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.
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.