1. The backtracking approach follows

BFS | DFS | Both of the above | None of the above

2. Which of these problems can be solved using backtracking approach?

Sum of Subsets | N Queens | Hamiltonian Cycle | All of the above

3. Backtracking approach is applied on

Approximation problems | Optimization problems | Constraint satisfaction problems | None of the above

4. Which of these is used in backtracking approach?

Binary tree | Binary search | AVL tree | State space tree

5. Find the odd one out.

Sum of Subsets | N Queens | Hamiltonian Cycle | Merge sort

6. For 4*4 chessboard, the total number of arrangements will be

2018 | 1820 | 1620 | 2016

7. In N*N Queens problems, no two queens should lie in

Same Column | Same Row | Same Diagonal | All of the above

8. N Queens problem can be efficiently solved using

Divide and Conquer | Backtracking | Dynamic Programming | Algebraic Manipulation

9. How many unique solutions are there for 8 Queens Problem?

8 | 4 | 12 | 16

10. In how many directions do queens attack each other?

1 | 2 | 3 | 4

11. In m coloring optimization problem, the _____ number of colors required to color the graph are calculated.

Minimum | Maximum | Negative | None of the above

12. The smallest number of colors required to color a graph is called

Chromatic number | Positive number | Natural number | Real number

13. In which case, it is not possible to have Hamiltonian Cycle?

Pendant vertices | Articulation points | Disconnected graph | All of the above

14. The Hamiltonian Cycle problem is

P Type | NP Type | NP Hard | NP Complete

15. The time complexity of graph coloring problem is

$O(n)$ | $O(n^2)$ | $O(n^3)$ | Correct $O(3^n)$

16. In the Hamiltonian Cycle problem, the given graph may be

Directed | Undirected | Either of the above | None of the above

17. Which of these is used in backtracking approach?
A

Binary tree | Binary search | AVL tree | State space tree

18. In how many directions do queens attack each other?
A

1 | 2 | 3 | 4

19. The time complexity of graph coloring problem is

O (n) | O (n2) | O (n3) | O (3n)

20. The graph coloring problem can be efficiently solved using

Backtracking | Divide and Conquer | Branch and Bound | Dynamic Programming

21. The complexity of Hamiltonian Cycle problem is
A.

O(1) | O(n) | O(log n) | O(nn)

22. The backtracking approach follows
A.

BFS | DFS | Both of the above | None of the above

23. For 4*4 chessboard, the total number of arrangements will be

2018	1820	1620	2016