

Ques1 Which of the following methods do we use to find the best fit line for data in Linear Regression?

Answer: Least Square Error

Ques2 Which of the following statement is true about outliers in linear regression?

Answer: Linear Regression is sensitive to outliers

Ques3 A line falls from left to right if a slope is _____?

Answer: Negative

Ques4 Which of the following will have symmetric relation between dependent variable and independent variable?

Answer: Regression

Ques5 Which of the following is the reason for over fitting condition?

Answer: Low bias and High Variance

Ques6 If output involves label then that model is called as:

Answer: Predictive modal

Ques7 Lasso and Ridge regression techniques belong to _____?

Answer: Regularization

Ques8 To overcome with imbalance dataset which technique can be used?

Answer: SMOTE

Ques9 The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses _____ to make graph?

Answer: True positive rate and False positive rate

Ques10 In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.

Answer: False

Ques11 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**

Answer: Apply PCA to project high dimensional data

Ques12 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.**

Answer: A, B, C

- 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.**

Ques13 Explain the term regularization?

Answer: In Regularization, we do not want huge weights/coefficients as a small change in weight can make a large difference for the dependent variable. So, regularization constraints the weights of such features to avoid overfitting.

Ques14 Which particular algorithms are used for regularization?

Answer: There are three different types of algorithm we use for regression.

- 1) LASSO(Least Absolute Shrinkage and Selection Operator)
Regression (L1 Form)**
- 2) Ridge Regression (L2 Form)**
- 3) ELASTICNET(Less popular)**

Ques15 Explain the term error present in linear regression equation?

Answer: An error term is a value which represents how observed data differs from actual data. It can also be a variable which represents how a given model differs from reality.