Code No: B5806 **NR**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II SEMESTER EXAMINATIONS, APRIL/MAY 2012
NEURAL NETWORKS
(COMPUTER SCIENCE AND ENGINEERING)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks

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1a) Describe structure and functions of artificial neuron.
b) Explain the characteristics of the signal flow graphs.

2.a) Illustrate the Geometric interpretation of the competitive learning.
b) Describe Boltzmann machine and its learning rule.

3.a) Explain Linear Least – Square filter.
b) What do you mean by linear seperability? Explain how you solve linear seperable problems.

4. Describe methods that will improve the back propagation algorithm's performance.

5.a) Describe Network Pruning Techniques.
b) Explain about Virtues and limitations of back propagation learning.

6.a) Write short notes on learning vector quantization.
b) Explain the competition process in the formation of the self – organizing map.

7. Describe the general characteristics of a neuro dynamical model and explain additive model with a diagram.

8.a) Explain the Hopfield model of a neural network.
b) Describe content – addressable memory.

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