

Code: R7411510

R07

B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

NEURAL NETWORKS

(Common to CSS and ECC)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Compare artificial and biological neural network.
(b) List the characteristics of neural networks.
- 2 (a) Discuss error correction learning.
(b) Explain in detail Hebbian learning rule.
- 3 (a) Explain unconstrained organization techniques.
(b) Define perceptron convergence theorem and write short notes on the evaluation of the theorem.
- 4 (a) Draw a model of multilayer perceptron and explain its function.
(b) Explain back propagation algorithm for XOR problem.
- 5 (a) Explain network pruning techniques.
(b) Give the limitations of back propagation learning.
- 6 (a) List the properties of feature map.
(b) Explain learning vector quantization.
- 7 (a) With a neat figure, explain Neuro dynamical model.
(b) Write short notes on dynamical systems.
- 8 Write explanatory notes on:
(a) Network architectures.
(b) Hopfield model.
