MACHINE LEARNING

Choose the correct option:

1: A) Least Square Error

2: A) Linear regression is sensitive to outliers

3: B) Negative

4: D) None of these

5: A) High bias and high variance

6: B) Predictive modal

7: D) Regularization

8: A) Cross validation

9: D) Recall and precision

10: A) True

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

Subjective answer type questions:

13. Explain the term regularization?

Regularization refers to the modifications that can be made to a learning algorithm that helps to reduce this generalization error and not the training error. It reduces by ignoring the less important features. It also helps prevent overfitting, making the model more robust and decreasing the complexity of a model.

14. Which particular algorithms are used for regularization?

Mainly, there are two types of algorithmic techniques, which are used for regularization.

- Ridge Regression
- Lasso Regression

15. Explain the term error present in linear regression equation?

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

A very simple answer is linear regression fails at finding relationships that are non-linear in nature. So if a variable increases at the rate of the log of another variable, linear regression will not describe the relationship well.