MACHINE LEARNING

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) C) Sensitivity and Specificity
10) B) False
11) B) Apply PCA to project high dimensional data
12) B) It becomes slow when number of features is very large.

13) Regularization is a method to overcome overfitting in a regression model. In this method we penalize the higher order terms present in the model by multiplying them with a smaller constant.

14) There are two algorithms:

    (a) L1 regularization also called Lasso regression
    (b) L2 regularization also called ridge regression

15) Linear regression equation represents the best fit line for a given dataset. The most common approach to fit this line is least square error method. As this line is not the exact fit line, therefore the difference between the actual value and the value predicted by the linear regression model is called error.