

AI and Machine Learning Essentials

Computer Science · Answer Key · 8 Questions

1. Which process allows a computer to improve its performance on a task by analyzing large amounts of data?

- A) Supervised learning**
- B) Manual programming
- C) Hard-coding
- D) Data deletion

2. What is the term for a subset of machine learning based on artificial neural networks inspired by the human brain?

- A) Natural Language Processing
- B) Deep learning**
- C) Robotic Process Automation
- D) Data mining

3. Which of these is a common example of AI used in everyday modern smartphones?

- A) Analog clock adjustment
- B) Voice-activated virtual assistants**
- C) Manual page turning
- D) Mechanical volume control

4. In machine learning, what is a 'training set' primarily used for?

- A) Deleting unnecessary files
- B) Testing the final software
- C) Teaching the model to recognize patterns**
- D) Increasing hardware storage

5. Which type of machine learning involves an algorithm learning from labeled data where the correct answers are provided?

- A) Supervised learning**
- B) Unsupervised learning
- C) Reinforcement learning
- D) Quantum learning

6. What is the primary function of a recommendation system found on streaming platforms?

- A) To filter out low-quality internet
- B) To predict user preferences based on past behavior**
- C) To automatically delete user history
- D) To prevent multiple users from logging in

7. What does the term 'bias' refer to in the context of machine learning datasets?

- A) The speed at which an algorithm runs
- B) The physical size of the computer
- C) Prejudice or skewed data that leads to unfair outcomes**
- D) The electricity required to power the AI

8. Which field of AI enables computers to understand, interpret, and manipulate human language?

- A) Computer Vision
- B) Natural Language Processing**
- C) Circuit Design
- D) Digital Animation