

S.No. 591

12PCA18

(For the candidates admitted from 2012–2013 onwards)

M.C.A. DEGREE EXAMINATION, NOVEMBER 2017.

Fifth Semester

SOFT COMPUTING

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write down the characteristics of Artificial Neural Network.  
Or  
(b) Describe model of Artificial Neuron.
2. (a) What is Backpropagation Network? Discuss.  
Or  
(b) Write a note effect of Tuning Parameters of the Backpropagation Neural Network.
3. (a) Write about simple ART Network.  
Or  
(b) Write a note on ART2.

4. (a) Write a note on Fuzzy membership.

Or

(b) Describe Fuzzy logic.

5. (a) What are the various operations of LR-type Fuzzy numbers? Discuss.

Or

(b) Write a note on LR-type fuzzy numbers.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Explain Neural Network Architecture.

Or

(b) Explain the classification of learning algorithm.

7. (a) Explain Backpropagation Algorithm.

Or

(b) Give a detailed note on Backpropagation learning.

8. (a) Describe the general structure of an ART Network.

Or

(b) Give a detailed note on ART1 model.

9. (a) Summarize the properties of Fuzzy sets.

Or

(b) Give a detailed note on Defuzzification.

10. (a) Explain the architecture of Fuzzy Neuron.

Or

(b) Describe the architecture of Fuzzy Backpropagation Network.

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