ANS1. (A) Least Square Error

ANS2. (A) Linear regression is sensitive to outliers

ANS3. (B) Negative

ANS4. (D) None of these

ANS5. (D) none of these

ANS6. (B) Predictive modal

ANS7. (D) Regularization

ANS8. (D) SMOTE

ANS9. (A) TPR and FPR

ANS10. (B) False

ANS11. (A) Bag of Words (BoW)

ANS12. (B) It becomes slow when number of features is very large.

ANS13. Regularization is an approach used in machine learning to help overfitting and improve the conception performance of a model. Overfitting occurs when a model is too complex and learns the noise in the training data rather of the supporting patterns. Regularization helps to solve this problem by adding a penalty term to the loss function during training. The penalty term discourages the model from fitting the training data too nearly and encourages it to learn the supporting patterns. There are several types of regularization ways, including L1 regularization, L2 regularization, and Elastic Net regularization. L1 regularization adds the absolute value of the magnitude of the coefficients as a penalty term to the loss function. L2 regularization adds the square of the magnitude of the coefficients as a penalty term to the loss function. Elastic Net regularization combines both L1 and L2 regularization. Regularization is an important approach in machine learning that helps to prevent overfitting and help the conception performance of a model.

ANS14. Regularization is a approach used in machine learning to help overfitting and improve the conception performance of a model. It involves adding a penalty term to the loss function during training 1. The generally used regularization ways are Lasso Regularization- L1 Regularization, Ridge Regularization- L2 Regularization and Elastic Net Regularization- L1 and L2 Regularization .

Lasso Regularization adds the “absolute value of magnitude” of the coefficient as a penalty term to the loss function. Ridge Regularization adds the “squared magnitude” of the coefficient as a penalty term to the loss function. Elastic Net Regularization is a combination of L1 and L2 regularization.

ANS15. In linear retrogression, the error is the difference between the predicted value and the true value of the dependent variable. The error is also known as the residual. The residual is calculated by deducting the predicted value from the factual value of the dependent variable. The residual is a measure of how well the regression line fits the data points. The lower the residual, the better the regression line fits the data points. The standard error of the regression is a measure of the average distance that the observed values fall from the regression line. It's used to assess the perfection of predictions. Roughly 95 of the observations should fall within/- two standard errors of the regression, which is a quick approximation of a 95 prediction interval.