

Machine Learning

Ans 1) A) Least Square Error

Ans 2) A) Linear regression is sensitive to outliers

Ans3) B) Negative

Ans 4) A) Regression

Ans 5) A) High bias and high variance

Ans 6) B) Predictive modal

Ans7) D) Regularization

Ans 8) D) SMOTE

Ans 9) B) Sensitivity and precision

Ans 10) A) True

Ans11) B) Apply PCA to project high dimensional data

Ans 12) B) and C)

Ans 13) Regularisation in machine learning is nothing but the technique for the calibration of models of machine learning for minimizing the adjusted loss function and prevent the overfitting or overfitting. There are two main types of regularization techniques: Ridge Regularization and Lasso Regularization. Ridge regularization is 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. On the other hand Lasso Regularization modifies the over-fitted or under-fitted models by adding the penalty equivalent to the sum of the absolute values of coefficients.

Ans 14) Ridge Regression and Lasso Regression these are the two particular algorithms are used for regularization in machine learning.

Ans 15) A Linear Regression model's main aim is to find the best fit linear line and the optimal values of intercept and coefficients such that the error is minimized. Error is the difference between the actual value and Predicted value and the goal is to reduce this difference. The vertical distance between the data point and the regression line is known as error or residual. Each data point has one residual and the sum of all the differences is known as the Sum of Errors.