

W-3238

M.Sc. (Fourth Semester) Examination, June-2020

COMPUTER SCIENCE

Paper - 403(I)

Neural Networks

Time : Three Hours

Maximum Marks : 85

Minimum Pass Marks : 29

Note : Attempt **all** questions.

- Q.1. a) Describe fuzzy-entropy theorem and subset hood theorem
b) Explain FAM and fuzzy-truck-backer upper control systems.
- Q.2. Explain Neural Network with its components. Also give analysis of feedback layer for different output functions.
- Q.3. Describe Hopfield model with the capacity and its energy analysis. Draw a state transition diagram.
- Q.4. Explain :
a) Competitive learning neural N/W.
b) Functional units of ANN for pattern recognition.
c) Task
- Q.5. What is multi-layer NN model of neuron? Write its topologies and basic learning laus. Describe ANN and TLU.

