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Total No. of Pages : 01

Total No. of Questions : 08

**M.Tech EPDT (Sem.-1)**  
**SOFT COMPUTING TECHNIQUES**  
**Subject Code : MTEP-PE2A-18**  
**Paper ID : [75232]**

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

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

- Q1. a) Discuss about the Support Vector Machines in detail.  
b) Write a brief note on In star and out star learning rules in supervised learning.
- Q2. a) Discuss about Widrow and Huff LMS learning rule.  
b) Explain in detail K mean clustering algorithm.
- Q3. Distinguish between supervised, unsupervised and reinforcement learning with suitable examples.
- Q4. a) Discuss in detail Kolwner's feature maps.  
b) Write a note on Fuzzy system design.
- Q5. a) What are the basic learning laws in RBF network?  
b) Discuss about recurrent back propagation in detail.
- Q6. Write a note on the evolution of genetic algorithms.
- Q7. a) What are counter propagation networks? Discuss about CMAC networks in detail.  
b) Write a short note on application of neural networks.
- Q8. a) Describe defuzzification techniques with suitable examples.  
b) Explain in detail the operation of fuzzy set.