



# BISHOP SCOTT BOYS' SCHOOL

## STUDENT CURRICULUM MANUAL

Subject : Mathematics

Class : 10

Academic Plan : 2025 -26

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
April	<b>LESSON 1 : Real Number</b>	<ul style="list-style-type: none"> <li>• Fundamental Theorem of Arithmetic</li> <li>• Proofs of irrationality of <math>\sqrt{2}</math>, <math>\sqrt{3}</math>, <math>\sqrt{5}</math></li> <li>• Expressing rational number in p/q form</li> <li>• Terminating and non terminating decimal</li> <li>• Properties of numbers</li> </ul>	Activity 1	8	
	<b>LESSON 2 : POLYNOMIALS</b>	<ul style="list-style-type: none"> <li>• Zeros of polynomials</li> <li>• Relationship between zeros and coefficients of polynomial</li> <li>• Remainder theorem</li> <li>• Graphical meaning of zeros of polynomials</li> </ul>	Activity 2	12	
May	<b>LESSON 3 : Pair of Linear Equations in Two Variables</b>	<ul style="list-style-type: none"> <li>• Consistent and Inconsistent system of Linear Equations.</li> <li>• Graphical solution of system of liner equations in two variables</li> </ul>	Activity 3	14	

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June	<b>LESSON 3 : Pair of Linear Equations in Two Variables</b>	<ul style="list-style-type: none"> <li>Solving Linear Equations in two variable by Method of Substitution , Method of Elimination</li> <li>Word Problems based on linear equations in two</li> </ul>		13	
July	<b>LESSON 4: QUADRATIC EQUATIONS.</b>	<ul style="list-style-type: none"> <li>Standard form of a quadratic equation <math>ax^2 + bx + c = 0</math>, (<math>a \neq 0</math>)</li> <li>Finding Roots of a Quadratic equation</li> <li>Finding sum of the roots of quadratic equation</li> <li>Finding product of roots of quadratic equation</li> <li>Nature of Roots of quadratic equation</li> </ul>	Activity 4	10	Portion for PT-01 Lesson -1 Lesson -2 Lesson -3 Lesson -4
July	<b>LESSON 5 : ARITHMETIC PROGRESSIONS</b>	<ul style="list-style-type: none"> <li>Finding nth term of Arithmetic Progression</li> <li>Finding sum of first n terms of A.P</li> <li>Finding Arithmetic mean</li> <li>Common properties of Arithmetic series</li> <li>Sum of first n natural numbers</li> <li>Application in solving daily life problems.</li> </ul>	Activity 5	8	

	<b>LESSON 6 : TRIANGLES</b>	<ul style="list-style-type: none"> <li>• Similar Figures</li> <li>• Congruent Triangles</li> <li>• Similarity of Triangles</li> <li>• Criteria for Similarity of Triangles</li> <li>• Basic Proportionality Theorem</li> <li>• Converses of Thales' Theorem</li> </ul>	Activity 6	10	
August	<b>LESSON 7: CO-ORDINATE GEOMETRY</b>	<ul style="list-style-type: none"> <li>• Distance formula to find distance between any two points.</li> <li>• Criteria for three point to be collinear</li> <li>• Section formula</li> <li>• Mid point formula</li> </ul>	Activity 7	10	
	<b>LESSON 8 : INTRODUCTION TO TRIGONOMETRY</b>	<ul style="list-style-type: none"> <li>• Trigonometric ratios</li> <li>• Values of the Trigonometric Ratios of <math>0^\circ</math> , <math>30^\circ</math> , <math>45^\circ</math> , <math>60^\circ</math> , <math>90^\circ</math></li> <li>• Relations between the trigonometric ratios.</li> <li>• Trigonometric Identities</li> </ul>		12	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
September	REVISION	REVISION	Activity 8	10	Portion for TERM - 1 Lesson - 1 Lesson - 2 Lesson - 3 Lesson - 4 Lesson - 5 Lesson - 6 Lesson - 7 Lesson - 8
October	<b>LESSON 9: SOME APPLICATIONS OF TRIGONOMETRY</b>	<ul style="list-style-type: none"> <li>• Application of trigonometry in daily life (HEIGHTS AND DISTANCES)</li> <li>• Find out angle of elevation</li> <li>• Find out angle of depression</li> </ul>	Activity 9	8	
	<b>LESSON 10 : CIRCLES</b>	<ul style="list-style-type: none"> <li>• Tangent to the circle</li> <li>• The tangent at any point of a circle is perpendicular to the radius through the point of contact.</li> <li>• Difference between tangent and secant</li> <li>• Finding length of tangent using formula</li> <li>• Number of Tangents</li> </ul>	Activity 9	7	

		<p>from a point on a circle</p> <ul style="list-style-type: none"> <li>The lengths of tangents drawn from an external point to a circle are equal.</li> </ul>		6	
Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
November	<p><b>LESSON 11 : AREA RELATED TO CIRCLES</b></p> <p>Problems based on areas and perimeter / circumference of the above said plane figures.</p>	<ul style="list-style-type: none"> <li>Finding length of minor/major arc of circle</li> <li>Area of sectors and segments of a circle.</li> <li>Finding area of major arc and minor arc of a circle</li> </ul>	Activity 10	10	<p>Portion for PT - 2</p> <p>Lesson -8</p> <p>Lesson -9</p> <p>Lesson -10</p> <p>Lesson -11</p>
	<p><b>LESSON 13 : SURFACE AREAS AND VOLUMES</b></p>	<ul style="list-style-type: none"> <li>Surface areas of combinations of any two solids</li> <li>volumes of combinations of any two solids</li> </ul>		8	
December	<p><b>LESSON 13 : STATISTICS</b></p>	<ul style="list-style-type: none"> <li>Finding the mean of Group data</li> <li>Mode of Group Data</li> <li>Median of Group Data</li> </ul>		6	<p>Lesson - ( 01 to 14)</p> <p><b>PREBOARD 01</b></p>
	<p><b>LESSON 14 : PROBABILITY</b></p>	<ul style="list-style-type: none"> <li>Classical definition of probability.</li> <li>Simple problems on finding the probability of an event</li> </ul>		6	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
January + February	REVISION				<b>PREBOARD 2</b>