ASSIGNMENT

MACHINE LEARNING

Q1 to Q11

1. A) Least Square Error
2. A) Linear regression is sensitive to outliers
3. B) Negative
4. C) Both of them
5. B) Low bias and low variance
6. B) Predictive Model
7. D) Regularization
8. D) SMOTE
9. A) TPR and FPR
10. A) True
11. C) Removing stop words

Q12

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

Q13 to Q15

13. The term “Regularization” is a form of regression that constrains/regularizes or shrinks the coefficient estimates

towards zero. This technique prevents the model from overfitting by adding extra information to it.

14. There are three mainly used algorithms that are used for regularization techniques:

i) Ridge Regression
ii) LASSO Regression
iii) Elastic-Net Regression

15. By the method of MSE (mean square error), Linear Regression is used to calculate the error of the model. It is calculated the distance of the observed y-values from the predicted y-values at each value of x; squaring each of these distances; calculating the mean of each of the squared distances.