Machine Learning

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 _____?

A) Positive

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

B) Correlation

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

C) Low 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 _____?

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?

C) Sensitivity and Specificity

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

A) True

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?

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.

13. Explain the term regularization?

Regularization is form of regression, where it tends to avoid any form of overfitting by keeping network weight small, it tries to balance bias and variance. This discourages learning more complex and flexible models.

14. Which particular algorithms are used for regularization?

Lasso Regression

Ridge Regression

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

The error is the difference between the predicted value and the actual value. If we are going to predict the male's weight with the help of height. Obviously higher the height accordingly the weight will also be higher. So we can't always be perfect in prediction, there always be a difference with actual reality. So that difference will be the error in this regression.