MACHINE LEARNING

1. A) Least Square Error
2. A) Linear regression is sensitive to outliers
3. B) Negative
4. A) Regression
5. B) Low bias and low variance
6. 6. If output involves label then that model is called as: A) Descriptive model
7. D) Regularization
8. D) SMOTE
9. A) TPR and FPR
10. A) True
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.
    (D) It does not make use of dependent variable.

13. Regularization, meaning in the machine learning context, refers to minimizing or shrinking the coefficient estimates towards zero to avoid underfitting or overfitting the machine learning model. The difference lies in how we pay attention to data and a machine learning model. That long-winding tomes about machine learning models will also include 'coefficients' for the input parameters. It is the machine equivalent of attention or importance attributed to each parameter. Basically, the higher the coefficient of an input parameter, the more critical the machine learning model attributes to that parameter. Therefore, regularization in machine learning involves adjusting these coefficients by changing their magnitude and shrinking to enforce generalization.

14. Ridge Regression (L2 Norm) ,Lasso (L1 Norm),Dropout.

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.