MACHINE LEARNING

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

B) Maximum Likelihood

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?

B) Correlation

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

A) High 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 _____?

B) Removing outliers

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:

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?

B) It becomes slow when number of features is very large.

C) We need to iterate

13) Explain the term regularization?

Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting. Using Regularization, we can fit our machine learning model appropriately on a given test set and hence reduce the errors in it.

14) . Which particular algorithms are used for regularization?

Decision Tree

It is one of the predictive modelling approaches used in statistics , data mining and machine learning . Decision trees are constructed via an algorithmic approach that identifies ways to split a data set based on different conditions.

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

Considering the Linear Regression model has been given it will give us an expected value for a certain set of features in data. The difference between the expected and the actual value is defined on some exogenous factor, this exogenous factor is often termed as error term.Residual (error term) is the actual value found within the dataset minus the expected value that is predicted in linear regression. Important Properties of Regression Line Regression coefficient values remain the same because the shifting of origin takes place because of the change of scale.

Python

1. Which of the following operators is used to calculate remainder in a division?

   C) %

2. In python 2//3 is equal to?

   B) 0

3. In python, 6<<2 is equal to ?
   C) 24

4. In python, 6&2 will give which of the following as output?

   A) 2

5. In python, 6|2 will give which of the following as output?
   C) 0

6. What does the finally keyword denotes in python?
   C) the finally block will be executed no matter if the try block raises an error or no

7. What does raise keyword is used for in python?

   A) It is used to raise an exception.

8. Which of the following is a common use case of yield keyword in python?

   C) in defining a generator

9. Which of the following are the valid variable names?

   A) _abc

   C) abc2

10. Which of the following are the keywords in python?

    A) yield

B) raise