

मोतीलाल नेहरू राष्ट्रीय प्रौद्योगिकी संस्थान इलाहाबाद प्रयागराज —211004 [भारत]

Motilal Nehru National Institute of Technology Allahabad Prayagraj-211004 [India]

Department of Computer Science & Engineering

Home Assignment 2

Programme Name: MCA. Semester: III

Course Code: CS33103 Course Name: Soft Computing

Instructions:

- 1. This is a handwritten assignment. You need to scan the written assignment and post the solution. You can keep the hard copy for preparation of examination.
- 2. Last date of submission is 20/10/2020.
- 1 Write short answers of following questions
 - **a.** What are perceptron networks? Its mathematical base.
 - **b.** Discuss the learning rule in single layer perceptron. Its algorithm.
 - **c.** AND,OR and XOR function with single layer perceptron
 - d. Multilayer perceptron, its architecture, learning rule, algorithm
 - **e.** Real world applications of perceptron. Its limitations.
 - **f.** Adaline networks- its architecture, learning rule, algorithm
 - **g.** Madaline networks- its architecture, learning rule, algorithm
 - **h.** Working Example for Classification of dataset using adaline & madaline.
 - i. Discuss commonly used activation functions.
 - **j.** Define linear Separability.