

23070

M. Tech. 2nd Semester (CSE)

Examination, May-2017

SOFT COMPUTING

Paper-MTCE-602-A

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Attempt any five questions.*

1. (a) What is learning ? Explain its different types.  
(b) Differentiate between hard and soft computing with suitable example.
2. What is Associative Memory ? Give its types.  
Use the Hebb Rule to store the vector (1 1 - 1 -1) in a Auto Associative Network. And
  - (1) Find the Weight Matrix
  - (2) Test the net with input vector.
  - (3) Test with one mistake in input
  - (4) Test with one missing in input
  - (5) Test with two missing in input
  - (6) Test with two mistake in input
3. Write a note on “differences between fuzzy theory and probability theory”. Also write various fuzzy functions.
4. Explain different Membership Function in detail.

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5. Differentiate between Fuzzy and Crisp Set. Also explain Fuzzy Operation on Fuzzy set.
6. Explain the following :
  - (i) Linguistic Hedges
  - (ii) Fuzzy Quantifiers
  - (iii) Fuzzy Propositions
7. What is Multi-Valued logic ? Give in detail.
8. Explain Nonspecificity of Fuzzy and Crisp Set.

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