

ML Lab (CS360)

Assignment 9

Total Marks: 20

1.

- (a) Load IRIS dataset. Create a linearly separable dataset with two features of petal length and petal width and two classes 'versicolor' and 'virginica'.
- (b) Perform a classification using SVM (allowed to use the library functions).
- (c) Perform 5-fold cross-validation and report the class-wise and average accuracies.

(Marks: 10)

2. Perform classification over IRIS dataset using radial basis function neural network (no use of any library functions). For the identification of the initial cluster centers, use the k-means algorithm (reuse your previous assignment's code). Report the individual class-wise accuracy, average accuracy and overall accuracy. **(Marks 10)**