LESSON PLAN SUMMER(2025-26)

DISCIPLINE: Mathematics	SEMESTER: 2ND	NAME OF THE TEACHING FACULTY: Smt sanghamitra Nath	
Subject: Mathematics-II	No. of Days/per week class allotted:	Semester From date:09.01.2026 to Date : 08.05.2026	
Total period alloted: 60		**No. of Weeks: 15**	**No of periods allotted**
Week	Class Day	Theory Topics	1
1ST	1st	**UNIT - I: Determinants and Matrices** Elementary properties of determinants up to 3rd order	1
	2nd	consistency of equations,	1
	3rd	Crammer's rule. Algebra of matrices,	1
	4th	Inverse of a matrix	1
2nd	1st	matrix inverse method to solve a system of linear equations in 3 variables	1
	2nd	matrix inverse method to solve a system of linear equations in 3 variables	1
	3rd	**UNIT - II: Integral Calculus** Integration as inverse operation of differentiation	1
	4th	Simple integration by substitution,	1
3rd	1st	by parts	1
	2nd	and by partial fractions (for linear factors only).	1
	3rd	Use of formulas , and for solving problems Where m and n are positive integers.	1
	4th	Applications of integration for i. Simple problem on evaluation of area bounded by a curve and axes.	1
4th	1st	problems ii. Calculation of Volume of a solid formed by revolution of an area about axes. (Simple problems).	1
	2nd		1
	3rd	**UNIT - III: Co-Ordinate Geometry** Equation of straight line in various standard forms (without proof),	1
	4th	inter section of two straight lines,	1
5th	1st	angle between two lines.	1
	2nd	Parallel and perpendicular lines,	1
	3rd	perpendicular distance formula.	1
	4th	General equation of a circle and its characteristics.	1
6th	1st	Problems	1
	2nd	To find the equation of a circle, given: ii. Centre and radius, iii. Three points lying on it	1
	3rd	and iv. Coordinates of end points of a diameter;	1

			1
	4th	Definition of conics (Parabola, Ellipse, Hyperbola)	1
7th	1st	their standard equations without proof.	1
	2nd	Problems on conics when their foci,	1
	3rd	directories or vertices are given.	1
	4th	**UNIT -IV: Vector Algebra** Definition notation and rectangular resolution of a vector.	1
8th	1st	Addition and subtraction of vectors.	1
	2nd	Scalar and vector products of 2 vectors.	1
	3rd	Simple problems related to work,	1
	4th	moment and angular velocity.	1
9th	1st	**UNIT-V: Differential Equations** Solution of first order and first degree differential equation by variable separation method	1
	2nd	problems	1
	3rd	MATLAB – Simple Introduction	1
	4th	problems	1
10th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1
11th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1
12th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1
13th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1
14th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1
15th	1st	Revision	1
	2nd	Revision	1
	3rd	Revision	1
	4th	Revision	1

09/01/2026

Prepared by

(Sanghamitra Jalta)

09/01/26

Head of the Department

09/01/26

Academic Co odinator