

1. What is Machine Learning?

It is a process where systems learn from data and make decisions or predictions without explicit programming.

2. Explain the concept of supervised learning.

Supervised learning is a training approach where input-output pairs are used to teach the model how to predict outputs for unseen inputs.

3. What is the difference between classification and regression?

Classification is about identifying categories like "cat" or "dog," while regression predicts numerical values like "house price."

4. Define overfitting and how to prevent it.

Overfitting occurs when a model performs well on training data but poorly on test data. It can be controlled by reducing model complexity and using techniques like regularization.

5. What is deep learning?

Deep learning uses artificial neural networks with several hidden layers to process and learn from data.