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

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?

B) Low bias and low variance

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

C) Reinforcement learning

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:

A) Construction bag of words from a email

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.

13. Explain the term regularization?

Regularization is a technique in machine learning used to prevent overfitting and improve the generalization ability of a model. Overfitting occurs when a model fits the training data too closely, capturing noise and idiosyncrasies that do not generalize well to new, unseen data. Regularization introduces a penalty term to the model's cost function, discouraging overly complex models and encouraging simplicity

14. Which particular algorithms are used for regularization?

There are three main regularization techniques, namely:

1. Ridge Regression
2. Lasso
3. Dropout

Ridge and Lasso can be used for any algorithms involving weight parameters, including neural nets. Dropout is primarily used in any kind of neural networks e.g. ANN, DNN, CNN or RNN to moderate the learning. Let's take a closer look at each of the techniques.

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.

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

D) $

2. n 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?

D) 0

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

D) 6

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 not.

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 C) look-in D) all of the above

A) yield B) raise

11.