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- Notes :
1. Solve Question 1 OR Questions No. 2.
 2. Solve Question 3 OR Questions No. 4.
 3. Solve Question 5 OR Questions No. 6.
 4. Solve Question 7 OR Questions No. 8.
 5. Solve Question 9 OR Questions No. 10.
 6. Solve Question 11 OR Questions No. 12.

1. a) What is soft computing constituents? Explain in details. 6
b) Explain Fuzzy theoretic operations in detail. 8
OR
2. a) Explain Fuzzy principles and relations in detail. 7
b) Explain fuzzy if then Rule in details. 7
3. a) Explain Mamdani fuzzy models. 6
b) Explain Random search and downhill simplex search in detail. 7
OR
4. Explain Tsukamoto fuzzy model and Genetic algorithm in detail. 13
5. a) Explain Architecture of Adaptive Networks in detail. 6
b) What is Back-propagation multi-layer perceptron's? Explain. 7
OR
6. a) What is supervised learning neural network? Explain in detail. 6
b) Define Radial Basis function networks. 7
7. a) What is learning vector Quantization Explain the process in detail. 7
b) Explain Korhonen self-organizing networks. 7
OR
8. a) What are the principles of component network? Elaborate it. 7
b) What is Hopfield Network? Explain. 7
9. a) Explain K-means clustering. 6
b) Explain ANFIS architecture in detail. 7
OR
10. a) Explain subtractive clustering. 6
b) Explain Fuzzy C-means clustering in detail. 7
11. a) Write note on GA-base fuzzy filter. 6
b) Define Rule fare organization. 7
OR
12. Explain Rule base organization and focus set base. Rue combination in detail. 13



~ Chinese Proverb

