Total No. of Questions :6]

SEAT No. :

P295

[Total No. of Pages : 2

Oct./BE/Insem. - 613
B. E. (Information Technology)
SOFT COMPUTING
(2015 Course) (Semester - I) (414457 B) (Elective - II)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right side indicate full marks.***
4) ***Use of Calculator is allowed.***
5) ***Assume suitable data if necessary.***

Q1) a) What are the soft computing characteristics? Explain with suitable examples. **[4]**

b) How Probabilistic reasoning using logic and probability used to handle uncertain situations? **[6]**

OR

Q2) a) Explain how Soft Computing and Fuzzy Logic are related with each other. **[5]**

b) With neat diagram, explain the Neural computing. **[5]**

Q3) a) Explain how Artificial Neuron model is based on Biological Neurons. **[5]**

b) Draw and explain the architecture of Multi-Layer Feed Forward Neural Networks. **[5]**

OR

Q4) a) Explain the activation function with suitable example. **[5]**

b) What are the issues in Error Back Propagation learning in MLFFNN? **[5]**

P.T.O.

Q5) a) Describe Hebbian Learning in Hopfield Networks. **[5]**

b) How Adaptive Resonance Theory is used in Character Recognition System? **[5]**

OR

Q6) a) Explain Deep Learning Architecture of Neural Networks. **[5]**

b) Which learning method is used in Self Organizing Maps? Explain with suitable example. **[5]**