**Answers to MCQ**

Question 1: What are Datasets?

Answer: C) A structured collection of data points that represent some aspect of the real world.

Question 2: Intro to Data Preprocessing

Answer: C) It reduces noise and inconsistencies in the data, improving the quality of analysis.

Question 3: Types of Data

Answer: C) Colors of flowers (e.g., red, blue, yellow).

Question 4: Handling Missing Data

Answer: B) Removing the entire row or column containing missing values.

Question 5: Feature Engineering

Answer: C) It involves creating new features or transforming existing ones to improve the model's performance.

Question 6: Dataset Splitting

Answer: C) To ensure that the model's performance is evaluated on unseen data.

Question 7: Handling Categorical Data

Answer: C) One-Hot Encoding, where each category becomes a binary column.

Question 8: Feature Scaling

Answer: C) To ensure that all numerical features have the same unit of measurement.

Question 9: Dealing with Outliers

Answer: C) Unusual or extreme data points that significantly differ from the rest.

Question 10: Data Imputation

Answer: D) Filling in missing values with estimated or calculated values.

Question 11: Handling Time-Series Data

Answer: C) The order and timing of data points matter.

Question 12: Dimensionality Reduction

Answer: D) To reduce the number of features while preserving relevant information.

Question 13: Handling Imbalanced Classes

Answer: C) Imbalanced classes can bias the model towards the majority class.

Question 14: Text Data Preprocessing

Answer: A) Converting text data to numerical values using encoding techniques.