

Government Girls Polytechnic Bilaspur

LESSON PLAN

Session Start Date as per CSVTU: 18.08.2026

Course Name: Basic Mathematics Course Code: 2000A02AT014

Nam of Subject Teacher : Mrs manorama Sahu

Lecture plus Tutorial/Week: 2+1

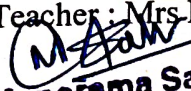
Session: JULY to DECEMBER 2025

Discipline: CSE and IT

LESSON PLAN		
Course Outcome	Topic/Subtopic to be covered under this Unit	No. of Periods Planned
CO-1 Solve engineering related problem based on concept of algebra.	1. Determinants, concept and properties of determinants	3
	2. Solution of Simultaneous equations in three unknown by Cramers Rule	2
	3. Matrics, Algebra of Matrics	3
	4. Inverse of Matrics	3
	5. Solution of simultaneous equations by matrix inversion method of 3×3	2
CO-2 Use Basic Concept of Differential Calculus to solve engineering related problems.	1. Basic Trigonametry	1
	2. Multiple and Sub multiple angles	1
	3. Functions and Limits, Independent and Dependent variables	1
	4 Concept of limit and its valuation	1
	5. Diffrentiation of Elementary Functions, Differentiation of Algebraic functions	2
	6. Differentiation of exponential and logarithmic functions	2
	7. Differentiation of sum of two functions.	1
	8. Differentiation of product of two functions.	1
	9. Differentiation of quotient of two functions.	
	10. Differentiation of function of	1

	a function.	
CO-3 Compute maxima, minima, tangent and normal for engineering related problem.	1.Second Order Derivatives.	2
	2. Equation of Tangent	2
	3. Equation of Normal.	2
	4.Equation of Tangent and Normal for functions of one variable only.	2
	5. Maxima for function of one variable only.	2
	6. Minima for function of one variable only.	2
CO-4 Solve engineering problems under given conditions of straight line and conic sections.	1.Various forms of straight line	1
	2. Coordinate systems, slope point form, division of a line segment	2
	3. Two point intercept form, General form	1
	4 . Perpendicular distance from a point on the line.	1
	5. Perpendicular distance between two parallel lines.	1
	6. Conic section, definition and standard form.	1
	7.General equation, centre and radius of a circle	1
	8. Focus, Axis, directrix, latus rectum and vertex of Parabola.	1
	9. Focus, Axis, directrix, latus rectum and vertex of Parabola ellipse.	1
CO-5 Use Basic concepts and statistics to solve engineering related problems.	1.Frequency distribution	1
	2.Central Tendency	1
	3.Graphical representation of frequency distribution	1
	4.Mean	1
	5.Median	1
	6.Mode	1
	7.Measure of Dispersion	1
	8.Range	1
	9.Quartile deviation.	1
	10.Standard Deviation	1
	11.Root mean square deviation	1
	12.Variance	1
	13.Coefficient of variance	1

Subject Teacher : Mrs Manorama Sahu


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