Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	An algorithm with a time complexity of O(n log n):	A. Bubble sort B. Binary Search C. Merge Sort D. Insertion sort
2	Which diagram shows P, NO, NP-hard,NP Complete	A. Bar chart B. Pie chart C. Venn diagram D. Lne graph
3	The halting problem is.	A. Solvable and tractable B. Unsolable and in P C. Unsolvable and not in NP D. NP Complete
4	What is the purpose of search algorithms	A. Arrange data B. Find secific data C. analyze nodes D. Save memory
5	How does Linear Search work.	A. Halve search interval B. Check each item one by oe C. Explore branch deeply D. Use queue for nodes
6	Sovable problems differ becasue they.	A. Take exponential time B. Need better hardware C. Halt with a result D. Have no input
7	The Halting Problem is an example of.	A. Solvable problem B. Tractable prolem C. Unsolvable problem D. NP Complete problem
8	Which is solved by Dynamic Programming.	A. Coin Change B. Fibonacci sequence C. Merge sort D. Puzzle solving
9	What does page rank algorithm analyze.	A. Page links B. page color C. Page size D. Page font
10	Which is an NP complete problem.	A. Sorting B. Knapsack C. GCD finding D. Binary search
11	What defines a Greedy algorithm	A. Explore all solutions B. Make best local choice C. Store results D. Divide problems
12	How does selection sort work.	A. Swap adjacent B. Select minium form unsorted part C. Use quenue for nodes D. Store intermediate results
13	How does Divide and conqurr work	A. Make local choices B. Break, sole, combine C. Store subproblem results D. Try all options, backtrack
14	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
15	Whcih is a sorting algorithms.	A. Linear search B. Qucik sort C. DFS D. BFS
16	Problems in NP and NP-hard are called.	A. P B. BPP C. NP Complete D. Tractable
17	Complexity class representing problesm solvable efficinetly by a deterministic alogrithm .	A. P B. NP-Hard C. NP D. NP -Complete
18	Which is solved by dynamic programming.	A. Coin change B. Fibonacci sequence C. Merge sort D. Puzzle solving
19	What is generate and Test algorithm	A. Tests all options B. Picks one solution C. skips testing D. Uses no logic
20	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