Lesson Plan
Name : Ms. Neeru
Designation : Senior Lecturer in Applied science

Discipline   :   Common to all Branches   Code   :   220012

Year/Sem   :   1st Sem   Work Load   :   4 Lectures per week

Subject   :   Applied Mathematics-I   Duration   :   01.09.2023 to 15.12.2023

Week	Lectures per week	Topic
1st	1st	Complex Numbers: Definition, Real & Imaginary Part of Complex Number with Examples
	2nd	Algebra of Complex Numbers : Addition, Substraction, Multiplication and Division
	3rd	Modulus and Conjugate of Complex Number and its properties
	4th	Polar and Cartesian Form of a Complex Number with Examples
2nd	1st	Argument of a Complex Number with Examples
	2nd	Logarithms : Definiton and Some Standard Logarithms
	3rd	Properties of Logarithms with Examples
	4th	Systems of Logarithms, Characteristic & Mantissa
3rd	1st	Method of Finding Antilogarithm of a Number with Examples
	2nd	Rivision and Problems
	3rd	Meaning of n! with Examples
	4th	Definition of Permutations with Examples
4th	1st	Definition of Combinations with Examples
	2nd	Difference between a Permutations and Combination
	3rd	Introduction to Binomial Expansion with Some Important Observations
	4th	General and Middle terms in Binomial Expansion
5th	1st	Terms from the End and the Absolute Term of the Binomial Expansion
	2nd	Binomial Theorem for a rational Index and Some Particular Expansions
	3rd	Applications of Binomial Theorem
	4th	Revision and Problems
6th		1st Sessional Test
7th	1st	Matrix Definition, Types of Matrices, Transpose of a Matrix with its Properties
	2nd	Algebra of Matrices: Addition, Difference, Multiplication; Determinants of Matrices
	3rd	Cramer's Rule
	4th	Concept of Angle

Lesson Plan

Name : Dr. Urmil
Designation : Lecturer in Applied science

Discipline	:	Common to all Branches	Code : 220012
Year/Sem	:	1st Sem	Work Load : 4 Lectures per week
Subject	:	Applied Mathematics-I	Duration : 01.09.2023 to 15.12.2023

Week	Lectures per week	Topic
8th	1st	Revision and Problems
	2nd	Measurement of Angle in Degrees, Grades, Radians and their Conversions
	3rd	T-Ratios of Allied Angles
	4th	Sum, Difference Formulae and their Applications

Week	Lectures per week	Topic
9th	1st	Product Formulae: Transformation of product to Sum, Difference and Vice-versa
	2nd	Revision and problems
	3rd	Applications of Trigonometric Terms in Engineering Problems Such as to Find the Elevation, Height, Distance etc.
	4th	Revision and problems

6th	**2nd Sessional Test**

Week	Lectures per week	Topic
10th	1st	Cartesiam and Polar Coordinates (Two-Dimensional), Distance between Two Points.
	2nd	Mid-point, Centroid of a triangle
	3rd	Slope of a Line, Equation of Straight Line in Various Standard Form
	4th	Intersection of Two Straight Lines, Concurrency of Lines

Week	Lectures per week	Topic
11th	1st	Angles between Straight Lines, Perpendicular Distance Formula
	2nd	Conversion of General Form of Equation to the Various Forms
	3rd	Revision and Problems
	4th	General Equation of a Circle and its Characteristics

Week	Lectures per week	Topic
12th	1st	Equation of Circle: Centre and Radius, Three Points Lying on it
	2nd	Equation of Circle : Coordinates of End Points of a Diameter
	3rd	Intoduction to MATLAB or SciLab
	4th	Revision and Problems

13th	**3rd Sessional Test**