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?**

A) Linear regression is sensitive to outliers

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

B) Negative

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

C) Both of them

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

C) Low bias and high variance

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

B) Predictive modal

7. **Lasso and Ridge regression techniques belong to _____?**

D) Regularization

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

D) SMOTE

9. **The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary**

classification problems. It uses _____ to make graph?

A) TPR and FPR

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

B) False

11. **Pick the feature extraction from below:**

C) Removing stop words

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

A) We don’t have to choose the learning rate.
B) It becomes slow when number of features is very large.
C) We need to iterate.

13. **Explain the term regularization?**

- Ans-**Regularization**: Regularization parameter in python's Scikit-learn C parameter used to maintain regularization. Here C is the penalty parameter, which represents misclassification or error term. The misclassification or error term tells the SVM optimization how much error is bearable. This is how you can control the trade-off between decision boundary and misclassification term. A smaller value of C creates a small-margin hyperplane and a larger value of C creates a larger-margin hyperplane.

14. **Which particular algorithms are used for regularization?**

Ans_There are three main regularization techniques, namely:

1.Ridge Regression (L2 Norm)
2.Lasso (L1 Norm)
3.Dropout

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

Ans_In Linear Regression model's main aim is to find the best fit linear line and the optimal values of intercept and coefficients such that the error is minimized. Error is the difference between the actual value and Predicted value.