

Artificial Intelligence Important Questions

Basic Concepts and Definitions

- What is Artificial Intelligence? How is it different from Machine Learning?
- Explain the Turing Test and its significance in AI.
- What are the types of AI (Narrow AI, General AI, Super AI)?
- Define intelligent agents and their environments.
- What are heuristic search techniques? Explain with examples.
- What role do search algorithms play in AI?
- How does AI handle uncertainty? Discuss probabilistic reasoning.

Interview and Frequently Asked Questions

- What is overfitting in machine learning? How to prevent it?
- Explain supervised, unsupervised, and reinforcement learning.
- What are generative adversarial networks (GANs)?
- How does transfer learning improve model performance?
- Describe handling bias and fairness in AI systems.
- What are some applications of AI in real life?
- How does NLP work? What are its key applications?

- What is computer vision and how does AI contribute?

University Exam and Long Questions

- Explain heuristic search techniques with examples.
- Write an essay on the different types of AI.
- Discuss the architecture of intelligent agents.
- Explain machine learning algorithms including decision trees, neural networks.
- Describe reinforcement learning and its applications.
- Discuss ethical issues in AI and the importance of fairness.
- Write on natural language processing and computer vision in AI.
- Define Bayesian networks and their use in uncertain knowledge representation.

AI and Machine Learning Interview Questions

- What is a confusion matrix? How is it used?
- Explain gradient descent in simple terms.
- What is the difference between parametric and non-parametric models?
- How do hyperparameters affect model training?
- Describe feature selection and its importance.
- What is zero-shot and few-shot learning?
- How do you optimize deep learning models?

- Describe generative AI evaluation metrics like temperature in models.

Multiple Choice Questions and Concepts

- What is the full form of AI?
- Who is the inventor of Artificial Intelligence?
- What is Weak AI?
- List the 5 big ideas of AI.
- What does a Bayesian network provide?
- What is inductive logic programming (ILP)?
- What are the types of quantification in AI?
- What does the term "temperature" control in generative models?