

MACHINE LEARNING ASSIGNMENT 1

Ans 1. A

Ans2. A

Ans 3.B

Ans4. B

Ans 5.C

Ans 6.A

Ans 7.D

Ans 8.B

Ans 9.C

Ans10.B

Ans11.C

Ans12.B

Ans13. Regularization means to make things regular or acceptable. In the context of machine learning, regularization is the process which regularizes or shrinks the coefficients towards zero. In simple words, regularization discourages learning a more complex or flexible model, to prevent overfitting or underfitting.

Ans14. 1.Lasso regression (least absolute shrinkage and selection operator; also Lasso or LASSO) is a regression analysis method that performs both variable selection and regularization in order to enhance the prediction accuracy and interpretability of the resulting statistical model. it will eliminate few features which are not usefull.

2. Ridge regression is a model tuning method that is used to analyse any data that suffers from multicollinearity. This method performs L2 regularization. When the issue of multicollinearity occurs, least-squares are unbiased, and variances are large, this results in predicted values to be far away from the actual values It minimise the coefficient of feature so that the gap could be reduced.

Ans15. An error term 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.

