

322840(22)

B. E. (Eighth Semester) Examination, 2020
APR-MAY
(New Scheme)

(CSE, IT Engg. Branch)

NEURAL NETWORK and FUZZY LOGIC

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) of each question is compulsory. Attempt any two parts from (b), (c) and (d) of each question.

Unit-I

1. (a) Define recurrent network? 2
- (b) Describe the different topologies of Neural network? 7
- (c) Differentiate between single layer & multi layered feed forward neural network? 7
- (d) Explain the perception learning algorithm in detail? 7

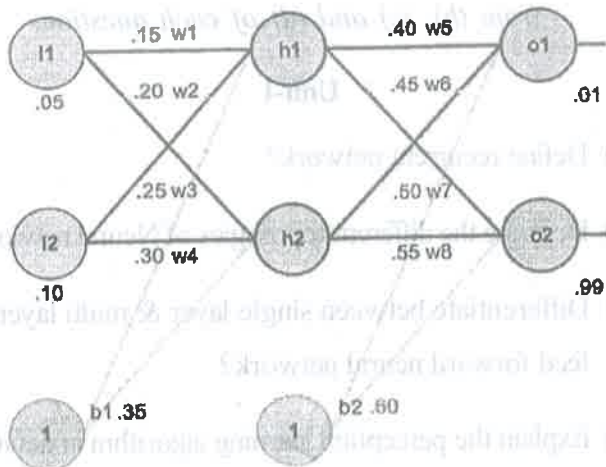
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Unit-II

2. (a) Define stability and convergence? 2
- (b) Describe the competitive learning algorithm in detail. 7
- (c) Explain the credit assignment problem in detail? 7
- (d) Differentiate between supervised and unsupervised learning in detail. 7

Unit-III

3. (a) What is generalized delta rule? 2
- (b) Explain the least mean algorithm in detail? 7
- (c) Simulate the back propagation algorithm. 7



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- (d) Describe the Adaline algorithm in detail. 7

Unit-IV

4. (a) Define Talking Network. 2
- (b) Explain speech recognition system in details. 7
- (c) Differentiate between character and handwritten recognition? 7
- (d) Describe the different application of pattern recognition? 7

Unit-V

5. (a) Define Fuzzy set? 2
- (b) Explain fuzzy associative memory? 7
- (c) Describe fuzzy operations in brief? 7
- (d) Describe defuzzification in detail? 7