

Total No. of Questions : 4]

SEAT No. :

PA-10122

[6009]- 426

[Total No. of Pages : 1

T.E. (Artificial Intelligence and Data Science) (Insem)

ARTIFICIAL NEURAL NETWORK

(2019 Pattern) (Semester - II) (317531)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) What is a neural network activation function? State its Types? [5]  
b) Explain architecture of Artificial Neural Network with a neat diagram. [5]  
c) Explain Mc-Culloch & Pitts model with an example. [5]

OR

- Q2)** a) What are the main differences among the three models of artificial neuron, namely, McCulloch-Pitts, Perceptron and Adaline? [5]  
b) Explain the structure and working of Biological Neural Network? [5]  
c) Differentiate between Biological Neural Network and Artificial Neural Network. [5]

- Q3)** a) Explain Perceptron Learning Algorithm with an example. [5]  
b) Explain the architecture of Multilayered neural network. [5]  
c) Write and explain the steps of Back Propagation Learning algorithm. [5]

OR

- Q4)** a) Draw the architecture of Back Propagation Network and explain in detail. [5]  
b) Differentiate between Feed forward and Feedback neural network. [5]  
c) What is Error Correction and how to minimize these errors? [5]

