1. Which of the following methods do we use to find the best fit line for data in Linear Regression?

Ans. A) Least Square Error

2. Which of the following statement is true about outliers in linear regression?

Ans. A) Linear regression is sensitive to outliers

3. A line falls from left to right if a slope is _____?

Ans. B) Negative

4. Which of the following will have symmetric relation between dependent variable and independent variable?

Ans. B) Correlation

5. Which of the following is the reason for over fitting condition?

Ans. C) Low bias and high variance

6. If output involves label then that model is called as:

Ans. B) Predictive model

7. Lasso and Ridge regression techniques belong to _____?

Ans. D) Regularization

8. To overcome with imbalance dataset which technique can be used?

Ans. D) SMOTE

9. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses _____ to make graph?

Ans. A) TPR (True Positive Rate) and FPR (False Positive Rate)

10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.

Ans. B) False

11. Pick the feature extraction from below:

A) Construction bag of words from a email

B) Apply PCA to project high dimensional data

C) Removing stop words

D) Forward selection

Ans. B) Apply PCA to project high dimensional data

12. Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression?

Ans. (A) and (B)

13. Explain the term regularization?

Ans. Regularization in the context of machine learning and statistical modeling refers to a set of techniques used to prevent a model from overfitting the training data. Overfitting occurs when a model learns not only the underlying pattern in the data but also noise and random fluctuations, leading to poor performance on new, unseen data.