

1. A) Least Square Error
2. A) Linear regression is sensitive to outliers
3. B) Negative
4. B) Correlation
5. C) Low bias and high variance
6. B) Predictive modal
7. D) Regularization
8. D) SMOTE
9. A) TPR and FPR
10. B) False
11. B) Apply PCA to project high dimensional data

12. A) We don't have to choose the learning rate.
B) It becomes slow when number of features is very large.

13. 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. The algorithms which are used for regularization are:
 - LASSO regression
 - Ridge regression
 - Elastic-Net regression

15. 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.