MACHINE LEARNING ANSWER SHEET-4

Answer 1 - D) None of the above

Answer 2 - D) None of the above.

Answer 3 - C) Random Forest

Answer 4 - D) None of the above.

Answer 5 - B) Model B

Answer 6 - A) Ridge D) Lasso

Answer 7 - C) Random Forest B) Decision Tree

Answer 8 - D) All of the above

Answer 9 - D) None of the above

Answer 10 - The adjusted R-squared compensates for the addition of variables and only increases if the new predictor enhances the model above what would be obtained by probability. Conversely, it will decrease when a predictor improves the model less than what is predicted by chance.

Answer 11 - Ridge and lasso regression are two common machine learning approaches for constraining model parameters. Both methods try to get the coefficient estimates as close to zero as possible because minimizing (or shrinking) coefficients can reduce variance dramatically (i.e., overfitting)

Answer 12 – A variance inflation factor (VIF) is a measure of the amount of multicollinearity in regression analysis. Multicollinearity exists when there is a correlation between multiple independent variables in a multiple regression model. This can adversely affect the regression results.

Answer 13 – To ensure that the gradient descent moves smoothly towards the minima and that the steps for gradient descent are updated at the same rate for all the features, we scale the data before feeding it to the model.

Answer 14 – 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)