



SNS COLLEGE OF TECHNOLOGY



Coimbatore-35.

An Autonomous Institution

COURSE NAME : 19CST302 NEURAL NETWORKS AND DEEP LEARNING

III YEAR/ VI SEMESTER

UNIT – I BASICS OF NEURAL NETWORKS



NEURAL NETWORKS

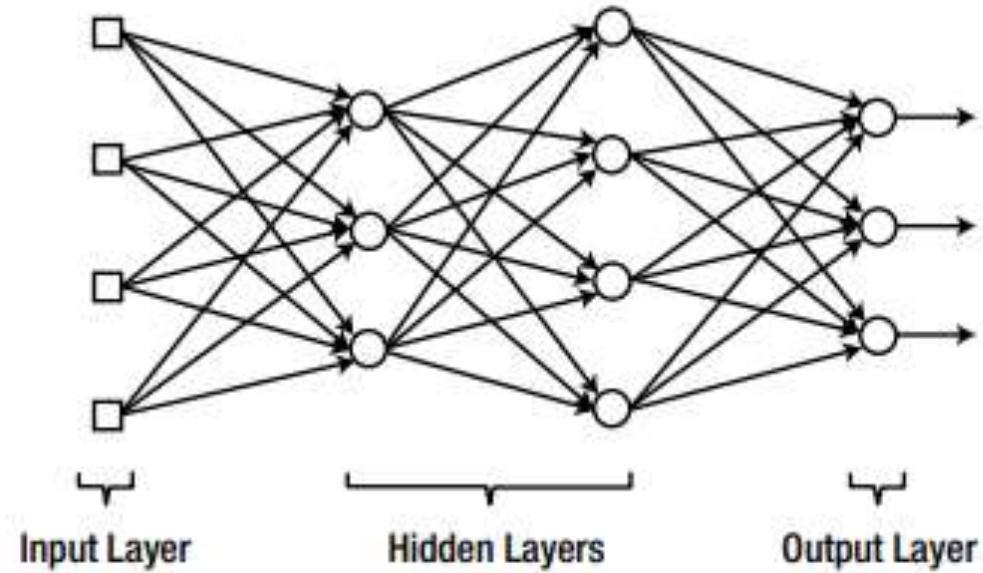


- Neural networks are a type of machine learning algorithm inspired by the human brain.
- They are composed of interconnected nodes or neurons that process and transmit information.



NEURAL NETWORKS

Layers of Neural Network :





NEURAL NETWORKS

Depending upon the number of layers, there are two types of neural networks:

- **Single Layered Neural Network:** A single layer neural network contains input and output layer. The input layer receives the input signals and the output layer generates the output signals accordingly.
- **Multilayer Neural Network:** Multilayer neural network contains input, output and one or more than one hidden layer. The hidden layers perform intermediate computations before directing the input to the output layer.



NEURAL NETWORKS

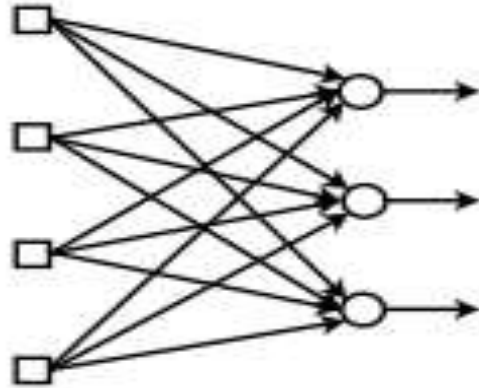
Depending upon the number of layers, there are two types of neural networks:

Single-Layer Neural Network		Input Layer - Output Layer
Multi-Layer Neural Network	Shallow Neural Network	Input Layer - Hidden Layer - Output Layer
	Deep Neural Network	Input Layer - Hidden Layers - Output Layers

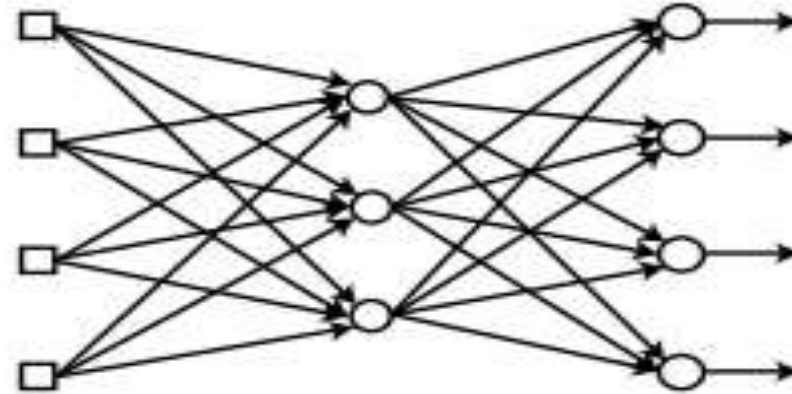


NEURAL NETWORKS

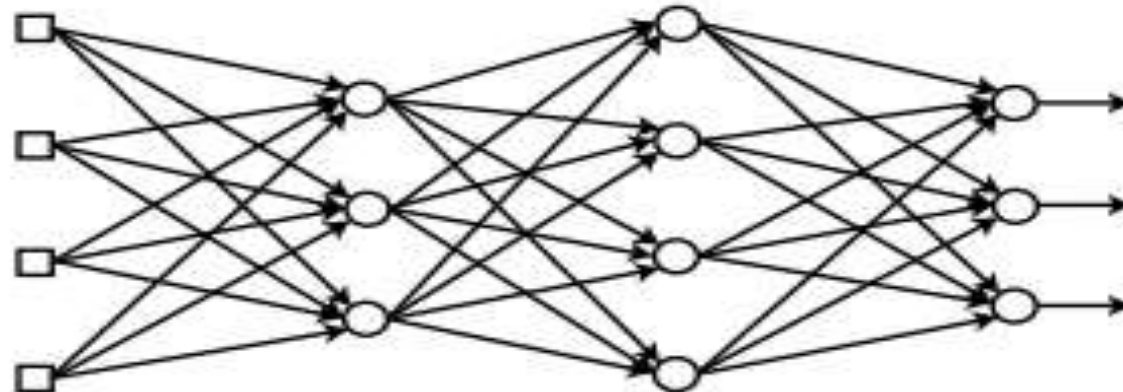
Depending upon the number of layers, there are two types of neural networks:



Single-layer Neural Network



(Shallow) Multi-layer Neural Network



Deep Neural Network



Thank You!