Machine learning Worksheet -1

Ans 1: A

Ans 2: A

Ans 3: B

Ans 4: B

Ans 5: C

Ans 6:

Ans 7:

Ans 8:

Ans 9: A

Ans 10: B
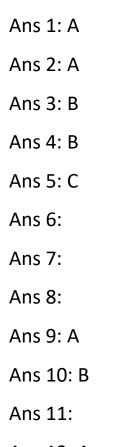
Ans 11:

Ans 12: A and B

Ans 13: Regularization – It is technique used for tuning the function by adding an additional penalty term in the error function.

The additional term controls the excessively fluctuating function such that the coefficients don't take extreme values.

Ans 14: There are three main regularization techniques, namely:

1- Ridge Regression (L2 Norm)
2- Lasso (L1 Norm)
3- Dropout

Ridge and Lasso can be used for any algorithms involving weight parameters, including neural nets. Dropout is primarily used in any kind of neural networks e.g. ANN,DNN,CNN or RNN to moderate the learning.

Ans 15: 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.