

## Machine Learning

Q1 Choose the correct option

1 ans: A. Least Square Error

2 ans: A. Linear regression is sensitive to outliers

3 ans: B. Negative

4 ans: B. Correlation

5 ans: C. Low bias and high variance

6 ans: B. Predictive modal

7 ans: D. Regularisation

8 ans: D. SMOTE

9 ans A. TPR and FPR

10 ans: B. False

11 ans: B. Apply PCA to project high dimensional data

More than one options are correct, Choose all the correct options

12 ans: A. We don't have to choose the learning rate

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

14 ans: Particular algorithms are used for regularization :

1. Ridge (L2) Regularization :

Also known as Ridge Regression, it modifies the over-fitted or under fitted models by adding the penalty equivalent to the sum of the squares of the magnitude of coefficients.

2. Lasso (L1) Regression

It modifies the over-fitted or under-fitted models by adding the penalty equivalent to the sum of the absolute values of coefficients.

15 ans : The error term of a regression equation represents all of the variation in the dependent variable not explained by the weighted independent variables.