

## MACHINE LEARNING

**1. Which of the following methods do we use to find the best fit line for data in Linear Regression?**

**Ans)** A) Least Square Error B

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

**Ans)** A) Linear regression is sensitive to outliers

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

**Ans)** B) Negative

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

**Ans)** C) Both of them

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

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

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

**Ans)** B) Predictive modal

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

**Ans)**

D) Regularization

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

**Ans)** D) SMOTE

**9. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses \_\_\_\_\_ to make graph?**

**Ans)** C) Sensitivity and Specificity

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

**Ans)**

A) True

**11. Pick the feature extraction from below:**

**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?**

**Ans)** 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.

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**13. Explain the term regularization?**

**Ans)** It is used to reduce the error by fitting a function in the given training set to avoid overfitting.

**14. Which particular algorithms are used for regularization?**

**Ans)** They are three types of algorithms are used for regularization

- Ridge Regression.
- LASSO (Least Absolute Shrinkage and Selection Operator) Regression.
- Elastic-Net Regression.

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

**Ans)** A linear regression always has an error term because in real life independent variables are never perfect predict of the dependent variables.