Q1.Which of the following methods do we use to find the best fit line for data in Linear Regression?
A1. Least square error

Q2. Which of the following statement is true about outliers in linear regression?
A2. Linear regression is sensitive to outliers

Q3. A line falls from left to right if a slope is _____?
A3. Negative

Q4.Which of the following will have symmetric relation between dependent variable and independent variable?
A4. Correlation

Q5. Which of the following is the reason for over-fitting?
A5. Low bias and high variance

Q6. If output involves label then that model is called as:
A6. Predictive Model

Q7.Lasso and Ridge regression techniques belong to _____?
A7.Regularization

Q8.To overcome with imbalance dataset which technique can be used?
A8. SMOTE

Q11. Pick the feature extraction from below:
A9. Apply PCA to project high dimensional data

Q12.Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression?
A12. A,B and C

Q13.Explain the term regularization?
A13. In machine learning, regularization techniques are used during model training to prevent overfitting.It is a crucial tool for building robust and generalizable machine learning models.

Q14. Which particular algorithms are used for regularization?
A14. The two common types of regularization i.e. Lasso and Ridge. Lasso Regression also called L1 Regularization and Ridge regularization also know as L2 regularization.
L1 Regularization uses weight values for normalization.

Q15.Explain the term error present in linear regression equation?

A15. The "error" means the difference between the predicted values and the actual observed values of the dependent variable. These differences are also known as residuals.