

**MODULE - 1****Chapter 1 : Introduction to Neural Networks and Their Basic Concepts 1-1 to 1-45**

Syllabus : Biological neuron and Artificial neuron, McCulloch-Pitts Model, Activation Function, various types of Activation Functions and types of Neural Network Architectures, Prerequisites for Training of Neural Networks. Linearly Separable and Linearly Non-Separable Systems with examples, Concepts of Supervised Learning, Unsupervised Learning and Reinforcement Learning. Brief survey of applications of Neural Networks.

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MODULE - 2

Chapter 2 : Supervised Learning Neural Networks

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 Error Functions : Mean Square Error and Sum Squared Error. Gradient Descent, Generalized delta rule, Error back propagation, Stopping Criterions for Training.

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