

**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.

1.1	Basics of Neural Networks.....	1-1
1.1.1	Introduction to Neural Networks.....	1-1
1.1.2	Biological Neural Networks.....	1-1
1.1.3	Biological Neuron.....	1-2
1.1.4	Artificial Neuron.....	1-4
1.1.5	Difference between Biological Neural Network and Artificial Neural Networks.....	1-5
1.2	McCulloch-Pitts Neuron Model.....	1-5
1.3	Activation Function and Types of Activation Functions.....	1-12
1.3.1	What is Activation Function ?.....	1-12
1.3.2	Why do we Need Activation Function ?.....	1-12
1.3.3	Types of Activation Function.....	1-12
1.3.4	Important Properties of Activation Functions :.....	1-18
1.4	Neural Network Architectures.....	1-18
1.5	Pre-requisites for Training of Neural Networks.....	1-21
1.5.1	Structuring the Network.....	1-21
1.5.2	Initial Weights.....	1-22
1.5.3	Loss Function.....	1-22
1.5.4	Learning Rate.....	1-23
1.6	Linear Separability.....	1-23
1.6.1	Linearly Separable Patterns.....	1-23
1.6.2	Non-Linearly Separable Patterns.....	1-26



1.7	Learning Methods	1-27
1.7.1	Concepts of Supervised Learning.....	1-28
1.7.2	Concept of Unsupervised Learning.....	1-28
1.7.3	Concept of Reinforced Learning.....	1-30
1.8	Brief Survey of Applications of Neural networks	1-31
1.8.1	Applications of Neural Networks in Pattern Classification.....	1-32
1.8.2	Character Recognition using Neural Networks.....	1-34
1.8.3	Hand Written Character Recognition using Neural networks.....	1-35
1.8.4	Face Recognition.....	1-39
1.8.5	Image Compression and Decompression.....	1-40
1.9	Important Terminologies of Neural Network	1-42
1.9.1	Weights	1-42
1.9.2	Bias	1-42
1.9.3	Threshold.....	1-43
1.9.4	Learning Constant.....	1-44
1.9.5	Momentum Factor.....	1-44

MODULE - 2

Chapter 2 : Supervised Learning Neural Networks

2-1 to 2-34

Syllabus : Perceptron : Single Layer Perceptron, Multilayer Perceptron and their Architecture.
 Error Functions : Mean Square Error and Sum Squared Error. Gradient Descent, Generalized delta rule, Error back propagation, Stopping Criteria for Training.

2.1	Supervised Learning	2-1
2.1.1	Perceptron Learning.....	2-1
2.1.1(A)	Rosenblatt's Perceptron.....	2-2
2.1.1(B)	The Perceptron Model (Single Perceptron).....	2-2
2.1.1(C)	Algorithm for Training a Single Perceptron Network.....	2-3
2.1.1(D)	Multi-layer Perceptron.....	2-4
2.1.1(E)	The EX-OR Problem and Need for Multi-layer Perceptron.....	2-5



2.1.1(F)	Solved Problems on Perceptron Learning	2-7
2.2	The Error Functions.....	2-8
2.3	Gradient Descent	2-11
2.4	Delta Learning Rule	2-11
2.4.1	Generalized Delta Learning Rule	2-12
2.4.2	Proofs.....	2-14
2.4.3	Algorithm-Generalized Delta Learning.....	2-15
2.4.4	Solved Problems on Delta Learning Rule.....	2-16
2.5	Error Back Propagation Training Algorithm.....	2-20
2.5.1	Architecture of Error Back Propagation Algorithm	2-21
2.5.2	Error Back Propagation Training.....	2-22
2.5.3	Algorithm (Error back Propagation Training)	2-23
2.6	Stopping Criterion for Training.....	2-25
2.7	Solved Problems	2-28

MODULE - 3

Chapter 3 : Unsupervised Learning Neural Networks

3-1 to 3-23

Syllabus : Competitive Learning Networks – Kohonen Self-Organizing Networks – architecture, training algorithm Discrete Hopfield networks-Hopfield Matrix, Testing Algorithm. , K-means Clustering Algorithm

