

LESSON PLAN		
Discipline / All Branches	Semester-2nd	Name of the teaching faculty:- Akankshya Joshi
Subject:- Engg. Math-I	No. of days/per week- 05	Semester from date : 01.02.2024 to 11.05.2024 No. of weeks :- 15 (excluding puja vacation)
Week	Class day	Theory
1st	1st	Introduction
	2nd	Types of vectors
	3rd	Representation of vectors
	4th	Magnitude and direction of vectors
	5th	Addition and subtraction of vectors
2nd	1st	Question answer discussion
	2nd	Position vector
	3rd	Scalar product of two vectors
	4th	Geometrical meaning of dot product
	5th	Angle between two vectors
3rd	1st	Scalar projection of two vectors
	2nd	Vector product
	3rd	Geometrical meaning of vector product
	4th	Problem discussion
	5th	Problem discussion & doubt clearing
4th	1st	Introduction to limit
	2nd	Definition of function, based on set theory
	3rd	Types of function
	4th	Constant function
	5th	Identity function

5th	1st	Absolute value function
	2nd	The greatest integer function
	3rd	Trigonometric function
	4th	Exponential function
	5th	Logarithmic function
6th	1st	Exaples.....
	2nd	Existence of limit
	3rd	Problem discussion
	4th	Method of evaluation of limit
	5th	Definition of continuity of a function at a point
7th	1st	Problem discussion
	2nd	Derivative of a function at a point
	3rd	Algebra of derivattives
	4th	Derivative of standard functions
	5th	Derivative of composite function(Chain Rule)
8th	1st	Examples.....
	2nd	Methods of Differentiation
	3rd	Parametric function
	4th	Implicit function
	5th	Logarithmic function
9th	1st	A function w.r.t another function
	2nd	Application of Derivative
	3rd	Successive Differentiation (upto second order)
	4th	Problem discussion
	5th	Partial differentiation (two variables up to second order)

10th	1st	Problem discussion
	2nd	Definition of Integration as Inverse of differentiation
	3rd	Integrals of standard functions
	4th	Methods of Integration
	5th	Integration by substitution
11th	1st	Integration by parts
	2nd	Definite Integrals
	3rd	Properties of definite Integrals
	4th	Problem discussion
	5th	Application of Integration
12th	1st	Area enclosed by a curve and X-Axis
	2nd	Area of a circle with center at origin
	3rd	Problem discussion
	4th	Previous year question answer discussion
	5th	Exercise problem discussion
13th	1st	Problem discussion with doubt clearing
	2nd	Introduction to Differential Equation
	3rd	Order of Differential equation
	4th	Degree of Differential Equation
	5th	Examples.....
14th	1st	Solution by method of separation variables
	2nd	Linear equation $dy/dx=Q$, P,Q are functions of x
	3rd	Previous year question answer discussion
	4th	Exercise problem discussion
	5th	Problem practice