

**Class – XII**  
**DELETED SYLLABUS**  
**(For the Session of 2020-21 Only)**  
**MATHEMATICS**  
**(THEORY)**

**UNIT I. RELATIONS AND FUNCTIONS**

1. **Relations and Functions :**  
Composite functions, inverse of a function.
2. **Inverse Trigonometric Functions:**  
Graphs of inverse trigonometric functions. Elementary properties of inverse trigonometric functions.

**UNIT-II: ALGEBRA**

1. **Matrices:**  
Existence of non-zero matrices whose product is the zero matrix. Concept of elementary row and column operations. Proof of the uniqueness of inverse, if it exists.
2. **Determinants:**  
Properties of determinants, Consistency, inconsistency and number of solutions of system of linear equations by examples

**UNIT-III: CALCULUS**

1. **Continuity and Differentiability:**  
Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretations.
2. **Applications of Derivatives:**  
Rate of change, approximation
3. **Integrals:**  
Definite integrals as a limit of a sum
4. **Applications of the Integrals:**  
Area between the two above said curves
5. **Differential Equations:**  
Formation of differential equation whose general solution is given.

**UNIT-IV: VECTORS AND THREE-DIMENSIONAL GEOMETRY**

1. **Three - dimensional Geometry:**  
Angle between (i) two lines, (ii) two planes. (iii) a line and a plane.

## **UNIT-V: LINEAR PROGRAMMING**

- 1. Linear Programming:** Mathematical formulation of L.P. problems,

## **UNIT-VI: PROBABILITY**

- 1. Probability:**  
Mean and variance of haphazard variable. Binomial distribution.

