

Machine learning
Assignment 39

In Q1 to Q11, only one option is correct, choose the correct option:

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?

D) none of these

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?

B) Correlation

5. Which of the following is the reason for over fitting condition?

C) 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

In Q12, more than one options are correct, choose all the correct
options:

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.

Q13 and Q15 are subjective answer type questions, Answer them briefly.

Q13. Explain the term regularization?

Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.

Q14. Which particular algorithms are used for regularization?

Ridge Regression.

LASSO (Least Absolute Shrinkage and Selection Operator) Regression.

Elastic-Net Regression.

Q15. Explain the term error present in linear regression equation?

Within a linear regression model tracking a stock's price over time, the error term is the difference between the expected price at a particular time and the price that was actually observed.