

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)

**MSc DEGREE EXAMINATION JUNE 2018**  
(First Semester)

Branch - **COMPUTER SCIENCE**

**SOFT COMPUTING**

Time : Three Hours

Maximum : 75 Marks

**SECTION -A (30 Marks)**

Answer ALL questions

ALL questions carry **EQUAL** Marks ( 5 x 6 ~ 30)

- 1 a Mention the features of soft computing.  
OR "  
b List the principles of optimization.
- 2 a Discuss on the classical search and optimization methods.  
OR  
b Give the advantages of genetic algorithm.
- 3 a How to model an artificial Neuron?  
OR  
b Discuss on the advantages and disadvantages of neural networks.
- 4 a What is fuzz} logic?  
OR  
b Mention the properties of fuzzy sets.
- 5 a I low crisp relation is defined?  
OR  
b Discuss on fuzzy controllers.

**SECTION -B (45 Marks)**

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x15 45)

- 6 Discuss on the traditional methods of optimization.
- 7 Explain the usage of the G A operator.
- 8 Describe the architecture of neural network.
- 9 Discuss on the operations on fuzzy sets with examples.
- 10 Explain the. concept of fluxzification and defuzzification.