OR

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, HYDERABAD
M.Tech II Semester Supplementary Examinations, March 2009.
NEURAL NETWORKS & FUZZY SYSTEMS
(Electrical Power Systems)
Time: 3 hours   Max. Marks.70
Answer any Five questions
All questions carry equal marks

1.a) Explain the differences between biological neurons and artificial neurons.
  b) Describe the learning methods in neural networks.

2.a) Compare and contrast the differences between single layer networks and multilayer networks.
  b) Describe the MC. Culloh-Pitts neuron model.

3.a) Describe the Delta learning algorithm.
  b) Describe the BP algorithm and its application.

4.a) Describe the unsupervised learning methods.
  b) Describe the significant features of kohonen networks.
5.a) Compare and contrast the differences between Hamming Net, and MAXNET.
  b) Describe the BAM and ART Architectures.

6.a) Describe the significant features of Hopfield networks.
  b) Describe the basic concepts of fuzzy sets and systems.

7.a) Describe the theorms related to Fuzzy system and Fuzzy sets
  b) Describe the different types of uncertainty and also explain the estimation methods of uncertainty.

8.a) Describe the measures of dissonance.
  b) Describe the features of Neuro Fuzzy controllers.

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