**ASSIGNMENT 8- Machine Learning**

Q1- C

Q2- A

Q3- B

Q4- C

Q5- D

Q6- B

Q7- C

Q8-

Q9-

Q10- A, C

Q11- One-Hot Encoding is the process of creating dummy variables. This technique is used for **categorical variables** where order does not matter.

Q12- When we are using an imbalanced dataset, we can oversample the minority class using replacement. This technique is called oversampling. Similarly, we can randomly delete rows from the majority class to match them with the minority class which is called undersampling.

Q13- The key difference between ADASYN and SMOTE is that the former uses a density distribution, as a criterion to automatically decide the number of synthetic samples that must be generated for each minority sample by adaptively changing the weights of the different minority samples to compensate for the skewed .

Q14- GridSearchCV **tries all the combinations of the values passed in the dictionary and evaluates the model for each combination using the Cross-Validation method**.

Q15- There are three error metrics that are commonly used for evaluating and reporting the performance of a regression model; they are: Mean Squared Error (MSE). Root Mean Squared Error (RMSE). Mean Absolute Error (MAE).