MACHINE LEARNING

ASSIGNMENT - 1

CHOOSE THE CORRECT OPTION :-

1. **OPTION – (A) [The best fit line for data in linear regression is LEAST SQUARE METHOD].**
2. **OPTION – (A) [Linear regression is sensitive to outliers].**
3. **OPTION – (B) [When a line falls from left to right, the slope is a negative number].**
4. **OPTION – (B) [the relationship is symmetric between Dependent variable and independent variable in case of correlation but in case of regression it is not symmetric].**
5. **OPTION - (C) [The overfitted model has low bias and high variance].**
6. **OPTION – (B) [If output involves label then that model is called as PREDICTIVE MODAL].**
7. **OPTION – (D) [Lasso and Ridge regression techniques belong to REGULARIZATION].**
8. **OPTION – (D) [To overcome with imbalance dataset SMOTE which technique can be used].**
9. **OPTION – (**
10. **OPTION – (B) [In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should not be less].**
11. **OPTION – (A,B,C)**

MULTIPLE CORRECT ANSWER :-

12. **DHERUIHGEHEHEH**

SUBJECTIVE ANSWERS :-

13. **The word regularize means to make things regular or acceptable. This is exactly why we use it for. Regularizations are techniques used to reduce the error by fitting a function appropriately on the given training set and avoid overfitting. Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.**

14.There are three main regularization technique are RIDGE REGGRESION, LASSO AND DROPOUT.

15..The standard error of the regression (S), also known as the standard error of the estimate, represents the average distance that the observed values fall from the regression line. Error term tells you how certain you can be about the formula.It represents the margin of error within a statistical model; it refers to the sum of the deviations within the regression line, which provides an explanation for the difference between the theoretical value of the model and the actual observed results.