3.1	Winner Take All or Competitive Learning.....	3-1
3.1.1	Problems based on Winner Take All Algorithm.....	3-4
3.1.2	Kohonen’s Self Organizing Maps.....	3-10
3.2	Discrete Hopfield Networks.....	3-18
3.2.1	Architecture	3-18
3.2.2	Training Algorithm	3-19
3.2.3	Energy Function.....	3-20
3.2.4	Testing Algorithm.....	3-21
3.3	K-means Algorithm	3-21

**MODULE - 4****Chapter 4 : Algorithms of Neural Networks 4-1 to 4-8**

Syllabus : Basic concept of Machine Learning, Support Vector Machine (SVM) - Introduction and SVM based Binary Classifier, LMS Algorithm.

4.1 Basic Concept of Machine Learning	4-1
4.2 Support Vector Machines	4-2
4.2.1 Classification of SVM.....	4-4
4.2.2 Regression SVM.....	4-5
4.2.3 Kernel Functions.....	4-6
4.3 LMS Algorithm	4-6
4.3.1 Problem on LMS Learning	4-8

MODULE - 5**Chapter 5 : Convolutional Neural Networks 5-1 to 5-16**

Syllabus : Basic concept of Deep Learning, Convolution Operation, Overview of CNN Architecture : Input layer, Convolution layers, Pooling layers, Padding, Strided Convolutions, Rectified Linear Unit (ReLU), , One Layer of a Convolutional Network, Fully Connected Layers, Complex Image Classification using CNN.

5.1 Basic Concept of Deep Learning	5-1
5.1.1 Why Deep Learning ?	5-1
5.2 Convolution Operation	5-2
5.3 Overview of CNN Architecture	5-4
5.3.1 Convolution Layer.....	5-5
5.3.2 Pooling Layer.....	5-8
5.3.3 Padding	5-9
5.3.4 Strided Convolutions	5-10
5.3.5 ReLu.....	5-11
5.4 One Layer of a Convolutional Network	5-12



5.5	Fully Connected Layer	5-12
5.6	Complex Image Classification Using CNN	5-13

MODULE - 6

Chapter 6 : Introduction to Fuzzy Inference System	6-1 to 6-87
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Syllabus : Introduction to Fuzzy Logic, Fuzzy Rules, Fuzzy Properties, Fuzzy Operations, Membership Functions, Fuzzification - Membership Value Assignments using Intuition Method, Defuzzification Methods - Mean of Maxima and Centroid (Centre of Area) Methods, Fuzzy Inference System with reference to Mamdani Model, Brief Review of Applications of Fuzzy Logic to Speed Control of DC Motor and Washing Machine.

6.1	Introduction to Fuzzy Logic	6-1
6.1.1	Fuzzy Sets : Basic Concepts.....	6-2
6.2	Fuzzy Rules and Fuzzy Reasoning	6-10
6.2.1	Fuzzy IF-THEN Rules	6-10
6.2.2	Fuzzy Reasoning.....	6-10
6.3	Fuzzy Properties	6-12
6.4	Fuzzy Operations	6-13
6.5	Fuzzy Membership Functions	6-15
6.5.1	Types of Membership Functions.....	6-15
6.6	Fuzzification	6-19
6.7	Defuzzification Methods.....	6-22
6.8	Fuzzy Inference Systems	6-26
6.8.1	Types of Fuzzy Inference Systems	6-27
6.8.1(A)	Mamdani Fuzzy Model.....	6-28
6.8.1(B)	Sugeno Fuzzy Model.....	6-29
6.8.1(C)	Tsukamoto Fuzzy Model.....	6-30
6.9	Applications of Fuzzy Logic : Fuzzy Controllers	6-31
6.9.1	Design of Controllers (Solved Problems).....	6-33
6.10	Solved Problems	6-61

