

## **QUESTION BANK-1 FOR ANN**

### **\*\*Examples solved in class including given for practice.**

1. Define ANN and Neural computing.
2. Distinguish between Supervised and Unsupervised Learning.
3. Mention the characteristics of problems suitable for ANNs.
4. List some applications of ANN.
5. What are the design parameters of ANN?
6. Explain the three classifications of ANNs based on their functions. Explain them in brief.
7. Distinguish between Learning and Training.
8. How can you measure the similarity of two patterns in the input space?
9. Mention the linear and nonlinear activation functions used in Artificial neural networks.
10. Write the differences between conventional computers and ANN.
11. Explain in Detail how weights are adjusted in the different types of Learning Law. (Both supervised and Unsupervised)
12. Write short notes on the following. A. Learning Rate Parameter and B. Activation Function.
13. Explain Delta Learning Rule.
14. Briefly describe Perceptron Learning Rule.
15. What are the relevant computational properties of the Human Brain.
16. Distinguish between linearly separable and nonlinearly separable problems. Give examples.
17. Compare physical neuron and artificial neuron.
18. Draw the model of MP(McCulloch Pitts) neuron and state its characteristics.
19. Draw the structure of a biological Neuron and explain in detail.
20. Draw the architecture of a single layer perceptron (SLP) and explain its operation. Mention its advantages and disadvantages.
21. Develop simple ANNs to implement the three input AND, OR and XOR functions using MP neurons.
22. Explain different architectures of Neural Network.