

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 Binary operations Introduction Basic Concepts	19	3
May	Matrices  Determinants	Introductions Matrix Types of Matrices Operations on Matrices. Transpose of a Matrix. Symmetric and Skew Symmetric Matrices Introduction Determinant 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	19	3
August	Application of Derivatives	Introductions Increasing and Decreasing Functions Tangents and Normals.	19	3

		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	Fundamental theorem of Calculus Evaluation Definite Integrals by substitutions. Some Properties of Definite Intergrals Introduction Area Under simple Curve, Introduction Basic Concepts General and Particular solutions of a Differential Method of solving First order, First degree Differential Equation	17	3
November	Probability	Introduction Conditional Probability Multiplication Theorm on Probability Independent Events Bayes Theorm. Random Variables Bernoulli Trials	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.	15	3
January	Three	Introductions	8	3

	Dimensional Geometry	Direction cosines and Direction ratio of a line Equation of a line in space  Shortest Distance between Two lines Planes Co planarity of Two lines Distance of a point from a plane.		
February		Revision		
March		Examination		

Deleted Exercises and topic for the session **2021-22** is as under:

- 1 Exercise 7.7
- 2 Exercise 9.3
- 3 Linear differential equation type  $dy/dx+Py=Q$
- 4 Misc. Example.
- 5 Mean and variance of Random Variables