Here are 10 MCQs about Machine Learning in markdown format:

1. **Which of the following is NOT a type of Machine Learning?**

   A. Supervised Learning B. Unsupervised Learning C. Reinforcement Learning D. Deep Learning

2. **What is the purpose of a validation set in Machine Learning?**

   A. To train the model B. To evaluate the final performance of the model after training C. To tune hyperparameters and prevent overfitting during training D. To deploy the model to production

3. **Which algorithm is best suited for classification problems?**

   A. Linear Regression B. K-Means Clustering C. Logistic Regression D. Principal Component Analysis

4. **What is 'overfitting' in Machine Learning?**

   A. When a model performs poorly on both training and test data B. When a model performs well on training data but poorly on test data C. When a model performs well on both training and test data D. When a model is too simple to capture the underlying pattern in the data

5. **Which of the following evaluation metrics is most appropriate for imbalanced datasets?**

   A. Accuracy B. Precision and Recall C. R-squared D. Mean Squared Error

6. **What is feature scaling?**

   A. Selecting the most important features from the dataset B. Transforming features to have a similar range of values C. Creating new features from existing features D. Removing irrelevant features from the dataset

7. **Which of the following is an example of unsupervised learning?**

   A. Spam email detection B. Image classification C. Customer segmentation D. Stock price prediction

8. **What does the term 'bias-variance tradeoff' refer to?**

   A. The tradeoff between model complexity and data size B. The tradeoff between model accuracy and interpretability C. The tradeoff between underfitting and overfitting D. The tradeoff between training time and inference time

9. **Which of the following algorithms is a distance-based algorithm?**

   A. Decision Tree B. Support Vector Machine C. K-Nearest Neighbors D. Naive Bayes

10. **What is the primary goal of dimensionality reduction techniques like PCA?**

    A. To improve model interpretability and reduce computational cost B. To increase the number of features in the dataset C. To handle missing values in the dataset D. To improve the accuracy of the model by adding more information

Answer Key: 1. D 2. C 3. C 4. B 5. B 6. B 7. C 8. C 9. C 10. A