

Unit - 5

Question bank

2-Mark Questions:

1. Define Machine Learning.
2. What are the different types of machine learning?
3. What is the concept of Artificial Intelligence?
4. What is conceptual learning?
5. What is an artificial neuron?
6. How does an artificial neuron work?
7. What are the different types of neural networks?
8. Mention 2 applications of machine learning in manufacturing.
9. What is AutoML?
10. What are the impacts of machine learning on society?

16-Mark Questions:

1. Discuss the different types of machine learning algorithms with suitable examples.
2. Explain the concept of artificial intelligence and its relationship with machine learning.
3. Discuss the process of conceptual learning in machine learning. How is it different from other types of learning?
4. Explain the structure and function of an artificial neuron. How does it mimic the behavior of a biological neuron?
5. Discuss the different types of neural networks, including feedforward neural networks, recurrent neural networks, and convolutional neural networks.¹
6. Explain the applications of machine learning in manufacturing, including predictive maintenance, quality control, and process optimization.
7. Discuss the concept of AutoML and its potential benefits in machine learning development.
8. What are the ethical considerations and societal implications of machine learning?
9. How can machine learning be used to address global challenges such as climate change and healthcare?
10. Discuss the future trends in machine learning, including deep learning, reinforcement learning, and explainable AI.