Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	Which is solved by Dynamic Programming.	A. Coin Change B. Fibonacci sequence C. Merge sort D. Puzzle solving
2	The halting problem is.	A. Solvable and tractable B. Unsolable and in P C. Unsolvable and not in NP D. NP Complete
3	What is the main advantage of Dynamic Programming.	A. Avoid redundant work B. Locally optmal results C. Sole independent problems D. Explore all options
4	How does selection sort work.	A. Swap adjacent B. Select minium form unsorted part C. Use quenue for nodes D. Store intermediate results
5	Easy to verify but hard to solve problem are in.	A. NP B. P C. NP hard D. Undecidable
6	What is generate and Test algorithm	A. Tests all options B. Picks one solution C. skips testing D. Uses no logic
7	How does Backtracking work.	A. Break into parts B. Build and Backtrack C. Store subproblems D. Make local choices
8	How does Divide and conqurr work	A. Make local choices B. Break, sole, combine C. Store subproblem results D. Try all options, backtrack
9	How does Divide and conquere work.	A. Make local chices B. Break ,solve, combine C. Store subproblem results D. Try alloptions, backtrack
10	Knowing if a problem is solvable hellps.	A. Increase complexity B. Save time C. Generate random output D. Avoid design
11	Seach algorithm more efficinet for large datasets.	A. Bubble sort B. Merge sort C. Quick Sort D. Selection sort
12	What is the main advantages of dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solves independent problems D. Explore alloptions
13	The Halting Problem is an example of.	A. Solvable problem B. Tractable prolem C. Unsolvable problem D. NP Complete problem
14	Why is tractability important.	A. Output color B. Language choice C. Solve efficiently D. Input type
		A. BFS Stack, DFS -queue

15	How do BFS and DFS differ.	B. BFS -level , DFS -depth C. BFS Sort, DFS-Search D. BFS always slower
16	What is the purpose of search algorithms	A. Arrange data B. Find secific data C. analyze nodes D. Save memory
17	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
18	What is the primary goal of algorithm design techniques.	A. Imporve hardware B. Sovle problems systematically C. Reduce input size D. Debug software
19	Which is solved by dynamic programming.	A. Coin change B. Fibonacci sequence C. Merge sort D. Puzzle solving
20	What do sorting algorithm mainly do.	A. Network routing B. Arrange data C. Find node links D. Search data