

## ML Lab (CS360)

# Assignment 11

Total Marks: 30

Submission Deadline: 09/11/2023

1. Implement a BPNN model by using own code. Consider the following to design the network:

Marks: 20

- a. Two input nodes, two hidden nodes and two output nodes.
- b. Values of the input nodes are 0.3 and 0.8 respectively. Values of the output nodes are 0.05 and 0.6 respectively.
- c. The weights values from input-hidden layers are 0.1, 0.3, 0.25, 0.8.
- d. The weights values from hidden-output layers are 0.2, 0.6, 0.4, 0.7.
- e. The activation to use is the Sigmoid activation function.
- f. Bias is 1 for input and hidden layer.
- g. Learning rate to consider are 0.5, 0.1 and 0.01.

2. Implement the same as in (1) using the in-built library functions BPNN and validate both the results.

Marks:

10