MACHINE LEARNING

Que1. Which of the following methods do we use to find the best fit line for data in Linear Regression?

Ans- A) Least Square Error

Que2. Which of the following statement is true about outliers in linear regression?

Ans- A) Linear regression is sensitive to outliers.

Que3. A line falls from left to right if a slope is _____?

Ans- B) Negative

Que4. Which of the following will have symmetric relation between dependent variable and independent variable?

Ans- B) Correlation

Que5. Which of the following is the reason for over fitting condition?

Ans- C) Low bias and high variance

Que6. If output involves label then that model is called as:

Ans- B) Predictive modal

Que7. Lasso and Ridge regression techniques belong to _____?

Ans- D) Regularization

Que8. To overcome with imbalance dataset which technique can be used?

Ans- A) Cross validation

Que9. 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

Que10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less. ?

Ans- A) True

Que11. Pick the feature extraction from below:

Ans- B) Apply PCA to project high dimensional data

Que12. 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.

Que13. Explain the term regularization?
Ans-In mathematics, statistics, finance, computer science, particularly in machine learning and inverse problems, regularization is the process of adding information in order to solve an ill-posed problem or to prevent overfitting.

Regularization can be applied to objective functions in ill-posed optimization problems. The regularization term, or penalty, imposes a cost on the optimization function to make the optimal solution unique.

Que14. Which particular algorithms are used for regularization?
Ans-There are three main regularization techniques, namely:

1)Ridge Regression. 2)Lasso. 3) Dropout.

Que15. Explain the term error present in linear regression equation?
Ans-Error is the difference between the actual value and Predicted value and the goal is to reduce this difference.
A 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.