

## MachineLearning - Assignment

Q.1 Answer ; D) Both A and B

Q.2 Answer ; A) Linear Regression is sensitive to outliers

Q.3 Answer ; B) Negative

Q.4 Answer ; B) Correlation

Q.5 Answer ; C) Low bias and high variance

Q.6 Answer ; B) Predictive model

Q.7 Answer ; D) Regularization

Q.8 Answer ; D) SMOTE

Q.9 Answer ; A) TPR and FPR

Q.10 Answer ; B) False

Q.11 Answer ;

Q.12 Answer ;

Correct options are –

- A) We do not have to choose the learning rate
- B) ) It becomes slow when number of features is very large

Q.13 Answer ;

Regularization : In Machine Learning , sometimes the model make their own assumption . This problem happens in Regression and classification also . To solve this problem, we use regularization . Basically It is used to prevent overfitting .

Regularization is of two types –

1. Lasso (L1) Regularization
2. Ridge (L2) Regularization

Q.14 Answer ;

The particular algorithms used in regularization are –

1. Linear Regression
2. Logistic Regression
3. Support Vector Machine
4. Decision Trees

Etc .

Q. 15 Answer ;

In Linear regression , error is the difference between the actual data point and the predicted values generated by the regression line .

If  $y$  = the actual value

$\hat{y}$  = the predicted value

Then, the error is  $y - \hat{y}$

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