1. **What are The types of neural networks ?**

* Perceptron.
* Feed Forward Neural Network.
* Multilayer Perceptron.
* Convolutional Neural Network.
* Radial Basis Functional Neural Network.

1. Why use Artificial Neural Networks?

Mainly, Artificial Neural Networks OR Artificial Intelligence is designed to give robots human quality thinking. So that machines can decide “What if” and ”What if not” with

precision.

1. What are the advantages of Neural Networks?  
   ANSWER Some of the other advantages are:-

* **Adaptive learning:** Ability to learn how to do tasks based on the data given for training or initial experience.
* **Self-Organization:** An Artificial Neural Networks can create its own organization or representation of the information it receives during learning time.
* **Real Time Operation:** Artificial Neural Networks computations may be carried out in parallel, and special hardware devices are being designed and manufactured which take advantage of this capability.
* **Fault Tolerance via Redundant Information Coding:** Partial destruction of a network leads to the corresponding degradation of performance. However, some network capabilities may be retained even with major network damage.

1. What is simple Artificial Neuron?  
   **Answer:**  It is simply a processor with many inputs and one output….It works in either the Training Mode or Using Mode.  In the training mode, the neuron can be trained to fire (or not), for particular input patterns. In the using mode, when a taught input pattern is detected at the input, its associated output becomes the current output.
2. How Artificial Neurons learns?  
   **Answer:**  This is a two paradigm process-

Associative Mapping:   Here the network produces a pattern output by working in a pattern on the given input.

Regularity Detection:  In this, units learn to respond to particular properties of the input patterns. Whereas in associative mapping the network stores the relationships among patterns