

Computer Science Ics Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	How does Backtracking work.	<p>A. <p>Break in to parts</p> B. <p>Make local choices</p> C. <p>Build and backtrack</p> D. <p>Store subproblems</p></p>
2	Search algorithm more efficient for large datasets.	<p>A. <p>Bubble sort</p> B. <p>Merge sort</p> C. <p>Quick Sort</p> D. <p>Selection sort</p></p>
3	What is role of algorithm in problem solving.	<p>A. <p>Gives steps</p> B. <p>Ignores logic</p> C. <p>Random process</p> D. <p>Blocks solutions</p></p>
4	A scenario where Dynamic programming proves most useful	<p>A. <p>Problem without overlapping sub problems</p> B. <p>Problems solved by making local choices</p> C. <p>Problems with overlapping sub problems and optimal substructure</p> D. <p>Problem divided into independent sub problems</p></p>
5	How does Divide and conquer work	<p>A. <p>Make local choices</p> B. <p>Break, solve, combine</p> C. <p>Store subproblem results</p> D. <p>Try all options, backtrack</p></p>
6	What is limitation Greedy algorithms	<p>A. <p>Too complex</p> B. <p>Always optimal</p> C. <p>Not always optimal</p> D. <p>High memory use</p></p>
7	For which problems is Backtracking suitable	<p>A. <p>Optimal substructure</p> B. <p>Explore all combinations</p> C. <p>One optimal choice</p> D. <p>No overlapping problems</p></p>
8	Which is an ill-defined problem.	<p>A. <p>Check even number</p> B. <p>Find shortest path</p> C. <p>Reduce poverty</p> D. <p>Count book arrangements</p></p>
9	Which problem gives yes /no answer.	<p>A. <p>Search</p> B. <p>Decision</p> C. <p>Optimization</p> D. <p>Counting</p></p>
10	The statement that applies to unsolvable problem	<p>A. <p>They can be solved in polynomial time</p> B. <p>They cannot be solved by any algorithm</p> C. <p>They are always in NP class</p> D. <p>They require exponential time to solve</p></p>
11	What is generate and Test algorithm	<p>A. <p>Tests all options</p> B. <p>Picks one solution</p> C. <p>skips testing</p> D. <p>Uses no logic</p></p>
12	If $P = NP$, this means	<p>A. <p>Some NP unsolvable</p> B. <p>all NP solvable in polynomial time</p> C. <p>All NP unsolvable</p> D. <p>Same space complexity</p></p>
13	Which of the following correctly describes a solvable problem.	<p>A. <p>Cannot be solved</p> B. <p>Takes infinite time</p> C. <p>Solved by algorithm in finite time</p> D. <p>Has no input/output</p></p>

