Q1:-What are the Applications of neural networks? (2)

Q2:-How Neural Networks(NN) learn ? (2)

Q3:- What is the difference between Neural networks and Human Nervous system? (2)

Q4:- State True and False for the statements

1. The neuron is the basic working unit of the brain.

2. A "neuron" in an artificial neural network is a mathematical function that collects and classifies information according to a specific architecture.

3. A perceptron is a single-layer neural network. It consists of main parts, including input values, weights and bias, net sum, and an activation function.

4. In the artificial neural network, two propagation functions work in a Neural Network: forward propagation that delivers the "error value" and backward propagation that delivers the "predicted" value."

5. In a human neuron, the axon is a long, cable-like projection of the cell carries the electrochemical message (nerve impulse) along the length of the cell.

6. In a human neuron, dendrites sums all the incoming signals to generate input.

7. In a human neuron, somas are small, branchlike projections of the cell make connections to other cells.

8. In Supervised learning, you train the machine using data which is well "labelled."

9. Unsupervised learning takes place when a machine can analyse data patterns previously unspecified by humans.

10. Reinforcement learning is an approach that helps a machine learn by rewarding desirable actions and penalising undesirable ones.

Q5:-Fill in the blanks

1. _____Networks are loosely modelled after how neurons in the human brain behave.

2. A Neural Network is divided into multiple_____.

3. In a neural network each layer is further divided into several blocks called_____

4. The first layer of a Neural Network is known as the_____layer.

5. _____layers are the layers in which the whole processing occurs.

6. Single-layer Neural Network is called a_____.

7._____ function decides, whether a neuron should be activated or not by calculating weighted sum and further adding bias to it.

8. Neural networks which consist of more than three layers of neurons (including the input and output layer) are called _____Networks.

9. _____propagation that delivers the "predicted value".

10. Deep learning uses _____ with multiple cores rather than central processing units (CPUs).