

## **Pattern Recognition**

**CS703A**

**Contracts: 3L**

**Credits- 3**

### **Module - I**

Introduction - Definitions, data sets for Pattern Recognition [2]

Different Paradigms of Pattern Recognition [1]

Representations of Patterns and Classes [2]

Metric and non-metric proximity measures [2]

### **Module - II**

Feature extraction [2]

Different approaches to Feature Selection [1]

Nearest Neighbour Classifier and variants [2]

Efficient algorithms for nearest neighbour classification [2]

### **Module - III**

Different Approaches to Prototype Selection [2]

Bayes Classifier [3]

Decision Trees [3]

Linear Discriminant Function [3]

### **Module - IV**

Support Vector Machines [2]

Clustering [3]

Clustering Large datasets [2]

Combination of Classifiers [2]

Applications - Document Recognition [2]

## **REFERENCES**

1. Devi V.S.; Murty, M.N. (2011) Pattern Recognition: An Introduction, Universities Press, Hyderabad.
2. R. O. Duda, P. E. Hart and D. G. Stork, Pattern Classification, Wiley, 2000.