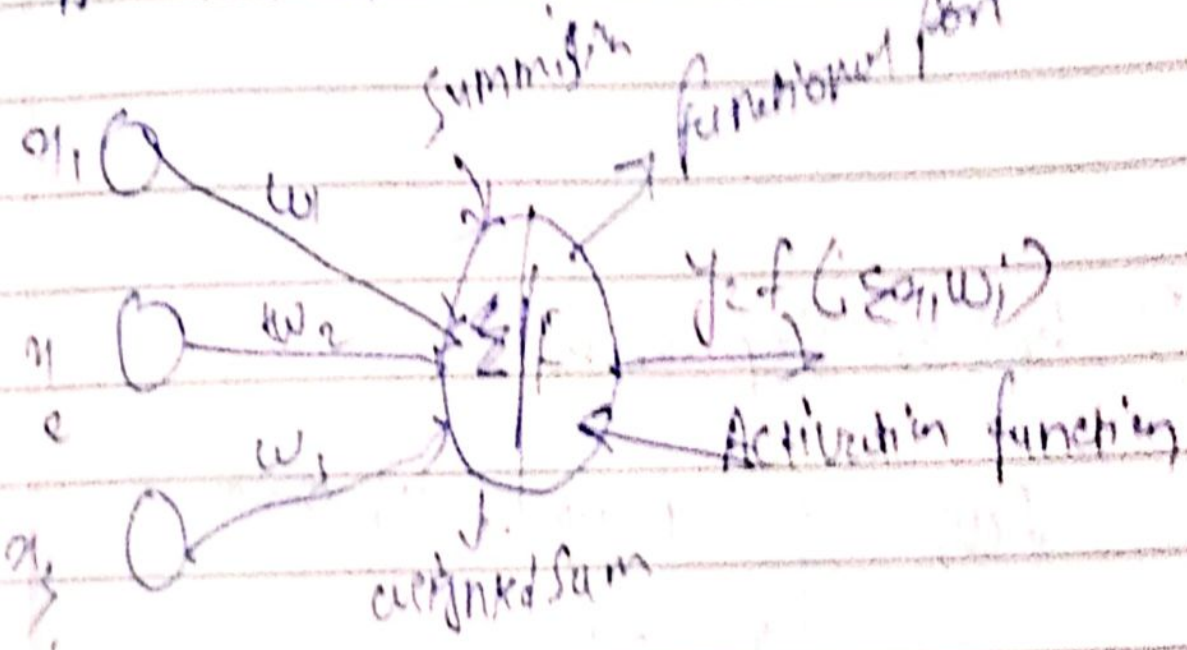
Artificial Neural Network

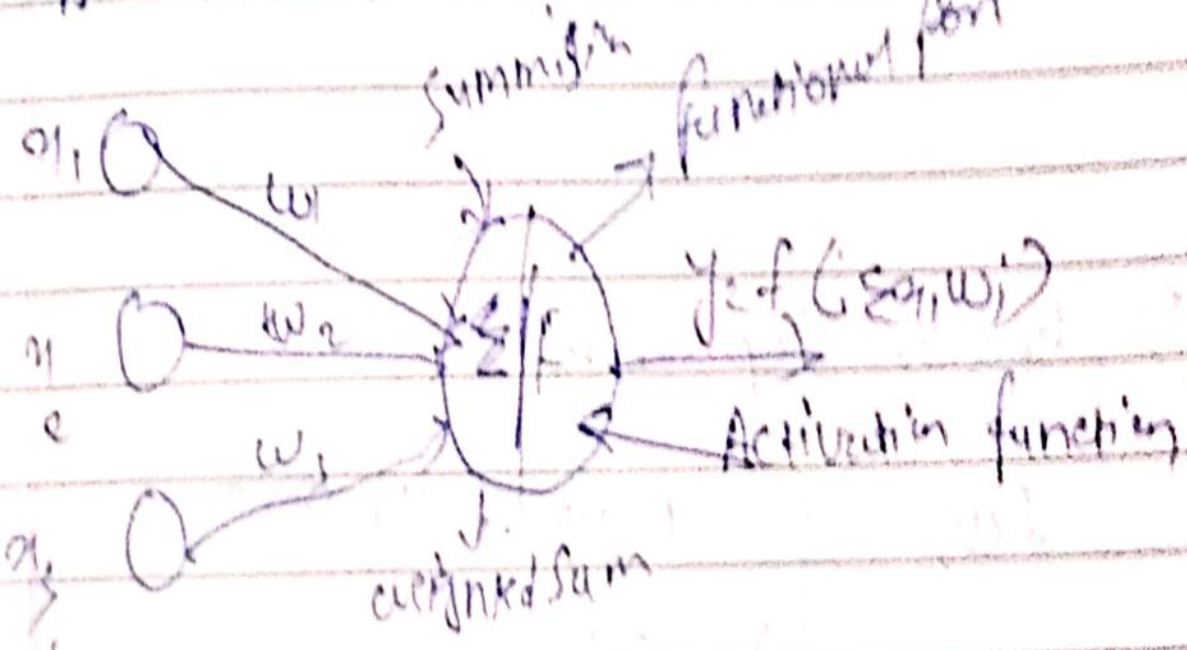


$x_1 w_1 + x_2 x_2 + \cdots x_n w_n$

↳ All the signal & weighted Submission provide function. [Activation function]

Activation function works on the i/p provided by given Submission and it works and provide a output $y = f(\Sigma x_i w_i)$

Artificial Neural Network



$x_1 w_1 + x_2 x_2 + \cdots x_n w_n$

↳ All the signal & weighted Submission provide function. [Activation function]

Activation function works on the i/p provided by given Submission and it works and provide a output $y = f(\Sigma x_i w_i)$

