Lesson Plan 2025(S)

Subject: - Mathematics-II

Name of faculty: - kajal priya pani

Semester: - 2nd

Course code: - TH-3

Class allotted: - 4p/week

Branch: - Civil, Electrical, Metallurgy

Weeks	Date/Period	From Date:- 04/02/2025 To 17/05/2025 Theory- Topic/Lesson	Teaching Aid
1	04/02/2025 To 08/02/2025	➢ Introduction to determinant and matrix. ➢ Basic concept of determinants ➢ Elementary properties of determinants up to 3rd order ➢ consistency of equations, and problems	WhiteBoard Marker
2	10/02/2025 To 15/02/2025	➢ Crammer's rule. ➢ Algebra of matrices, ➢ Inverse of a matrix, ➢ Problems	WhiteBoard Marker
3	17/02/2025 To 22/02/2025	➢ Problems ➢ Matrix inverse method to solve a system of linear equations in 3 variables. ➢ Problems ➢ **Unit-ii** Basic concept of integral calculus	WhiteBoard Marker
4	24/02/2025 To 01/03/2025	➢ Integration as inverse operation of differentiation. ➢ problems ➢ Simple integration by substitution. ➢ problems	WhiteBoard Marker
5	03/03/2025 To 08/03/2025	➢ Simple integration by parts. ➢ problems ➢ Simple integration by partial fraction. ➢ problems	WhiteBoard Marker

6	10/03/2025 To 13/03/2025	➤ Use of formulas , and for solving problems Where m and n are positive integers. ➤ Problems. ➤ Problems. ➤ Problems.	WhiteBoard Marker
7	17/03/2025 To 22/03/2025	➤ Applications of integration for i. ➤ Simple problem on evaluation of area bounded by a curve and axes. ➤ Problems ➤ Problems.	WhiteBoard Marker
8	24/03/2025 To 29/03/2025	➤ Calculation of Volume of a solid formed by revolution of an area about axes. (Simple problems). ➤ Problems ➤ Problems	WhiteBoard Marker
9	02/04/2025 To 05/03/2025	➤ Basic concept of co.ordinate geometry. ➤ Equation of straight line in various standard forms (without proof) ➤ intersection of two straight lines ➤ Angle between two lines.	Whiteboard Marker
10	07/04/2025 To 12/04/2025	➤ Parallel and perpendicular lines, perpendicular distance formula. ➤ Problems. ➤ General equation of a circle and its characteristics.	WhiteBoard Marker
11	15/04/2025 To 19/04/2025	➤ To find the equation of a circle ➤ Centre and radius of a circle ➤ Three points lying on it and ➤ Coordinates of end points of a diameter;	WhiteBoard Marker
12	21/04/2025 To 26/04/2025	➤ Definition of conics (Parabola, Ellipse, Hyperbola) their standard equations without proof. ➤ on conics when their foci, directories or vertices are given. ➤ problems. ➤ Definition notation and rectangular resolution of a vector	WhiteBoard Marker

13	28/04/2025 To 03/05/2025	**UNIT-V: Differential Equations** ➢ Addition and subtraction of vectors. ➢ Scalar and vector products of 2 vectors. ➢ Simple problems related to work, moment and angular velocity ➢ Problems.	WhiteBoard Marker
14	05/05/2025 To 10/05/2025	➢ Solution of first order and first degree differential equation. ➢ differential equation by variable separation method. ➢ Problems.	WhiteBoard Marker
15	13/05/2025 To 17/05/2025	➢ MATLAB – Simple Introduction ➢ **Revisions**	WhiteBoard . . Marker

Signature of HOD

Signature of faculty