MACHINE LEARNING

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

Ans:- Least square error

Q 2. Which of the following statement is true about outliers in linear regression?
Ans:- Linear regression is sensitive to outliers

Q3. A line falls from left to right if a slope is _____?
Ans:- b) Negative

Q4. Which of the following will have symmetric relation between dependent variable and independent variable?
Ans:- b) Correlation

Q5. Which of the following is the reason for over fitting condition?
Ans:- c) Low bias and high variance

Q6. If output involves label then that model is called as:
Ans:- a) Descriptive model

Q7. Lasso and Ridge regression technique belongs to _____?
Ans:- b) Regularization

Q8. To overcome with imbalance dataset which technique can be used?
Ans:- d) SMOTE

Q9. The AUC Receiver Operator Characteristics (AUCROC) curve is an evaluation metric for binary classification and problems. It uses _____ to make graph?
Ans:- a) TPR and FPR

Q10. In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.
Ans:- b) False

Q 11. Pick the feature extraction from below:
Ans:- b) Applying PCA to project high dimensional data.

Q 12. Which of the following is true about Normal equation used to compute the coefficient of the Linear Regression.
Ans:- a) We do not have to choose the learning rate
b) it becomes slow when number of features is very large

Q 13. Explain the term regularization?
Ans:- Regularization is a form of regression that constrains / regularize or shrinks the coefficient estimates towards zero. This technique is used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting. Overfitting occurs when a machine learing model is constraints to a training set and not perform well. Regularization help sort this overfitting problems by restricting the degrees of freedom of a given equation i.e simply by reducing the number of a degrees of a polynomial function by reducing their corresponding weights

Q 14. Which particular algorithms are used for regularization?
Ans:- Algorithms used for regularization are:

1. Lasso
2. Ridge

Q 15. Explain the term error present in linear Regression equation?

Ans:- Term error represents the difference between the actual outcome variable and the outcome variables predicted by the regression model. In simple term it is the difference between the predicted value and actual value.