

13 Lecture - CS101

Important Mcqs

1. **Which of the following is not a type of algorithm?**

- A) Sorting algorithm
- B) Search algorithm
- C) Machine learning algorithm
- D) Linear algorithm

Answer: D) Linear algorithm

2. **Which algorithm is used to find the shortest route between two cities?**

- A) Bubble sort
- B) Quick sort
- C) Gradient descent
- D) Dijkstra's algorithm

Answer: D) Dijkstra's algorithm

3. **Which algorithm is used to analyze and learn from data in order to make predictions or decisions?**

- A) Sorting algorithm
- B) Search algorithm
- C) Optimization algorithm
- D) Machine learning algorithm

Answer: D) Machine learning algorithm

4. **Which factor is not important to consider when designing an algorithm?**

- A) Efficiency
- B) Accuracy
- C) Scalability
- D) Complexity

Answer: D) Complexity

5. **Which sorting algorithm has the worst time complexity?**

- A) Quick sort
- B) Bubble sort
- C) Insertion sort
- D) Selection sort

Answer: B) Bubble sort

6. **Which search algorithm is more efficient for a sorted data set?**

- A) Linear search
- B) Binary search
- C) Hash-based search
- D) All of the above

Answer: B) Binary search

7. **Which optimization algorithm is inspired by the process of cooling metals?**

- A) Gradient descent
- B) Simulated annealing
- C) Genetic algorithms
- D) Particle swarm optimization

Answer: B) Simulated annealing

8. **Which machine learning algorithm is based on decision trees?**

- A) Neural networks
- B) Support vector machines
- C) Random forests
- D) K-means clustering

Answer: C) Random forests

9. **Which factor is most important to consider in real-time applications?**

- A) Efficiency
- B) Accuracy
- C) Scalability
- D) Complexity

Answer: A) Efficiency

10. **Which algorithm is used to find the optimal solution for a problem by evaluating all possible solutions?**

- A) Brute force algorithm
- B) Greedy algorithm
- C) Dynamic programming
- D) Hill climbing algorithm

Answer: A) Brute force algorithm