

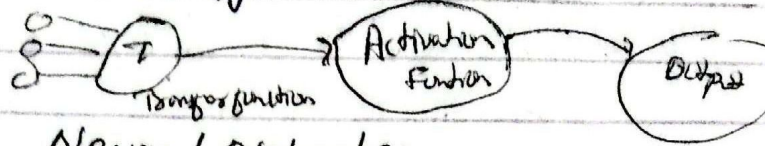
- It consist over 3 layers
1. Input layer
  2. Hidden layer
  3. Output layer

ANN  $\rightarrow$  consist over forward pass & backward pass

3 layers (input, hidden, and output)

- i. Node (Neurons) which store the data
- ii. layers (input) the data
- iii. connections for connecting
- iv. Activation function for providing the output

$\Rightarrow$  ANN and SVM done in ML copy



$\Rightarrow$  Introduction to Neural Networks

it is the one of the most important topic in AI. Google translate and Google assistant use/play very important role on both.

$\Rightarrow$  Neural Networks  $\Rightarrow$  Artificial Neural Networks

$\rightarrow$  Neural exist inside our brains it has very high quantity and connected with network.

and this connectivity helps to share and exchange the information.

So Artificial Neural Networks means all these human neural characteristics we want to embed inside the machines and that thing we called the Artificial Neural Networks and Note that inside the machine we use Artificial Network.

$\Rightarrow$  Basic components of an Artificial Neural Network

1. Neurons (Nodes) = it is basic  $\circ$  which store data/value
2. layers is like input layer and then multiple hidden layers.
3. connections  $\circ \circ \circ$  which helps in calculation
4. Activation function: Use for connecting these layers.

it help to find out our output in b/w

(0, 1)

and each layer here weight means bias value which shows how strong connection also