

B. Tech. (CSE) 7th Semester (G-Scheme)
Examination, November-2023
NEURAL NETWORKS
Paper-PCC-CSE-401-G

Time allowed : 3 hours]

[Maximum marks : 75

Note: Attempt five questions in all, selecting at least one question from each section. Question No.1 is compulsory. All questions carry equal marks.

1. Write a short note on: 6×2.5=15
- (a) Differentiate between Feedforward and Feedback Networks.
 - (b) What are Separability limitations in unsupervised Learning?
 - (c) Define Activation function and its different types.
 - (d) Reinforcement Learning
 - (e) Unsupervised Learning
 - (f) Backpropagation Network

Section- A

2. Describe the following: 15
- (a) Auto Associative Memory
 - (b) Hetro Associative Memory
4. How biological neural is different from the artificial neural networks? Explain architecture of biological neural network. 15

Section-B

4. What do you mean by Gradient Descent algorithm?
Explain with example. 15
5. Explain the following: 15
- (a) Application of Artificial Neural Network
 - (b) McCulloch Pitts Model

Section-C

6. Explain the architecture of associative memory in detail.
Also discuss its retrieval algorithm. 15
7. In which manner multilayer perceptron model differ from single layer Perceptron Model? Explain the reasons for emergence of multilayer perceptron model. 15

Section-D

8. Explain Hebbian Model and implement logic 'AND' function using Hebb Network. 15
9. What do you mean by Generalized Delta rule? Explain in detail. 15