

**SYLLABUS- XI (2021-22)**  
**SUBJECT - Mathematics**

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	PRACTICAL/ PROJECT
<b>UT -1 (JUNE-AUG)</b>	1.Sets 2.Relations and Functions 3. Trigonometry 4. Principle of mathematical Induction 5. Complex Numbers and Quadratic Equations 6.Linear Inequalities 7.Permutations and combinations	1.Sets 3.Trigonometry	<p><b>1. To find the values of sine and cosine functions.</b></p> <p><b>2. To distinguish between relation &amp; function.</b></p> <p><b>3. To interpret geometrically the meaning of <math>i = \sqrt{-1}</math> &amp; its integral powers.</b></p> <p><b>4. To verify the graph of given inequality.</b></p>
<b>HALF YEARLY (SEPT)</b>	9. Sequences and Series 12.Introduction to Three dimensional Geometry	1.Sets 2.Relations and Functions 3. Trigonometry 4. Principle of mathematical Induction 5. Complex Numbers and Quadratic Equations 6.Linear Inequalities 12.Introduction to Three dimensional Geometry 7.Permutations and combinations 9.Sequences and Series	<p><b>5. To explain the concept of octants by three mutually perpendicular planes in the space.</b></p> <p><b>6. To demonstrate that the A.M. of two different positive numbers is always greater than their G.M.</b></p>
<b>UT2 (OCT-NOV)</b>	13.Limits and Derivatives 16.Probability 8.Binomial Theorem 10.Straight Lines 14.Mathematical Reasoning	13.Limits and Derivatives 16.Probability	<p><b>7. To find analytically Lim.</b></p> <p><b>8. To write a sample space when a coin is tossed once, twice, thrice and four times.</b></p>
<b>I TERM (JAN)</b>	11.Conic Sections 15.Statistics	1.Sets 2.Relations and Functions 3.Trigonometry 4. Principle of mathematical Induction. 5.Complex Numbers and Quadratic Equations 6.Linear Inequalities 7.Permutations and Combinations 8.Binomial Theorem 9.Sequences and Series 10.Straight Lines 11.Conic Sections 12.Introduction to Three dimensional Geometry 13.Limits and Derivatives 14.Mathematical Reasoning 15.Statistics 16.Probability	<p><b>9.To construct an ellipse using a rectangle.</b></p> <p><b>10. An alternative method of constructing parabola.</b></p>

<b>ANNUAL EXAMS (FEB)</b>		<ol style="list-style-type: none"><li>1.Sets</li><li>2.Relations and Functions</li><li>3.Trigonometry</li><li>4. Principle of mathematical Induction.</li><li>5.Complex Numbers and Quadratic Equations</li><li>6.Linear Inequalities</li><li>7.Permutations and Combinations</li><li>8.Binomial Theorem</li><li>9.Sequences and Series</li><li>10.Straight Lines</li><li>11. Conic Sections</li><li>12.Introduction to Three dimensional Geometry</li><li>13.Limits and Derivatives</li><li>14.Mathematical Reasoning</li><li>15.Statistics</li><li>16.Probability</li></ol>	
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