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

A)Least Square Error B) Maximum Likelihood

C) Logarithmic Loss D) Both A and B

Answers Options:D

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

A)Linear regression is sensitive to outliers B) linear regression is not sensitive to outliers

C) Can't say D) none of these

Answers Options:A

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

A)Positive B) Negative

C) Zero D) Undefined

Answers Options:B

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

A)Regression B) Correlation

C) Both of them D) None of these

Answers Options:B

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

A)High bias and high variance B) Low bias and low variance

C) Low bias and high variance D) none of these

Answers Options:C

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

A)Descriptive model B) Predictive modal

C) Reinforcement learning D) All of the above

Answers Options:B

7.Lasso and Ridge regression techniques belong to ?

A)Cross validation B) Removing outliers

C) SMOTE D) Regularization

Answers Options:D

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

A)Cross validation B) Regularization

C) Kernel D) SMOTE

Answers Options:

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 B) Sensitivity and precision

C) Sensitivity and Specificity D) Recall and precision

Answers Options:A

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

A)True B) False

Answers Options:B

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

Answers Options:D

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.

D)It does not make use of dependent variable.

Answers Options:A,B,C

13.Explain the term regularization?

Regularization is a technique used to reduce errors by fitting the function appropriately on the given training set and avoiding overfitting.

14.Which particular algorithms are used for regularization?

There are three main regularization techniques

•Ridge Regression (L2 Norm)

•Lasso (L1 Norm)

•Dropout.

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

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