MACHINE LEARNING

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 moda

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- C) Sensitivity and Specificity

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:
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) We don't have to choose the learning rate & B) It becomes slow when number of features is very large.
13- Explain the term regularization
Ans- Regularization techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.
14- Which particular algorithms are used for regularization
Ans- Lasso (L1 Norm)
15- Explain the term error present in linear regression equation

Ans- An error term represents the margin of error within a statistical model; it refers to the sum of the deviations within the regression line, which provides an explanation for the difference between the theoretical value of the model and the actual observed results.