## COLLEGE OF ENGINEERING TRIVANDRUM

# DEPARTMENT OF COMPUTER APPLICATIONS

# Third Semester M.C.A Degree

# First Series Examination Jan-2022

#### 20MCA283: DEEP LEARNING

Time: 1 hr Max. Marks: 20

#### **PART-A**

(Answer All Questions. Each question carries 2.5 marks)

- 1. Implement AND function using McCulloch Pitts Neuron.
- 2. Compare single-layer perceptron and multi-layer perceptron.
- 3. What is underfitting in a neural network?
- 4. Explain feed-forward neural network.

(Total: 4\*2.5= 10 marks)

#### **PART-B**

(Each question carries 5 marks)

- 5. a) Explain the Perceptron model.
  - b) Implement OR function using perceptron model.

OR

- 6. Explain different types of activation functions.
- 7. How overfitting problems can be reduced in deep learning?

OR

8. Explain the role of batch normalization in training a neural network.

(Total: 2\*5=10 marks)