Total No. of Questions : 8] *[Total No. of Printed Pages : 1*

Roll No .....

EE-8004(1) (CBGS)

B.E. VIII Semester Examination, June 2020

Choice Based Grading System (CBGS)

Soft Computing Techniques

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. What is Monte-Carlo simulation? How does the Monte Carlo solution work? State the benefits of Monte-Carlo simulation techniques.

2. Explain the following
   a) Random variable
   b) Distribution functions
   c) Function of random variable
   d) Generation of random digit
   e) Confidence interval

3. Write the algorithm for back propagation for back propagation training and explain about updation of weight.

4. a) Explain ANN and its types.
   b) What are the different activation function used and different learning rules available?

5. a) Compare Soft computing Vs Hard computing.
   b) Write the various types of Soft computing techniques and mention applications areas.

6. What is GA? Compare binary and real coded GA and discuss the applications of G.A for solving optimization problems.

7. What do you understand by particle swam optimization. Discuss the steps involved for solving optimization problem using PSO.

8. Explain the following (Any two)
   a) Solution of Economic load dispatch problem using GA
   b) ANN training and testing
   c) Compare GA and PSO
   d) FLN network
   e) Constraint handling in GA

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