

## ML Lab (M.Tech)

# Assignment 7

Total Marks: 20

1. Implement the single layer perceptron (SLP) for the OR and AND problem. Please make sure the followings: **Marks: 10**
  - a. Activation function is threshold activation.
  - b. Train the model for different learning rates (LR), where  $0 < LR < 1$ . Train for 5 different learning rates and plot the training curve(epoch vs training accuracy).
  - c. Weight initialization should be between -0.3 to 0.3
2. Implement the KNN classifier over the IRIS dataset  
**Marks: 10**

**Note: Please do not use any library function/packages**