
3	Why are commonly used algorithms important.	A. Reduce hrdware cost B. Solve common problems efficiently C. Remove need for data structures D. for theory only
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 Problems can be	A. Solved in polynomial time B. Verified in polynomial time C. Solved in exponeitial timeonly D. Not verified
6	How does Divide and conqurr work	A. Make local choices B. Break, sole, combine C. Store subproblem results D. Try all options, backtrack
7	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
8	P vs NP asks if	A. Fast solutions are in NP B. Check complexity C. Debug rrors D. Improve hardware
9	What is the primary goal of algorithm design techniques.	A. Improve hardware B. Solve problems systematically C. Reduce imput size D. Debug software
10	Whcih is an Ill-defined problem.	A. Check even number B. Find shortest path C. Reduce poverty D. Count book arrangements
11	Sovable problems differ becasue they.	A. Take exponential time B. Need better hardware C. Halt with a result D. Have no input
12	What is the main advantage of Dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solve independent problems D. Explore alloptions
13	What is generate and Test algorithm	A. Tests all options B. Picks one solution C. skips testing D. Uses no logic

14	What is outpout when checking if 8 is even.	A. Found at 2 B. Even C. Odd D. Yes
15	What is computational problem.	A. solved using algorithm B. Solved using creativity C. Has unclear input D. Has no process
16	What is the purpose of search algorithms	A. Arrange data B. Find secific data C. analyze nodes D. Save memory
17	What do sorting algorithm mainly do.	A. Network routing B. Arrange data C. Find node links D. Search data
18	What does “input” mean in a computational problem.	A. Result after processing B. Steps to solve C. Data at start D. Type of problem
19	How does Backtracking work.	A. Break in to parts B. Make local choices C. Build and backtrack D. Store subproblems
20	Which alorithm finds node relationships in a graph.	A. Bubble sort B. Linear Search C. BFS D. Selection sort