LESSON PLAN

Discipline: **Electrical Engineering**	Semester: **3rd semester**	Name of the Teaching Faculty: **Dharashree Puthal**
Subject: **Engineering Mathematics-III** Sub code: **Th-1**	No of days /week class allotted:**02/week**	Semester from Date:**15/09/2022 to 22/12/2022** No of weeks:**15**

Month	Week	No of periods available	Class Day	Theory topics to be covered
September	2nd	02P	19.09.2022	**Chapter 1: COMPLEX NUMBERS** Real and Imaginary numbers Complex Numbers, Conjugate Complex Numbers, Modulus and Amplitude of a Complex Number
			21.09.2022	Geometrical Representation of Complex Numbers Properties of Complex Numbers
	3rd	02P	26.09.2022	Determination of three cube roots of unity and their properties
			28.09.2022	De Moivre's Theorem and Problems
October	4th	02P	10.10.2022	**Monthly Test-01**
			12.10.2022	**Chapter 4: LAPLACE TRANSFORMS** Define Gamma function and $r(n+1)=n!$ and find $r(1/2)=\sqrt{\pi}$
	5th	02P	17.10.2022	Define Laplace Transform of a function $f(t)$ and Inverse Laplace Transform
			19.10.2022	Derive L.T. of standard functions and explain existence conditions of L.T.
	6th	02P	26.10.2022	Explain Linear, Shifting property of L.T.
			31.10.2022	Formulate L.T. of Derivatives, Integrals
November	7th	02P	02.11.2022	Multiplication by t^n and Division by t
			07.11.2022	Derive formulae of Inverse L.T. and Explain method of Partial Fractions
	8th	01P	09.11.2022	Problems
	9th	02P	14.11.2022	**Revision and Doubt Clearing classes & Internal Assessment**
			16.11.2022	
	10th	02P	21.11.2022	Explain Finite Difference and form table of Forward and Backward difference
			23.11.2022	Define Shift Operator and Establish relation between & Difference Operator
	11th	02P	28.11.2022	Derive Newton's Forward Interpolation formula for equal intervals
			30.11.2022	Derive Newton's Backward Interpolation formula for equal intervals

December	12th	01P	05.12.2022	State Lagrange's Interpretation formula for unequal intervals
	13th	02P	07.12.2022	**Monthly Test-03**
			12.12.2022	Explain Numerical Integration and State Newton's Cote's formula.
	14th	02P	14.12.2022	Trapezoidal rule and Solve Problems on Trapezoidal rule
			19.12.2022	Simpson's 1/3rd rule and Solve problems on Simpson's 1/3rd rule
	15th	01P	21.12.2022	**Revision &Previous year question & Answer discussion.**
				. VERY SIMILAR TEST/MOCK TEST

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13/9/22