

AI and Machine Learning Adventures

AI And ML · Practice Test · 25 Questions

1. What does 'AI' stand for in the world of computers?

- A) Automated Intelligence
- B) Artificial Intelligence
- C) Advanced Information
- D) Algorithm Integration

2. Machine Learning is a type of AI that allows computers to learn without being directly programmed for every single task. What is one way computers learn in ML?

- A) By reading storybooks
- B) By playing video games
- C) By analyzing large amounts of data
- D) By watching cartoons

3. Which of these is an example of AI that you might use in your everyday life?

- A) A toaster
- B) A calculator
- C) A smartphone's voice assistant (like Siri or Google Assistant)
- D) A bicycle

4. Imagine a computer program that can tell the difference between a picture of a cat and a picture of a dog. This is an example of which AI capability?

- A) Robotics
- B) Natural Language Processing
- C) Computer Vision
- D) Robotic Process Automation

5. What is a 'model' in Machine Learning?

- A) A toy car
- B) A blueprint for building a robot
- C) A program that has learned from data and can make predictions
- D) A person who trains the computer

6. When a computer learns to recognize spam emails, it is using Machine Learning to do what?

- A) Write poems
- B) Categorize or classify emails
- C) Play chess
- D) Translate languages

7. Which technology helps AI understand and respond to human language, like when you talk to a smart speaker?

- A) Robotics
- B) Natural Language Processing (NLP)
- C) Computer Vision
- D) Machine Vision

8. What is 'data' in the context of Machine Learning?

- A) Instructions for a computer
- B) Information or facts that the computer learns from
- C) A type of computer game
- D) A list of commands

9. When a self-driving car uses sensors to see the road and other cars, what AI concept is it using?

- A) Natural Language Processing
- B) Robotics
- C) Computer Vision
- D) Expert Systems

10. What is the goal of 'training' a Machine Learning model?

- A) To make the computer tired
- B) To teach the computer to recognize patterns and make accurate predictions
- C) To give the computer a break
- D) To erase all its memory

11. Which of these is a common type of data used to train AI systems?

- A) Stories
- B) Pictures
- C) Music
- D) All of the above

12. What is 'deep learning'?

- A) A type of AI that uses multiple layers of artificial neural networks to learn complex patterns
- B) A way to make AI models run faster
- C) A new programming language
- D) A method to store AI models

13. AI can be used to help doctors diagnose illnesses by analyzing medical images like X-rays. This is an example of AI in which field?

- A) Entertainment
- B) Agriculture
- C) Healthcare
- D) Construction

14. When a streaming service recommends movies you might like, it's using AI to do what?

- A) Translate languages
- B) Generate music
- C) Personalize recommendations
- D) Control robots

15. What is a 'neural network' in AI?

- A) A type of computer virus
- B) A network of neurons inspired by the human brain, used for learning
- C) A way to connect computers together
- D) A new type of internet

16. AI systems that help write text or create art are using a type of Machine Learning called?

- A) Supervised Learning
- B) Unsupervised Learning
- C) Generative AI
- D) Reinforcement Learning

17. What does it mean for an AI to be 'biased'?

- A) It only understands one language
- B) It has unfair preferences or prejudices due to the data it was trained on
- C) It makes mistakes
- D) It runs very slowly

18. Which of these is a common application of AI in sports?

- A) Predicting weather
- B) Analyzing player performance
- C) Designing buildings
- D) Managing finances

19. When a robot learns to walk or pick up objects, it's often using an AI technique that rewards good actions and punishes bad ones. This is known as:

- A) Supervised Learning
- B) Unsupervised Learning
- C) Reinforcement Learning
- D) Transfer Learning

20. What is the main benefit of AI learning from data rather than being explicitly programmed for every situation?

- A) It makes computers slower
- B) It allows AI to handle new and unexpected situations
- C) It requires less energy
- D) It makes computers simpler

21. What are 'algorithms' in the context of AI and ML?

- A) Physical machines
- B) Sets of rules or instructions that computers follow to solve problems or learn
- C) Types of computer screens
- D) Human emotions

22. When AI is used to create realistic-looking fake images or videos, it's sometimes called:

- A) Deepfake
- B) Artificial Reality
- C) Virtual Vision
- D) Digital Dream

23. What is the role of a 'dataset' in Machine Learning?

- A) A collection of answers
- B) A collection of information used to train the ML model
- C) A type of computer code
- D) A list of questions

24. AI can help design new medicines by simulating how different molecules might interact. This is an example of AI in:

- A) Art
- B) Music
- C) Science and research
- D) Sports

25. What is the primary difference between AI and Machine Learning?

- A) AI is a subset of Machine Learning
- B) Machine Learning is a subset of AI
- C) They are completely different fields
- D) AI is older than Machine Learning