## Machine Learning

| 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?  |
|     | 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?  |
|     | C) 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.  |
|     | 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 word  |
| 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) | Explain the term regularization?   |
|     | Regularization is a technique used to reduce the error by fitting the function appropriately on                              |
|     | given training set and avoid overfitting.  |

There are mainly two algorithms are used in regularization

14) Which particular algorithms are used for regularization?

- 1. L1 regularization
- 2. L2 regularization

A regression model which uses L1 regularization is called LASSO (Lease Absolute Shrinkage and selection Operator) regression. A model which uses L2 regularization technique is called Ridge regularization technique.

15) Explain the term error present in linear regression equation? Error is the difference between actual value and predicted value.