

## 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 : C) Both of them
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 and FPR
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 is the technique which is used to solve the issue of underfitting and overfitting in a model.

14. Which particular algorithms are used for regularization?

Ans: 1) Lasso Regression 2) Ridge Regression 3) Elastic Net

15. Explain the term error present in linear regression equation?

Ans: It represents the distance between the actual point from the regression line. It's the difference between the actual data point and the predicted data point by the model.