

Mathematics & Statistics (Arts and Science)
Standard XI
Paper I

Chapter 1: ANGLE AND ITS MEASUREMENT

1. System of measurement of angle and relations between them.
2. Conversion of angle from one system to other system.

Chapter 2: TRIGONOMETRIC FUNCTIONS

1. Definitions of trigonometric functions .
2. Values of trigonometric functions and their angles .
3. Graphs of trigonometric functions.

Chapter 3: TRIGONOMETRIC FUNCTIONS OF COMPOUND ANGLES AND FACTORIZATION FORMULAE

1. Trigonometric functions of sum or difference of the angles
2. Trigonometric functions of multiple and sub multiple angles.
3. Sum or difference of two trigonometric functions as product.
4. Rules of trigonometric ratios of angle of a triangle.

Chapter 4: DETERMINANTS AND MATRICES

1. Value of determinant
2. reduction of determinant
3. solving linear equations
4. Area of a triangle using determinants.
5. Types of Matrices
6. Algebraic operations on matrices.

Chapter 5: STRAIGHT LINE

1. Locus and its equation
2. Different forms of equations of straight lines.
3. Angle between two lines.
4. Distance of a point from a line .

Chapter 6. CIRCLE

1. Equation of a circle
2. Properties of a circle.
3. Equation of tangent to the circle.

Chapter 7. CONIC SECTION

1. Equation of conic sections.
2. properties of conics.
3. Equation of tangent to the conics.

Chapter 8: MEASURES OF DISPERSION

1. Range
2. Standard deviation
3. Variance

Chapter 9: PROBABILITY

1. Probability of an event.
2. conditional probability.
3. Bay's Theorem.
4. Applications of Bay's Theorem.

