

H.T.No.

EE1915

GEC-R14

M. Tech II Semester Regular/Suppl. Examinations, July 2016

ARTIFICIAL INTELLIGENCE TECHNIQUES

(Control Systems)

Time: 3 Hours

Max. Marks: 60

Note: Answer any **FIVE** questions. All Questions carry equal Marks.

5 × 12 = 60M

1. Draw and Explain Biological Neural Network model. Explain how Neural Network is formulated using the Biological Network? (12M)
2. a) List the applications of Artificial Intelligent Techniques? (6M)
b) Explain different learning algorithms in Neural Network (6M)
3. a) Explain the limitations of perception convergence theorem. (6M)
b) Compare the discrete and continuous perception networks (6M)
4. Explain Back propagation algorithm in detail (12M)
5. Explain about Hope field networks (12M)
6. Define the following
a) Fuzzy logic
b) Degree of membership
c) Linguistic variables
d) Membership function (12M)
7. a) Explain in detail various defuzzification methods (6M)
b) Compare Crisp set and Fuzzy set (6M)
8. Explain about fuzzy based PI and PID controller (12M)