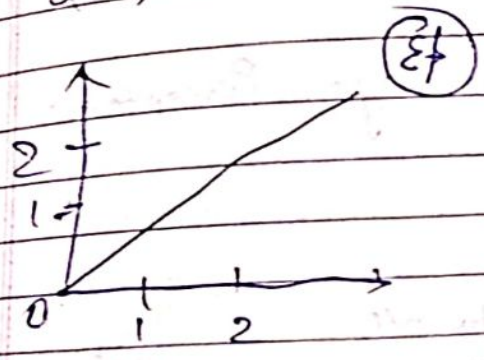
Types of Activation function

① Linear fn — weighted sum

$f(v) = a + v$

$= a + \sum w_i x_i$

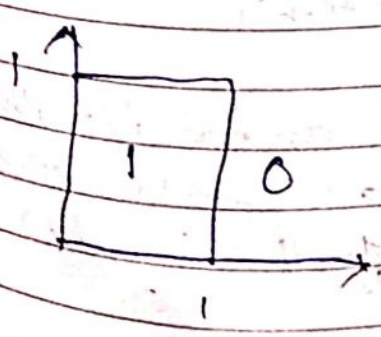
$a \rightarrow$ bais



② Heaviside Step function

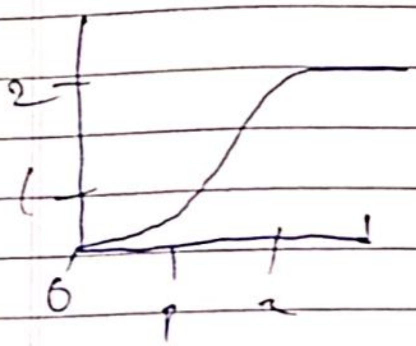
$$f(v) = \begin{cases} 1 & \text{if } v \geq q \rightarrow \text{Threshold} \\ 0 & \text{otherwise} \end{cases}$$

$q \rightarrow$ Threshold



(III) Sigmoid function

$$f(U) = \frac{1}{1+e^{-V}}$$



Model evaluation Techniques

* residual
  rmse
  Confusion Matrix
  qi Saurte
  forward estimation
  Backward propogation

T	F
0	10
0	90

= 90%

= $\frac{0}{90}$

$\frac{0}{0}$