Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	Waht does O (n2) indicate.	A. Linear growth B. Constant time C. Square of input D. Logarithmic growth
2	What is the main advantage of Dynamic programming.	A. Avoid redundant work B. Locally optimal results C. Solve independent problems D. Explore alloptions
3	How does selection sort work.	A. Swap adjacent B. Select minium form unsorted part C. Use quenue for nodes D. Store intermediate results
4	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
5	An algorithm with a time complexity of O(n log n):	A. Bubble sort B. Binary Search C. Merge Sort D. Insertion sort
6	Which alorithm finds node relationships in a graph.	A. Bubble sort B. Linear Search C. BFS D. Selection sort
7	Easy to verify but hard to solve problem are in.	A. NP B. P C. NP hard D. Undecidable
8	How do BFS and DFS differ.	A. BFS Stack, DFS -queue B. BFS -level , DFS -depth C. BFS Sort, DFS-Search D. BFS always slower
9	What do sorting algorithm mainly do.	A. Network routing B. Arrange data C. Find node links D. Search data
10	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
11	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
12	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
13	What is computational problem.	A. solved using algorithm B. Solved using creativity C. Has unclear input D. Has no process
		A. Inputs

14	Tractability depends on	B. Complexity C. Outputs D. Algorthm type
15	Why is tractability important.	A. Output color B. Language choice C. Solve efficiently D. Input type
16	Whcih is a sorting algorithms.	A. Linear search B. Qucik sort C. DFS D. BFS
17	Which notation shows the upper bound of time complexity.	A. Omega B. Theta C. Big O D. Lambda
18	What does space complexity measure.	A. Execution time B. Memory usage C. Number of steps D. Result accuracy
19	What is the primary goal of algorithm design techniques.	A. Imporve hardware B. Sovle problems systematically C. Reduce input size D. Debug software
20	The Halting Problem is an example of.	A. Solvable problem B. Tractable prolem C. Unsolvable problem D. NP Complete problem