R09

Code No: C5509

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH I - SEMESTER EXAMINATIONS, APRIL/MAY-2012
NEURAL NETWORKS AND APPLICATIONS
(EMBEDDED SYSTEMS)

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

Answer any five questions
All questions carry equal marks

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1.a) Compare the performance of a computer and that of biological neural network.
b) Describe Mcculloch – Pitt's neuron model. Design NOR gate using this model.

2.a) Explain the different types of Hebbian learning.
b) Explain about out star learning and its training mechanism.

3. Solve traveling salesman problem using recurrent networks.

4. What is meant by liner seperability? What are its limitations? How to overcome the limitations.

5.a) What is Boltzman's machine ? Explain
b) Describe recurrent and associative memories.

6.a) Explain self organizing feature maps.
b) Explain the three different methods of implementing the feature mapping process.

7.a) Write short notes on Hamming net.
b) Briefly describe Associative memory of spatiotemporal patterns.

8. Write short notes on
a) Generalized Delta learning rule
b) Perception convergence theorem.

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