Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	When is Generate and Test best.	A. small prblem space B. Large problem space C. No testing needed D. No solutions exist
2	Which technique is used in Merge sort.	A. Greedy B. Divide and conqurer C. Dynaimc Programming D. Back tracking
3	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
4	What is the primary goal of algorithm design techniques.	A. Improve hardware B. Solve problems systematically C. Reduce imput size D. Debug software
5	What does page rank algorithm analyze.	A. Page links B. page color C. Page size D. Page font
6	Which alorithm finds node relationships in a graph.	A. Bubble sort B. Linear Search C. BFS D. Selection sort
7	Whcih is a sorting algorithms.	A. Linear search B. Qucik sort C. DFS D. BFS
8	What does “input” mean in a computational problem.	A. Result after processing B. Steps to solve C. Data at start D. Type of problem
9	What is the primary goal of algorithm design techniques.	A. Imporve hardware B. Sovle problems systematically C. Reduce input size D. Debug software
10	How does Divide and conquere work.	A. Make local chices B. Break ,solve, combine C. Store subproblem results D. Try alloptions, backtrack
11	Why is tractability important.	A. Output color B. Language choice C. Solve efficiently D. Input type
12	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
13	Seach algorithm more efficinet for large datasets.	A. Bubble sort B. Merge sort C. Quick Sort D. Selection sort
14	P vs NP asks if	A. Fast solutions are in NP B. Check complexity C. Debug rrors D. Improve hardware

15	For which problems is Backtracking suitable	A. Optimal substrcuture B. Explore all combnations C. ONe optimal choice D. No overlapping problems
16	What is the main advantages of dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solves independent problems D. Explore alloptions
17	What does time complexity measrue.	A. Memory use B. Time growth with input C. Number of loops D. Output accuracy
18	Complexity class representing problesm solvable efficinetly by a deterministic alogrithm .	A. P B. NP-Hard C. NP D. NP -Complete
19	What is a key limitatio of Greedy Algorithms.	A. Too complex B. Always optimal C. Not always optimal D. High memory use
20	NP Problems can be	A. Solved in polynomial time B. Verified in polynomial time C. Solved in exponeitial timeonly D. Not verified