FACULTY OF ENGINEERING

B. E. 4/4 (Mech. / Prod.) I – Semester **(Old)** Examination, July 2010

Subject : **Fuzzy Logic and Neural Networks**
(Elective – I)

Time : 3 Hours} {Max. Marks: 75

Note: Answer **all** questions of Part - A and answer any **five** questions from Part-B.

Part - A (25 Marks)

1. Explain about artificial neuron.
2. What is knowledge based algorithm ?
3. Explain about Neural Network Properties.
4. Name any three applications of neural networks.
5. Compare supervised and unsupervised learning.
6. What are local minima ?
7. Explain in detail about clustering.
8. Define Statistical modeling.
9. What is Boltzman's machine algorithm ?
10. What is deterministic annealing ?

Part – B (50 Marks)

11. Explain the computational advantages offered by Neural Networks.

12. Explain the working of a single layer perception in detail can it simulate an EX-OR function ? Explain.

13. What is Back propagation ? What is complexity of learning by using the algorithm.

14. Write the Kohonen algorithm, explain in detail.

15. Write the Hopfield network algorithm, explain in detail.

16. Write the Bottsman's machine algorithm, explain in detail.

17. Explain Multilayer Perceptions in detail.

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