## Second Semester ME (Big Data Analytics)

## Lab intenal test

Date: 26/02/2024 Time: 9 – 10.30 am Max. 30 marks

## Answer all questions

Q. No.	Question	BL-CO-PO-Marks
1	Develop a general perceptron model that takes <b>n</b> bipolar inputs and generates one output.	3-1-3-10
	Consider the initial values of weights and bias: w1=w2=b=0, learning rate $\alpha$ = 0.3, and threshold $\theta$ = 1.	
	Demonstrate the AND, OR, NAND, and NOR operations using the general perceptron model that you have developed.	
2	Demonstrate the different approaches used to identify the optimal number of clusters for the given data set.	4-2-4-10
	Compare their performance.	4-3-4-10