SYLLABUS
XII
SESSION: 2021-22
SUB: MATHEMATICS

1ST TERM

1st unit test

- **RELATION & FUNCTION**
- Relation
- **ALGEBRA**
- Types of Matrices Operations on Matrices
- **CALCULUS**
- Limit
- Continuity & Differentiability

2nd unit test
- **RELATION & FUNCTION**
- Function

- **CALCULUS**
- Differentiation
- Maxima & Minima
- **VECTOR AND THREE DIMENSIONAL CO-ORDINATE GEOMETRY**
- Product of two vectors
- Direction cosine and direction ratios

PRETEST
- **RELATION & FUNCTION**
- Binary Operation
- **ALGEBRA**
- Adjoint and Inverse of matrix, solution of linear equation by matrix method
- **CALCULUS**
- Indefinite Integral
- Method of substitution
- Integration by parts
- Integration of some special function
- Definite Integral
- Definite integration as an area
- **VECTOR AND THREE DIMENSIONAL CO-ORDINATE GEOMETRY**
- Straight line in three dimensional space

SELECTION TEST

- **CALCULUS**
  - 2nd order derivative
  - Order and degree of differential equation
  - Differential equation of 1st order and first degree
  - Tangent & normal
- **VECTOR AND THREE DIMENSIONAL CO-ORDINATE GEOMETRY**
  - Plane
- **LINEAR PROGRAMMING**
  - Linear programming graphical method
- **PROBABILITY**
  - Probability