

# MACHINE LEARNING

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
- B) Maximum Likelihood
- C) Logarithmic Loss
- D) Both A and B

Ans→ A) Least Square Error

2. Which of the following statement is true about outliers in linear regression?

- A) Linear regression is sensitive to outliers
- B) linear regression is not sensitive to outliers
- C) Can't say
- D) none of these

Ans→ A) Linear regression is sensitive to outliers

3. A line falls from left to right if a slope is \_\_\_\_\_?

- A) Positive
- B) Negative
- C) Zero
- D) Undefined

Ans→ B) Negative

4. Which of the following will have symmetric relation between dependent variable and independent variable?

- A) Regression
- B) Correlation
- C) Both of them
- D) None of these

Ans→ B) Correlation

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

- A) High bias and high variance
- B) Low bias and low variance
- C) Low bias and high variance
- D) none of these

Ans→ D) none of these

6. If output involves label then that model is called as:

- A) Descriptive model                      B) Predictive modal
- C) Reinforcement learning              D) All of the above

Ans → B) Predictive modal

7. Lasso and Ridge regression techniques belong to \_\_\_\_\_?

- A) Cross validation                      B) Removing outliers
- C) SMOTE                                  D) Regularization

Ans → D) Regularization

8. To overcome with imbalance dataset which technique can be used?

- A) Cross validation                      B) Regularization
- C) Kernel                                  D) SMOTE

Ans → A) Cross validation

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                              B) Sensitivity and precision
- C) Sensitivity and Specificity              D) Recall and precision

Ans → C) Sensitivity and Specificity

10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.

- A) True                                      B) False

Ans → A) True

11. Pick the feature extraction from below:

- A) Construction bag of words from a email
- B) Apply PCA to project high dimensional data
- C) Removing stop words
- D) Forward selection

Ans→ 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.
- C) We need to iterate.
- D) It does not make use of dependent variable.

Ans→ D) It does not make use of dependent variable.