Explain the concept of clustering. Explain any two methods of data clustering. Explain Evolutionary computation.

- Explain survival of the fittest with the suitable example.
  - Explain genetic algorithm and their types.
- Write short notes on any three:
  - Rank space method
  - Fuzzy sets
  - Crisp set
  - Fuzzy logic theory
  - Gaussian machine

Roll No .....

## MCIT-204

## M.E./M.Tech., II Semester

Examination, December 2016

## **Soft Computing**

Time: Three Hours

Maximum Marks: 70

Note: i) Attempt any five questions.

- ii) All questions carry equal marks.
- Explain AO\* algorithm and compare with A\* which algorithm is best than other? Justify your Answer.
  - What is production system? Give the comparison between breadth first search and depth first search.
- 2. a) Explain local maxima and global maximum with respect to the hill climbing with a diagram.
  - b) What are the similarities and dissimilarities between fuzzy logic and Neural networks?
- 3. a) Explain the Back propagation network with architecture algorithm and an example.
  - b) List and explain the various activation functions. Also explain their suitability with respect to application.
- Explain fuzzy reasoning with is methods in details.
  - Describe multiobjective and multiattribute decision making.
- Explain any four defuzzification methods with suitable example.
  - b) Explain data clustering algorithms.

http://www.rgpvonline.com

MCIT-204

http://www.rgpvonline.com

PTO

MCIT-204

http://www.rgpvonline.com