LESSON PLAN

Discipline: **Electrical Engineering**		Semester: **3rd semester**	Name of the Teaching Faculty: **Sadashiba Mohanta**
Subject: **Engineering Mathematics-III** Sub code: **Th-1**		No of days /week class allotted:**02/week**	Semester from Date:**01/08/2023 to 30/11/2024** No of weeks:**17**

Month	Week	No of periods available	Class Day	Theory topics to be covered
August	1st	01P	02.08.2023	**Chapter 2: MATRICES** Define Rank of a Matrix. Perform Elementary Row Transformations to Determine the Rank of a Matrix
	2nd	01P	07.08.2023	State Rouche's Theorem for Consistency of a System of Linear Equations in *n* unknowns.
			09.08.2023	Solve Equations in three unknowns testing Consistency
	3th	01P	14.08.2023	**Chapter 3: LINEAR DIFFERENTIAL EQUATIONS** Define homogeneous and non–homogeneous Linear Differential Equations with constant coefficients with Examples
			16.08.2023	Find General Solution of Linear Differential Equations in terms of C.F. and P.I.
	4th	01P	21.08.2023	Derive rules for finding C.F. and P.I. in terms of operator D
			23.08.2023	Problems
	5th	01P	28.08.2023	Define Partial Differential Equation (P.D.E.)
September	6th	01P	04.09.2023	Form Partial Differential Equations by eliminating arbitrary constants and arbitrary functions
	7th	01P	11.09.2023	Solve Partial Differential Equations of the form Pp + Qq = R
			13.09.2023	Problems
	8th	01P	18.09.2023	Monthly Test-02

	9th	01P	25.09.2023	**Chapter 5:FOURIER SERIES** Define Periodic functions with Examples.
			27.09.2023	State Dirichlet's condition for the Fourier expansion of a function and it's Convergence
October	10th	01P	04.10.2023	Express Periodic function ( ) satisfying Dirichlet's conditions as a Fourier series
	11th	01P	09.10.2023	**Revision and Doubt Clearing classes** **&** **Internal Assessment**
			11.10.2023	State Euler's formulae
	12th	01P	16.10.2023	Formulae for Fourier series coefficients
			18.10.2023	Problems on finding Fourier series coefficients
	13th	01P	25.10.2023	Define Even and Odd functions Find Fourier series of Even and Odd functions in (0 ≤ ≤ 2 and – ≤ ≤)
	14th	01P	30.10.2023	Obtain Fourier series of continuous functions in (0 ≤ ≤ 2 and – ≤ ≤)
November	15th	01P	01.11.2023	Problems
	16th	01P	06.11.2023	Obtain Fourier series of functions having points of discontinuity (0 ≤ ≤ 2 and – ≤ ≤)
			08.11.2023	Problems
	17th	01P	13.11.2023	**Chapter 6: NUMERICAL METHODS** Appraise Limitation of Analytical Methods of solution of Algebraic Equations
		01P	15.11.2023	Derive Iterative formula for finding the solutions of Algebraic Equations by Bisection method
	18th	01P	20.11.2023	Problems
			22.11.2023	Derive Iterative formula for finding the solutions of Algebraic Equations by Newton-Raphson method
	19th	01P	29.11.2023	Revision &Previous year question & Answer discussion.
		. VERY SIMILAR TEST/MOCK TEST		