Machine Learning MCQ's & Subjective Answered

1. Which of the following methods do we use to find the best fit line for data in Linear Regression?
A) Least Square Error
2. Which of the following statement is true about outliers in linear regression?
A) Linear regression is sensitive to outliers
3. A line falls from left to right if a slope is?
B) Negative
4. Which of the following will have symmetric relation between dependent variable and independent variable?
C) Correlation
5. Which of the following is the reason for over fitting condition?
B) Low bias and High variance
6. If output involves label then that model is called as:
B) Predictive modal
7. Lasso and Ridge regression techniques belong to?
D) Regularization
8. To overcome with imbalance dataset which technique can be used?
D) SMOTE
9. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses to make graph?
A) TPR and FPR
10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.
B) False
11. Pick the feature extraction from below:
B) Apply PCA to project high dimensional data
12. Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression?
A) We don't have to choose the learning rate.B) It becomes slow when number of features is very large.
13. What do you mean by Regularization?
Regularizations are techniques used to reduce the error by fitting a function appropriately on the given training set to avoid overfitting.

14. Which particular algorithms are used for regularization?

Lasso Regression(L1) Ridge Regression(L2) Cross Validation

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

Linear Regression most often use Mean-Square-Error to find error in the model.

MSE is calculated by

Measuring the distance between the observed y-variable and predicted y-variable at each value of \mathbf{v}

Squaring each of these distances

Calculating the mean of each Squared distances.