LESSON PLAN

SUB:-SIMULATION PRACTICE ON MATLAB.

BRANCH:- ELECTRICAL ENGG.

SEMESTER: 4TH

NAME OF FACULTY: - UMESH KU DALAI

GOVERNMENT POLYTECHNIC, BHADRAK

SESSION:2024-25

Hod Electrical

HOD (ELECT.)
G.P.BHADRAK

Academic Co-ordinator

Academic Co-ordinator

Principal
Govt. Polytechnic Bhadrak

Principal
Govt.Polytechnic
Bhadrak

DISCIPLINE ELECTRICAL ENGG.	SEMESTER 4TH	NAME OF THE TEACHING FACULTY UMESH KU DALAI (Lect. in Elect. Engg.)
SUBJECT SIMULATION PRATICE ON MATLAB	NO. OF DAYS/WEEK CLASS ALLOTTED – 45 (3P/week)	SEMESTER FROM DATE 04.02.2025 – 17.05.2025
WEEK	CLASS DAY	PRACTICAL TOPICS
1st	01	**Introduction to MATLAB programming:** Functions and operation using variables and arrays. To learn algebraic, trigonometric and exponential
	02	Functions and operation using variables and arrays. To learn algebraic, trigonometric and exponential
2nd	01	To learn Arithmetic, Relational and Logic operator
	02	To learn Arithmetic, Relational and Logic operator
3rd	01	Matrix formation and its manipulation
	02	Matrix formation and its manipulation
4th	01	Vector manipulation: Use of linspace to create vectors
	02	Vector manipulation: Use of linspace to create vectors
5TH	01	To create, add and multiply vectors. Use of sin and sqrt functions with vector arguments.
	02	To create, add and multiply vectors. Use of sin and sqrt functions with vector arguments.
6TH	01	Use of sin and sqrt functions with vector arguments
	02	Use of sin and sqrt functions with vector arguments
7TH	01	Two dimensional Plots and sub plots
	02	Two dimensional Plots and sub plots
8TH	01	Label the plot and printing. Write and execute a file to plot a circle, sine and cosine
	02	Label the plot and printing. Write and execute a file to plot a circle, sine and cosine

9TH	01	Label the plot and printing. Write and execute a file to plot a impulse, step, ramp.
	02	Label the plot and printing. Write and execute a file to plot a impulse, step, ramp.
10TH	01	**Introduction to SIMULINK:** Use of Commonly used blocks, Math operation block and Display block from SIMULINK library
	02	Use of Commonly used blocks, Math operation block and Display block from SIMULINK library
11TH	01	Use of logical and relational operator block. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices
	02	Use of logical and relational operator block. Use of Sim-Power system block to use Electrical sources, elements and Power electronics devices
12TH	01	Verification of Network theorems.
	02	Verification of Network theorems.
13TH	01	Simulation of a half wave uncontrolled rectifier.
	02	Simulation of a half wave uncontrolled rectifier.
14TH	01	Simulation of 1-phase full bridge controlled rectifier.
	02	Simulation of 1-phase full bridge controlled rectifier.
15TH	01	Simulation of step-down chopper.
	02	Simulation of step-down chopper.

01/02/2025

SIGNATURE OF THE FACULTY

Lect.in Elect.Engg.
Govt.Poly.Bhadrak