

**SYLLABUS - 2021 - 2022**

**STANDARD : 10**

**SUBJECT : MATHEMATICS**

<b>Unit</b>	<b>Content</b>
<b>1. Relations and Functions</b>	1.1 Introduction 1.2 Ordered Pair 1.3 Cartesian Product 1.4 Relations
<b>2. Numbers and sequences</b>	2.1 Introduction 2.2 Euclid's Division Lemma 2.3 Euclid's Division Algorithm 2.4 Fundamental Theorem of Arithmetic 2.6 Sequences 2.7 Arithmetic Progression
<b>3. Algebra</b>	3.1 Introduction 3.2 Simultaneous Linear Equations in three Variables 3.3 GCD and LCM of Polynomials 3.4 Rational expressions 3.5 Square Root of Polynomials. 3.6 Quadratic Equations 3.8 Quadratic Graphs
<b>4. Geometry</b>	4.1 Introduction 4.2 Similarity 4.3 Thales Theorem and Angle Bisector Theorem (Theorems 1,3-with proof & 2,4-without proof) 4.4 Pythagoras Theorem(Theorem 5-with proof) 4.5 Circles and Tangents(Theorem 6-without proof) 4.6 Concurrency Theorems
<b>5. Coordinate Geometry</b>	5.1 Introduction 5.2 Area of a Triangle 5.3 Area of a Quadrilateral 5.4 Inclination of a Line 5.5 Straight Line

<b>6. Trigonometry</b>	6.1 Introduction 6.3 Heights and Distances
<b>7. Mensuration</b>	7.1 Introduction 7.2 Surface Area 7.3 Volume 7.4 Volume and Surface Area of Combined Solids
<b>8. Statistics and Probability</b>	8.4 Probability 8.5 Algebra of Events
<b>(*All examples and exercise problems for the content mentioned above)</b>	