Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	NP Problems can be	A. Solved in polynomial time B. Verified in polynomial time C. Solved in exponeitial timeonly D. Not verified
2	Which is solved by dynamic programming.	A. Coin change B. Fibonacci sequence C. Merge sort D. Puzzle solving
3	What does time complexity measrue.	A. Memory use B. Time growth with input C. Number of loops D. Output accuracy
4	How does bubble sort work	A. Select smallest and swap B. Swap adjacent if wrong C. Divide and merge D. Explore nodes level wise
5	Tractable prolem canbe solved	A. In exponential time B. Efficiently with large input C. With no algorithm D. Are always NP hard
6	The meanig of NP in computational complexity is.	A. Non deterministic polynomial time B. Negative polynomial time C. No trivial polynomial time D. Numerical polynomial time
7	What does space complexity measure.	A. Execution time B. Memory usage C. Number of steps D. Result accuracy
8	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
9	Why is tractability important.	A. Output color B. Language choice C. Solve efficiently D. Input type
10	Waht does O (n2) indicate.	A. Linear growth B. Constant time C. Square of input D. Logarithmic growth
11	An algorithm with a time complexity of O(n log n):	A. Bubble sort B. Binary Search C. Merge Sort D. Insertion sort
12	If P= NP ,this means	A. Some NP unsolvable B. all NP solvable inpolynomial time C. All NP unsolvable D. Same space complexity
13	Which alorithm finds node relationships in a graph.	A. Bubble sort B. Linear Search C. BFS D. Selection sort
14	Which diagram shows P, NO, NP-hard,NP Complete	A. Bar chart B. Pie chart C. Venn diagram D. Lne graph

15	What does “input” mean in a computational problem.	A. Result after processing B. Steps to solve C. Data at start D. Type of problem
16	What is role of algorithm in problem solving.	A. Gives steps B. Ignores logic C. Random process D. Blocks solutions
17	Problems in NP and NP-hard are called.	A. P B. BPP C. NP Complete D. Tractable
18	The Halting Problem is an example of.	A. Solvable problem B. Tractable prolem C. Unsolvable problem D. NP Complete problem
19	How does selection sort work.	A. Swap adjacent B. Select minium form unsorted part C. Use quenue for nodes D. Store intermediate results
20	NP- complete matters because.	A. Solved faster than P B. Solving one solves all NP C. aLWAYS TRACTABLE D. nO REAL USE