Discipline: ELECTRICAL	Semester: 6TH	Name of the Teaching Faculty: PALLABI MOHANTA
Subject: Pr3. SIMULATION PRACTICE ON MATLAB	No. of Days/per week class allotted: 01	Semester From Date: 14·02·2023 To Date: 23·05·2023 No. of Weeks: 15
Week	Class Day	Theory/Practical Topics
1st	01	Introduction to MATLAB programming: 1.1. Functions and operation using variables and arrays.
2nd	01	1.1.1. To learn algebraic, trigonometric and exponential manipulation.
3rd	01	1.1.2. To learn Arithmetic, Relational and Logic operator
4th	01	1.2. Matrix formation and its manipulation
5th	01	1.3.1. Use of linspace to create vectors. 1.3.2. To create, add and multiply vectors. 1.3.3. Use of sin and sqrt functions with vector argumen
6th	01	1.4. Plotting: 1.4.1. Two dimensional Plots and sub plots
7th	01	1.4.2. Label the plot and printing. 1.5. Write and execute a file to plot a circle, impulse, step, ramp, sine and cosine functions. .
8th	01	Introduction to SIMULINK: 2.1. Use of Commonly used blocks, Math operation block and Display block from SIMULINK library
9th	01	2.2. Use of logical and relational operator block.
10th	01	2.3. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices
11th	01	2.4. SIMULATION: 2.4.1. Verification of Network theorems.
12th	01	2.4.2. Simulation of a half wave uncontrolled rectifier.
13th	01	2.4.3. Simulation of 1-phase full bridge controlled rectifier
14th	01	2.4.4. Simulation of step-down chopper.
15th	01	2.4.4. Simulation of step-down chopper.