(For the candidates admitted from 2012-2013 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

Third Semester

Computer Science

SOFT COMPUTING

Time: Three hours Maximum: 75 marks

SECTION A — $(5 \times 5 = 25 \text{ marks})$

Answer ALL the questions.

 (a) List out various characteristics of Neural Network.

Or

- (b) Explain about Taxonomy of Neural Network.
- 2. (a) Discuss the architecture of Backpropagation Network.

Or

(b) Comment on Augmented BP Network.

3. (a) Write about Classical ART Networks.

Or

- (b) Briefly explain about Special features of ART1 Models.
- 4. (a) What is meant by Crisp Sets?

Or

- (b) Explain about Predicate Logic.
- 5. (a) Comment on Fuzzy Neuron.

Or

(b) How to evaluate the earth quake damage Using Backpropagation model?

SECTION B — $(5 \times 10 = 50 \text{ marks})$

Answer ALL the questions.

6. (a) Explain Learning Methods of Neural Network

Or

- (b) Describe Rosenblatt's perceptron.
- 7. (a) Briefly explain about Backpropagation Learning.

Or

(b) How to select various parameters in Backpropagation Network? Justify.

8. (a) Illustrate on ART1 algorithm.

Or

- (b) Explain various applications of ART.
- 9. (a) Discuss about Basic Fuzzy Set Operations with example.

Or

- (b) Describe in detail about fuzzy Cruise Controller.
- 10. (a) Explain about Fuzzy Backpropagation Architecture.

Or

(b) Discuss about Learning in Fuzzy Backpropagation.