

Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	The meanig of NP in computational complexity is.	<p>A. <input type="checkbox"/> Non deterministic polynomial time</p> <p>B. <input type="checkbox"/> Negative polynomial time</p> <p>C. <input type="checkbox"/> No trivial polynomial time</p> <p>D. <input type="checkbox"/> Numerical polynomial time</p>
2	Whcih is a sorting algorithms.	<p>A. <input type="checkbox"/> Linear search</p> <p>B. <input checked="" type="checkbox"/> Quicik sort</p> <p>C. <input type="checkbox"/> DFS</p> <p>D. <input type="checkbox"/> BFS</p>
3	P vs NP asks if	<p>A. <input type="checkbox"/> Fast solutions are in NP</p> <p>B. <input checked="" type="checkbox"/> Check complexity</p> <p>C. <input type="checkbox"/> Debug rrors</p> <p>D. <input type="checkbox"/> Improve hardware</p>
4	How does selection sort work.	<p>A. <input type="checkbox"/> Swap adjacent</p> <p>B. <input checked="" type="checkbox"/> Select minium form unsorted part</p> <p>C. <input type="checkbox"/> Use queneue for nodes</p> <p>D. <input type="checkbox"/> Store intermediate results</p>
5	The Halting Problem is an example of.	<p>A. <input type="checkbox"/> Solvable problem</p> <p>B. <input type="checkbox"/> Tractable prolem</p> <p>C. <input checked="" type="checkbox"/> Unsolvable problem</p> <p>D. <input type="checkbox"/> NP Complete problem</p>
6	What does space complexity measure.	<p>A. <input type="checkbox"/> Execution time</p> <p>B. <input checked="" type="checkbox"/> Memory usage</p> <p>C. <input type="checkbox"/> Number of steps</p> <p>D. <input type="checkbox"/> Result accuracy</p>
7	How does Backtracking work.	<p>A. <input type="checkbox"/> Break into parts</p> <p>B. <input checked="" type="checkbox"/> Build and Backtrack</p> <p>C. <input type="checkbox"/> Store subproblems</p> <p>D. <input type="checkbox"/> Make local choices</p>
8	The halting problem is.	<p>A. <input type="checkbox"/> Solvable and tractable</p> <p>B. <input type="checkbox"/> Unsolable and in P</p> <p>C. <input checked="" type="checkbox"/> Unsolvable and not in NP</p> <p>D. <input type="checkbox"/> NP Complete</p>
9	Whcih is an Ill-defined problem.	<p>A. <input type="checkbox"/> Check even number</p> <p>B. <input type="checkbox"/> Find shortest path</p> <p>C. <input checked="" type="checkbox"/> Reduce poverty</p> <p>D. <input type="checkbox"/> Count book arrangements</p>
10	For which problems is Backtracking suitable	<p>A. <input type="checkbox"/> Optimal substructure</p> <p>B. <input checked="" type="checkbox"/> Explore all combnations</p> <p>C. <input type="checkbox"/> ONE optimal choice</p> <p>D. <input type="checkbox"/> No overlapping problems</p>
11	How does Divide and conquere work.	<p>A. <input type="checkbox"/> Make local chices</p> <p>B. <input checked="" type="checkbox"/> Break ,solve, combine</p> <p>C. <input type="checkbox"/> Store subproblem results</p> <p>D. <input type="checkbox"/> Try alloptions, backtrack</p>
12	Complexity class representing problesm solvable effcinety by a deterministic alogrithm .	<p>A. <input checked="" type="checkbox"/> P</p> <p>B. <input type="checkbox"/> NP-Hard</p> <p>C. <input type="checkbox"/> NP</p> <p>D. <input type="checkbox"/> NP -Complete</p>
13	Knowing if a problem is solvable hellps.	<p>A. <input type="checkbox"/> Increase complexity</p> <p>B. <input checked="" type="checkbox"/> Save time</p> <p>C. <input type="checkbox"/> Generate random output</p> <p>D. <input type="checkbox"/> Avoid design</p>
14	What is the purpose of search algorithms	<p>A. <input type="checkbox"/> Arrange data</p> <p>B. <input checked="" type="checkbox"/> Find secific data</p> <p>C. <input type="checkbox"/> analyze nodes</p> <p>D. <input type="checkbox"/> Save memory</p>
15	Which is an example of O (log n) comlexity.	<p>A. <input type="checkbox"/> Sorting numbers</p> <p>B. <input type="checkbox"/> Pair comparison</p> <p>C. <input checked="" type="checkbox"/> Binarv search</p>

		D. <p>Linear search</p>
16	What is output when checking if 8 is even.	A. <p>Found at 2</p> B. <p>Even</p> C. <p>Odd</p> D. <p>Yes</p>
17	What is limitation Greedy algorithms	A. <p>Too complex</p> B. <p>Always optimal</p> C. <p>Not always optimal</p> D. <p>High memory use</p>
18	An algorithm that sort data by stepping through the list and swapping adjacent elements if needed is.	A. <p>Selection sort</p> B. <p>Quick sort</p> C. <p>Bubble sort</p> D. <p>Merge sort</p>
19	Why use real life tasks in algorithm learning.	A. <p>Show steps in life</p> B. <p>Make it harder</p> C. <p>Reduce interest</p> D. <p>Add confusion </p>
20	What is the main advantages of dynamic programming.	A. <p>Avoid redundant work</p> B. <p>Locally optimal results</p> C. <p>Solves independent problems</p> D. <p>Explore alloptions</p>