

# AI AND MACHINE LEARNING QUJZ

Instructions: Select the correct answer for each question.

#### Chapter 1 Quiz

#### 1. What does AI stand for?

- A. Artificial Intelligence
- B. Automated Integration
- C. Advanced Innovation
- D. Artificial Interaction

#### 2. Which of the following is a subset of AI?

- A. Machine Learning
- B. Quantum Computing
- C. Blockchain
- D. Cybersecurity

#### 3. What is Generative AI primarily used for?

- A. Creating new content
- B. Analyzing data
- C. Securing networks
- D. Predicting stock prices

#### 4. Which of the following is an example of supervised learning?

- A. Training a model to classify emails as spam or not spam
- B. Grouping customers based on purchasing behavior
- C. Playing a game to maximize rewards
- D. Generating realistic images from random noise

#### 5. What is the main difference between AI and Machine Learning?

- A. Al is broader and includes Machine Learning as a subset
- B. Machine Learning is broader and includes AI as a subset
- C. Al focuses on hardware, while Machine Learning focuses on software
- D. Al is only used for robotics, while Machine Learning is used for data analysis



### 6. Which type of learning involves discovering patterns in data without labeled examples?

- A. Unsupervised Learning
- B. Supervised Learning
- C. Reinforcement Learning
- D. Deep Learning

#### 7. What is a neural network?

- A. A computational model inspired by the human brain
- B. A type of hardware used for AI
- C. A database for storing AI models
- D. A programming language for Al development

#### 8. Which of the following is an ethical concern in AI?

- A. Bias in decision-making
- B. High computational speed
- C. Improved accuracy
- D. Automation of repetitive tasks

#### 9. What does reinforcement learning focus on?

- A. Learning through rewards and penalties
- B. Learning from labeled data
- C. Learning from unlabeled data
- D. Learning by mimicking human behavior

#### 10. Which of the following is an example of Generative AI?

- A. ChatGPT
- B. Google Maps
- C. Antivirus software
- D. Excel spreadsheets

#### Chapter 1 Quiz

#### 11. What is the goal of AI?

- A. To simulate human intelligence
- B. To replace all human jobs
- C. To create physical robots
- D. To store large amounts of data

#### 12. Which of the following is a real-world application of AI?

- A. Voice assistants like Siri
- B. Traditional calculators
- C. Manual typewriters
- D. Mechanical clocks

#### 13. What is the term for training a model using labeled data?

- A. Supervised Learning
- B. Unsupervised Learning
- C. Reinforcement Learning
- D. Generative Learning

#### 14. What is the primary role of Machine Learning in AI?

- A. To enable machines to learn from data
- B. To build physical robots
- C. To store large amounts of information
- D. To create computer hardware

#### 15. Which of the following is a challenge in AI development?

- A. Ensuring fairness and avoiding bias
- B. Increasing computational power
- C. Improving accuracy
- D. Automating repetitive tasks

## We'll have another quiz next week and go over this weeks answers

If you feel that you're not grasping the information feel free to go through Chapter 1 again to review any questions or doubts. Then you can retake your quiz and see if you can improve your scores!

