Roll No. ....

23070

M. Tech. 2nd Semester (Computer Engg.) Examination – December, 2014

SOFT COMPUTING

Paper : MTCE-602-A

Time : Three Hours]   *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions. All questions carry equal marks.

1. Explain the Hopfield Network in detail with its architecture.   20

2. (a) What do you mean by supervised and unsupervised learning explain ?   10

     (b) Explain the mathematical models of Neurons.   10

3. Explain the following :   20

     (i) Multilayer perception model

(ii) Associative memory

4. (i) What is membership function ? Explain it with the help of example. **10**

(ii) Give a brief description about Fuzzy Logic. **10**

5. What is Fuzzy Set ? Explain in detail the different operation on Fuzzy Sets with a suitable example. **20**

6. (a) Give a brief description about Lattice of Fuzzy Numbers. **10**

(b) What is Linguistic variables ? Explain in detail. **10**

7. Explain the following : **20**

(i) Multi valued Logic

(ii) Fuzzy Propositions

8. Write short notes on : **20**

(i) Fuzziness of Fuzzy Sets,

(ii) Uncertainty Based Information.