

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

Ph.D Examination

NEURAL NETWORKS & FUZZY LOGIC (ECE/CSE)

M.Code : 78010

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES:

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1 a) Explain structure and function of a biological neuron.
 b) How the human brain learns?
- Q2 a) Differentiate between 'Classification' and 'Clustering'.
 b) What is use of artificial neural network in adaptive control?
- Q3 a) Explain linear separability.
 b) Write about gradient decent algorithm.
- Q4 a) What is use of back propagation algorithm?
 b) What are the feed forward neural networks?
- Q5 a) Explain kohonen network in detail.
 b) What is a hopfield network?
- Q6 a) Explain bi-directional associate memory in detail.
 b) What do you mean by stability of equilibrium states?
- Q7 a) What is difference between 'fuzzy set' and 'crisp set' linguistic variables?
 b) Explain fuzzy relations in detail.
- Q8 a) Explain fuzzy IF-THEN rule with the help of an example.
 b) What are various defuzzification techniques?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.