Class–M.Sc (IT)-IV Sem.
Subject –Neural Networks

Time Allowed : 3 Hours　　　　**Maximum Marks :100**

Note:　　**Attempt any five questions.**

1. (a)　Explain Architecture of Neural Network.　　10

   (b)　What are different types of learning techniques used in NN?　　10

2. (a)　Explain method of steepest descent with example.　　12

   (b)　What are the various activation functions used in ANN ?　　8

3.　Describe ART-1 in detail.　　20

4. (a)　Explain LMS in details.　　10

   (b)　How can single layer perceptron be trained to simulate OR, AND gate?　　10

5.　How perceptron learning is poorly behaved? Explain pocket algorithm with and without ratches.　　20

6.　How Hopfield model will be helpful in Neural Network with example?　　20

7. (a)　Write short note on Art2.　　10

   (b)　Write about K-mean clustering.　　10

8. Explain following :

    (a) Topology Preserving maps

    (b) Outer Product Rule   20

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