

Machine Learning– WORKSHEET 1

Answers

Q1- A

Q2- A

Q3- B

Q4- B

Q5- C

Q6- B

Q7- D

Q8- D

Q9- A

Q10- B

Q11- B

Q12- D

Answer Q13

Regularization is a technique used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting.

The commonly used regularization techniques are:

1-L1 regularization

2-L2 regularization

3-Dropout regularization

Answer Q14 –

The commonly used regularization techniques are:

1-L1 regularization

2-L2 regularization

3-Dropout regularization

A regression model which uses L1 Regularization technique is called LASSO (Least Absolute Shrinkage and Selection Operator) regression.

A regression model that uses L2 regularization technique is called Ridge regression.

Lasso Regression adds “absolute value of magnitude” of coefficient as penalty term to the loss function(L).

Answer Q15

An error term is the sum of the deviations of each actual observation from a model regression line.

Regression analysis is used to establish the degree of correlation between two variables, one independent and one dependent, the result of which is a line that best "fits" the actually observed values of the dependent value in relation to the independent variable or variables.