



# NARSIMHA REDDY ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to JNTUH | Approved by AICTE  
Accredited by NBA & NAAC with 'A' Grade

## 23EC704 : ARTIFICIAL NEURAL NETWORKS

### Unit wise Question Bank

#### Course objectives :

1. To understand the biological neural network and to model equivalent neuron models.
2. To understand the architecture, learning algorithms
3. To know the issues of various feed forward and feedback neural networks.
4. To explore the Neuro dynamic models for various problems.

#### Course outcomes :

**CO1** Understand the similarity of Biological networks and Neural networks.

**CO2** Perform the training of neural networks using various learning rules.

**CO3** Understanding the concepts of forward and backward propagations.

**CO4** Understand and Construct the Hopfield models.

**CO5** Design and build self organization maps and dynamic models.

## UNIT-I

S.No	Questions	BT	CO	PO
<b>Part – A (Short Answer Questions)</b>				
1	What is learning rate parameter?	L1	CO1	<b>PO1</b>
2	What is axon? Give its function?	L1	CO1	<b>PO1</b>
3	Write about memory based learning.	L1	CO1	<b>PO1</b>
4	Describe the learning Laws in neural network.	L1	CO1	<b>PO1</b>
5	Explain about Long-term memory and short term memory in neural networks?	L1	CO1	<b>PO1</b>
<b>Part – B (Long Answer Questions)</b>				
6	With a neat diagram explain the basic architecture of artificial neural networks	L2	CO1	<b>PO1</b>
7	How neural networks are viewed as a directed graphs? Explain.	L2	CO1	<b>PO1</b>
8	What is error correction learning? Explain with suitable illustration	L2	CO1	<b>PO1</b>
9	Explain in detail about Hebbian learning with its training algorithm.	L2	CO1	<b>PO1</b>
10	Explain the statistical nature of the learning process in neural networks.	L2	CO 1	<b>PO 1</b>