Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	Easy to verify but hard to solve problem are in.	A. NP B. P C. NP hard D. Undecidable
2	For which problems is Backtrackign suitable.	A. Optimal substructure B. Explore all combinations C. One optimal choice D. No overlapping problems
3	What does page rank algorithm analyze.	A. Page links B. page color C. Page size D. Page font
4	How does Divide and conqurr work	A. Make local choices B. Break, sole, combine C. Store subproblem results D. Try all options, backtrack
5	Which is an NP complete problem.	A. Sorting B. Knapsack C. GCD finding D. Binary search
6	Which diagram shows P, NO, NP-hard,NP Complete	A. Bar chart B. Pie chart C. Venn diagram D. Lne graph
7	What is the main advantage of Dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solve independent problems D. Explore alloptions
8	Which notation shows the upper bound of time complexity.	A. Omega B. Theta C. Big O D. Lambda
9	What is limitation Greedy algorithms	A. Too complex B. Always optimal C. Not always optimal D. High memory use
10	What does space complexity measure.	A. Execution time B. Memory usage C. Number of steps D. Result accuracy
11	Waht does O (n2) indicate.	A. Linear growth B. Constant time C. Square of input D. Logarithmic growth
12	Which is solved by Dynaimc programming.	A. Coin Change B. Fibonacci sequence C. Merge sort D. Puzzle solving
13	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
14	Which is an example of O (log n) comlexity.	A. Sorting numbers B. Pair comparison C. Binary search D. Linear search
15	What is the primary goal of algorithm design techniques.	A. Imporve hardware B. Sovle problems systematically

		C. Reduce input size D. Debug software
16	Sovable problems differ becasue they.	A. Take exponential time B. Need better hardware C. Halt with a result D. Have no input
17	What is the main advantages of dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solves independent problems D. Explore alloptions
18	Why are commonly used algorithms important.	A. Reduce hardware cost B. Solve common Problems efficiently C. Remvoe need for data structure D. For theory only
19	Which problem gives yes /no answer.	A. Search B. Decision C. Optimization D. Counting
20	Complexity class representing problesm solvable efficinetly by a deterministic alogrithm .	A. P B. NP-Hard C. NP D. NP -Complete