

MACHINE LEARNING WORKSHEET

1.A(LEAST SQUARE ERROR)

2.A(LINEAR REGRESSION IS SENSITIVE TO OUTLIERS)

3.B(NEGATIVE)

4.A(REGRESSION)

5.C(LOW BIAS AND HIGH VARIANCE)

6.B(PREDICTIVE MODEL)

7.D(REGULARIZATION)

8.D(SMOTE)

9.C(SENSITIVITY AND SPECIFICITY)

10.B(FALSE)

11.B(APPLY PCA TO PROJECT HIGH DIMENSIONAL DATA)

12.A(WE DON'T HAVE TO CHOOSE LEARNING RATE) B(IT BECOMES SLOW WHEN NUMBER FEATURES IS VERY LARGE)

13.REGULARIZATION means to make things regular or acceptable. We know over fitting occurs when we try to train a complex model the regularization in simple terms it tries to discourage learning more complex or flexible model, to avoid risk of overfitting.

14.The 3 Main regularization techniques are 1.Ridge regression 2.Lasso 3.Elastic net

15.Error means the difference between actual output and the predicted output Error is less model is near by responses Error is more the prediction is less So, one should have less error $Y1 = B_0 + B_1X1 + E1$
 $Y1$ =dependent variable B_0 =population y intercept B_1 =slope $X1$ =independent variable $E1$ =Random error