

# MACHINE LEARNING

1. A. Least Square Error
2. A)
3. B) Negative
4. D)
5. C)
6. B) predictive model
7. D) Regularization
8. D) SMOTE
9. A) TPR and FPR
10. B) False
11. A)
12. A)

13. Regularization → It is a technique used in machine learning to prevent overfitting. Regularization helps to reduce overfitting by adding penalty term to the loss function as penalty term discourages the model from fitting the data and encourages it to generalize better to new data.

14. There are two algorithms used for Regularization which are as follows →

1. LASSO REGRESSION → This algorithm adds a penalty term to proportional to the absolute value of the magnitude of the coefficients.
2. RIDGE REGRESSION → This algorithm adds a penalty term to proportional to the square of the magnitude of the coefficients.

15. In Linear Regression the error term represents the difference between the predicted value of the dependent variable and the actual value of the dependent variable as this is also known as residual. As if the error term is important because if it is large then it means that the model is not good fit for the data and its predictions are not accurate and if the error term is small then it means that the model is good fit for the data.