

Class – XII
Subject- Mathematics
Syllabus

Month	Name of Chapter	Contents	Teaching Period	Revision period
April	Relations and Functions Inverse Trigonometric Functions	Introduction Types of Relations Types of Functions Composition of Functions and Invertible Functions Binary operations Introduction Basic Concepts Properties of Inverse Trigonometric Functions	19	3
May	Matrices Determinants	Introductions Matrix Types of Matrices Operations on Matrices. Transpose of a Matrix. Symmetric and Skew Symmetric Matrices. Elementary operation (Transformation) of a matrix Invertible Matrix Introduction Determinant Properties of Determinants, Area of Triangles. Minors and cofactors. Adjoint and Inverse of a Matrix. Application of Determinants and Matrices.	20	3
June	Summer Vacation			
July	Continuity and Differentiability	Introduction Continuity Differentiability. Exponential and Logarithmic Functions Logarithmic Differentiation Derivatives of Functions in Parametric Forms Second order Derivatives Mean Value Theorm.	19	3
August	Application of	Introductions	19	3

	Derivatives	Rate of Change of Quantities Increasing and Decreasing Functions Tangents and Normals. Approximations. Maxima and Minima		
September	Integrals	Introduction Integration as an Inverse Process of Differentiation Method of Integration Integrals of Some Particular Functions Integration by partial fractions Integration by Parts.	5	10
October	Application of Integrals Differential Equations	Definite Integral Fundamental theorem of Calculus Evaluation Definite Integrals by substitutions. Some Properties of Definite Integrals Introduction Area Under simple Curve, Area between Two Curves Introduction Basic Concepts General and Particular solutions of a Differential Formation of a Differential Equation whose General Solutions is given. Method of solving First order, First degree Differential Equation	17	3
November	Probability	Introduction Conditional Probability Multiplication Theorem on Probability Independent Events Bayes Theorem. Random Variables and its Probability Distributions Bernoulli Trials and Binomial Distribution	14	3

December	Vectors Linear Programming	Introduction Some Basic Concepts Types of Vectors Addition of Vectors Multiplication of vector by a scalar Product of Two vectors Introduction Linear Programming Problems and its Mathematical Formulation. Different Types of a linear Programming Problems	15	3
January	Three Dimensional Geometry	Introductions Direction cosines and Direction ratio of a line Equation of a line in space Angles between Two lines Shortest Distance between Two lines Planes Co planarity of Two lines Angle between Two Planes Distance of a point from a plane. Angle between a line and a plane	8	3
February		Revision		
March		Examination		