Prak Shastri – First Year (Class 12ᵗʰ)
Subject- Mathematics
3ʳᵈ Semester

Text Book: - NCERT (NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING)

S. No	Unit Name	Unit Topics	Periods (64)	Credits (4)
1.	Relations and Functions	Introduction, Type of Relations, Type of Functions, Composition of Functions and Invertible Functions.	08	1
	Inverse Trigonometry Functions	Introductions, Basic Concepts, Properties of Trigonometry Functions	08	
2.	Matrices	Introduction, Matrix, Type of Matrices, Operations on Matrices, Transpose of Matrix, Symmetric and Skew Symmetric Matrices, Elementary Operation (Transformation) of a Matrix, Invertible Matrices.	08	1
	Determinants	Introduction, Determinants, Properties of Determinants, Area of Triangle, Minors and Cofactors, Adjoint and Inverse of a Matrix. Applications of Determinants and Matrices.	08	
3.	Continuity and Differentiability	Introduction, Continuity Differentiability, Exponential and Logarithmic Functions, Logarithmic Differentiation, Derivatives of Functions in Parametric Forms, Second Order Derivative, Mean Value Theorem.	16	1
4.	Application of Derivatives	Introductions, Rate of Change of Quantities, Increasing and Decreasing Functions, Tangents and Normals, Maxima and Minima.	16	1

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