

Your grade: 100%

Your latest: 100% • Your highest: 100%
To pass you need at least 71%. We keep your highest score.

Next item →

1. Why are machine learning models particularly valuable in applications like credit risk assessment?

1 / 1 point

☐ They guarantee a loan will be repaid.

☐ They focus exclusively on classifying applicants as “approved” or “denied.”

☒ They can predict loan default probabilities based on applicant data.

☐ They require human experts to analyze each loan application.

✔ Correct

Machine learning models analyze patterns in applicant data to estimate default probabilities.
2. Which technique reduces the number of features in a dataset?

1 / 1 point

☐ Association

☐ Clustering

☐ Anomaly detection

☒ Dimensionality reduction

✔ Correct

Dimensionality reduction reduces the number of features or dimensions in the data.
3. What is the first step in initiating a Machine Learning Model Lifecycle?

1 / 1 point

☐ Data Collection

☐ Model Deployment

☒ Problem Definition

☐ Model Development and Evaluation

✔ Correct

Starting with Problem Definition helps outline the objective for the model.
4. During the Model Development phase, which recommendation technique focuses on similarities between product features?

1 / 1 point

☐ Collaborative Filtering

☒ Content-Based Filtering

☐ Regression Analysis

☐ Clustering

✔ Correct

Content-Based Filtering recommends products based on their features.
5. What is one of the main reasons that generative AI models take longer to train than traditional machine learning models?

1 / 1 point

☐ They require fewer parameters but more memory

☐ They only train on small datasets of tabular data

☐ They rely on structured data with less variability

☒ They have billions of parameters and need extensive compute power

✔ Correct

Generative AI models have billions of parameters and need significant compute resources.
6. Which of the following is a data processing and analytics tool used for storing and manipulating massive data?

1 / 1 point

☒ PostgreSQL

☐ PyTorch

☐ TensorFlow

☐ NumPy

✔ Correct

PostgreSQL is a powerful, open-source object-relational database system used to store and manipulate large amounts of data, often in conjunction with machine learning tasks.
7. In the context of Scikit-learn, what does the *train_test_split* function do?

1 / 1 point

☒ It splits your dataset into training and testing subsets

☐ It scales your data

☐ It generates a classification model

☐ It evaluates your model's accuracy

✔ Correct

The *train_test_split* function in Scikit-learn is used to randomly split the dataset into training and testing sets, helping assess model performance on unseen data.