R09

Code No: D2509

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY 2012
INTRODUCTION TO NEURAL NETWORKS
(SOFTWARE ENGINEERING)

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

Answer any five questions
All questions carry equal marks

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1.a) What is a neural network? Explain the neural network architectures.
b) Compare AI machines with neural networks.

2.a) Describe structure and functions of biological neuron.
b) Describe error-correlation learning through signal flow graph.

3.a) State the three basic elements of competitive learning rule.
b) Describe linear adaptive filters.

4.a) What do you mean by linear seperability? Explain how do you solve linear seperable problems?
b) Explain perceptron-convergence theorem.

5.a) Explain design issues for optimal learning and momentum constants.
b) Explain how do you choose activation function and target values in back propagation.

6.a) Describe network pruning techniques.
b) Explain about supervised learning.

7.a) Write short notes on learning vector quantization.
b) Explain about adaptive pattern classification.

8. Discuss in detail about neurodynamical models.

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