

## SYLLABUS FOR THE SESSION 2023-24

**CLASS :XII**

**SUBJECT: MATHEMATICS**

MONTH	TEXT BOOK	DIGITAL RESOURCES	SUBJECT ENRICHMENT ACTIVITIES
APRIL	Matrices, Determinants, Inverse Trigonometric Function	E-library notes,smart class	To explore the principal value of the function $\sin^{-1}x$ using the unit circle
MAY	Relation and Functions, Continuity and Differentiability	E-library notes,smart class	To find analytically the limit of a function $f(x)$ at $x=c$ and also check the continuity of the function at that point
JULY	Application of Derivatives, Integration (Indefinite)	E-library notes,smart class	To understand the concept of decreasing and increasing function. To understand the concept of local minima , local maxima and point of inflection.
AUGUST	Integration (definite), Application of Integration	E-library notes,smart class	Formation of differential equation to explain the process of cooling of boiled water to a given room temperature.
SEPTEMBER	Differential Equation, Vectors Algebra	E-library notes,smart class	Estimation of the population a particular region / country under the assumption that there is no migration in or out of the existing population in a particular year.
OCTOBER	Three Dimensions, Linear Programming	E-library notes,smart class	To demonstrate the equation of plane in normal form.
NOVEMBER	Probability, Revision	E-library notes,smart class	To verify that the relation $R$ in the set of the lines in a space defined by $R=\{(l,m): l \parallel m\}$ is an equivalence relation.
DECEMBER	Revision		