

## 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?  
Ans: Least Square Error
2. Which of the following statement is true about outliers in linear regression?  
Ans: linear regression is not sensitive to outliers
3. A line falls from left to right if a slope is\_\_\_\_?  
Ans: Negative
4. Which of the following will have symmetric relation between dependent variable and independent variable?  
Ans: Regression& Correlation
5. Which of the following is the reason for over fitting condition?  
Ans: High bias and high variance
6. If output involves label then that model is called as:  
Ans: Predictive modal
7. Lasso and Ridge regression techniques belong to\_\_\_\_\_  
Ans: Regularization
8. To overcome with imbalance dataset which technique can be used?  
Ans: Cross Validation
9. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses\_\_\_\_\_to make graph?  
  
Ans: Recall and precision
10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.  
Ans: False
11. Pick the feature extraction from below:  
Ans: 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
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the Linear Regression?

- A) We don't have to choose the learning rate.
- B) We need to iterate.
- C) It does not make use of dependent variable.

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

13. Explain the term regularization?

Ans: If I have some features data I want to find the label I will pass on my data to my model, my model will predict 95/ 100 percentage or called as overfitting during my training time my model would be overfitting, in order to avoid the overfitting we will use Regularization.

14. Which particular algorithms are used for regularization?

Ans: mainly we use Ridge regression & Lasso (L1& L2)

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

Ans: The Difference between Actual & predictive value is called as error or residual we Call it as, its the difference between actual response and the prediction made by our model. In simple term we can call it an error made by our model.

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