Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	Complexity class representing problesm solvable efficinetly by a deterministic alogrithm .	A. P B. NP-Hard C. NP D. NP -Complete
2	The characteristic of a well defined problem is.	A. Ambiguous goals and uncelear requirements B. Vegue processes and inputs C. Clear goas, inpus, processes, and oututs D. Undrined solutions
3	Which problem gives yes /no answer.	A. Search B. Decision C. Optimization D. Counting
4	What is the purpose of search algorithms	A. Arrange data B. Find secific data C. analyze nodes D. Save memory
5	How does Backtracking work.	A. Break in to parts B. Make local choices C. Build and backtrack D. Store subproblems
6	How does bubble sort work	A. Select smallest and swap B. Swap adjacent if wrong C. Divide and merge D. Explore nodes level wise
7	For which problems is Backtrackign suitable.	A. Optimal substructure B. Explore all combinations C. One optimal choice D. No overlapping problems
8	When is Generate and Test best.	A. small prblem space B. Large problem space C. No testing needed D. No solutions exist
9	Tractability depends on	A. Inputs B. Complexity C. Outputs D. Algorthm type
10	What is limitation Greedy algorithms	A. Too complex B. Always optimal C. Not always optimal D. High memory use
11	Whcih is an Ill-defined problem.	A. Check even number B. Find shortest path C. Reduce poverty D. Count book arrangements
12	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
13	What does “input” mean in a computational problem.	A. Result after processing B. Steps to solve C. Data at start D. Type of problem
14	Which is solved by Dynaimc programming.	A. Coin Change B. Fibonacci sequence C. Merge sort

		D. Puzzle solving
15	Which is an example of O (log n) comlexity.	A. Sorting numbers B. Pair comparison C. Binary search D. Linear search
16	Which technique is used in Merge sort.	A. Greedy B. Divide and conqurer C. Dynaimc Programming D. Back tracking
17	What is role of algorithm in problem solving.	A. Gives steps B. Ignores logic C. Random process D. Blocks solutions
18	What is the primary goal of algorithm design techniques.	A. Improve hardware B. Solve problems systematically C. Reduce imput size D. Debug software
19	Waht does O (n2) indicate.	A. Linear growth B. Constant time C. Square of input D. Logarithmic growth
20	Knowing if a problem is solvable hellps.	A. Increase complexity B. Save time C. Generate random output D. Avoid design