

Government Engineering College, Modasa



INDEX

3710216 – Machine Learning

No.	Date	Title	Pg No.	Sign
1.		Given the following vectors: A = [1, 2, 3, 4, 5, 6, 7, 8, 9 10] B = [4, 8, 12, 16, 20, 24, 28, 32, 36, 40] C = [10, 9, 8, 7, 6, 5, 4, 3, 2, 1] Ex. 1: Find the arithmetic mean of vector A, B and C Ex. 2: Find the variance of the vector A, B and C Ex. 3: Find the euclidean distance between vector A and B Ex. 4: Find the correlation between vectors A & B and A & C		
2.		Load breast cancer dataset and perform classification using Euclidean distance. Use 70% data as training and 30% for testing.		
3.		Repeat the above experiment with 10-fold cross validation and find the standard deviation in accuracy. Repeat the above experiment with 10-fold cross validation and find the standard deviation in accuracy.		
4.		Repeat the experiment 2 and build the confusion matrix. Also derive Precision, Recall and Specificity of the algorithm		
5.		Predict the class for X = < Sunny, Cool, High, Strong > using Naïve Bayes Classifier for given data....		

6.		For the data given in Exercise 5, find the splitting attribute at first level:		
7.		Generate and test decision tree for the dataset in exercise 5		
8.		Find the clusters for following data with $k = 2$: Start with points 1 and 4 as two separate clusters.		
9.		Find following statistics for the data given in Exercise 1		
10.		<p>Given the following vectors:</p> <p>$X = [340, 230, 405, 325, 280, 195, 265, 300, 350, 310]$; %sale</p> <p>$Y = [71, 65, 83, 74, 67, 56, 57, 78, 84, 65]$;</p> <p>Ex. 1: Find the Linear Regression model for independent variable X and dependent variable Y.</p> <p>Ex. 2: Predict the value of y for $x = 250$. Also find the residual for y4.</p>		