Question.1

1.A- least square error

2.b-Linear regression is sensitive to outliers

3-c-negative

4-b-correlation

5.A-high bias and high varince

6.c-reinenforcement

7.d-regularization technique

8.D SMOTE

9. Sensitivity and precision

10. True

11. Apply PCA to project high dimensional data

12- A-We don't have to choose the learning rate. B) It becomes slow when number of features is very large.

Question.13- Regularization is a technique used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting.

Question 14- The commonly used regularization techniques are :
L1 regularization, L2 regularization, Dropout regularization

Question15- The error term is also known as the residual, disturbance, or remainder term,

he error term and residual are often used synonymously, there is an important formal difference. An error term is generally unobservable and a residual is observable and calculable, making it much easier to quantify and visualize. In effect, while an error term represents the way observed data differs from the actual population a residual represents the way observed data differs from sample population data