

SEMESTER-II (Pool-A)

COURSE NAME : FOUNDATION OF MACHINE LEARNING

(CHOI-A12)

Number of Credit: - 02

Maximum marks: 50

Contact Hours: 25

Min Marks: 20

Unit:I

Machine Learning: Introduction, Types of machine learning, Application of machine learning.

Unit:II

Nearest Neighbour Methods, Validation: Nearest neighbour prediction, K-nearest methods, Weighted Neighbour methods.

Unit-III

Probability, Matrix, Random variable, Conditional probability, Bayes' theorem, Over fitting.

Unit-IV

Linear classification: Characterizing a linear classifier, Training a linear classifier, Logistic regression.

Unit-V

Decision Trees, Decision tree classifiers, K-means, Hierarchical Clustering,

Reference Books:

1. Hastie, Tibshirani, and Friedman, The Elements of Statistical Learning
2. Barber, Bayesian Reasoning and machine learning
3. Tom M. Mitchell, machine learning