

# Quiz-II DAA (CS4403 Design & Analysis of Algorithms)

Answer all the MCQ questions

Points:

9/10

1. Which of the following is not a branch and bound strategy to generate branches?

(1/1 Point)

- ☐ LIFO branch and bound
- ☐ FIFO branch and bound
- ☐ Lowest cost (LC) branch and bound
- ☐ Highest cost branch and bound

2. Which data structure is most suitable for implementing LC-branch and bound strategy?

(1/1 Point)

- ☐ stack
- ☐ queue
- ☐ priority queue
- ☐ linked list

3. Which of the following can traverse the state space tree only in DFS manner?

(1/1 Point)

- ☐ Branch and bound
- ☐ Dynamic programming
- ☐ Greedy algorithm
- ☐ Backtracking

4. \_\_\_\_ is the class of decision problems that can be solved by non-deterministic polynomial algorithms.

(1/1 Point)

- ☐ NP
- ☐ P
- ☐ NP-Hard
- ☐ NP-Complete

5. To which of the following class does a CNF-satisfiability problem belong?

(1/1 Point)

- ☐ NP
- ☐ P
- ☐ NP-Complete
- ☐ NP-Hard

6.If a problem can be solved by combining optimal solutions to non-overlapping problems, the strategy is called \_\_\_\_\_

(0/1 Point)

- ☐ Dynamic programming
- ☐ Greedy
- ☐ Divide and conquer
- ☐ Recursion

7.In dynamic programming, the technique of storing the previously calculated values is called \_\_\_\_\_

(1/1 Point)

- ☐ Saving value property
- ☐ Storing value property
- ☐ Memoization
- ☐ Mapping

8.What is the area of a rectangle with the largest perimeter that can be inscribed in the unit circle (i.e., all the vertices of the rectangle are on the circle with radius 1)

(3/3 Points)

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4