

**ACADEMIC PLANNER 2017 - 2018**

**Sub : Mathematics**

**Class - X**

DATE	TOPIC	C.W / H.W / ASSIGNMENT	Maths Lab Activity
April 11-15th April (3 days)	<b><u>Ch 1. Real Numbers</u></b> Euclid's Division Lemma	Ex. 1.1	
16- 30th April (12 days)	<b><u>Ch 1. Real Numbers</u></b> The Fundamental Theorem of Arithmetic Irrational Numbers Decimal Expansion of Rational Numbers	Ex. 1.2 to Ex. 1.4	Verify Euclid's Division Lemma
	<b><u>Ch.2 Polynomials</u></b> Geometrical Meaning of the zeroes of a polynomial Relationship between zeroes and coefficients of a Polynomial Division Algorithm for Polynomials	Ex. 2.1 to Ex.2.3	
May 1-15th May (9 days)	<b><u>Ch. 3 Pair of Linear Equations In Two Variables</u></b> Pair of linear equations in two variables Graphical Method of solving a Pair of Linear Equations Substitution Method Elimination Method Cross Multiplication Method Equations Reducible to a Pair of Linear Equations in Two Variables	Ex -3.1 to 3.6	
JULY 1-15th July (11 days)	<b><u>Ch6. Triangles</u></b> Similar Figures BPT Criteria for Similarity of Triangles Areas of Similar Triangles Pythagoras Theorem	Ex - 6.1 to 6.5	To prepare perfect Height Finder.
16- 31st July (10 days)	<b><u>Ch14. Statistics</u></b> Mean of a Grouped Data Median of a Grouped Data Mode of a Grouped Data 'More than' and 'Less than' Ogive	Ex. 14.1 to 14.4	
August 1-15th Aug. (11 days)	<b><u>Ch. 8 Trigonometry</u></b> Trigonometric Ratios Trigonometric Ratios of Some Specific Angles Trigonometric Ratios of Complementary angles Trigonometric Identities	Ex. 8.1 to 8.4	To prepare Angle Calculator.
16 -31st Aug. (14 days)	<b><u>Ch9. Applications of Trigonometry</u></b> Heights And Distances	Ex. 9.1	
	<b><u>Ch 7. Co-ordinate Geometry</u></b> Distance Formula Section Formula Area of a Triangle	Ex. 7.1 to 7.3	

<b>September</b> 1-15th Sept.	<b>Half Yearly Exam</b>		
16-30th Sept. (10 days)	<b>Ch4. Quadratic Equations</b> Introduction of quadratic Equation Solution By Factorisation Method Solution by Completing the Square Nature of roots	Ex. 4.1 to 4.4	To find Geometrically the solution of a Quadratic Equation $ax^2+bx+c=0$ , a 0 (where a=1) by using the method of completing the square.
<b>October</b> 1-15th Oct. (9 days)	<b>Ch5. Arithmetic Progression</b> Introduction of Arithmetic Progressions nth Term of an AP Sum of First n terms of an AP	Ex. 5.1 to 5.3	To verify: (i) $1+3+5+\dots+2n+1 = \frac{n^2}{2}$ (ii) $1+2+3+\dots+n = \frac{n(n+1)}{2}$
16 -31st Oct. (11 days)	<b>Ch13. Surface Areas and Volumes</b> Surface Area and Volume of Combination of Solids Conversions of Solids Frustum of a Cone	Ex.13.1 to 13.4	
<b>November</b> 1-15th Nov. (11 days)	<b>Ch.10 Circles</b> Tangent to a Circle Number of Tangents to a Circle  <b>Ch.12 Area Related to Circles</b> Perimeter and Area of a Circle Areas of Sector and Segment of a circle	Ex.10.1 to 10.2  Ex. 12.1 to 12.2	To verify that lengths of tangents from an external points to a circle are equal by paper folding ,cutting and pasting.
16-30th Nov. (13 days)	<b>Ch.12 Area Related to Circles</b> Applications of areas related to circles  <b>Ch 15 Probability</b> A Theoretical Approach	Ex. 12.3  Ex.15.1	
<b>December</b> 1-15th December (11 days)	<b>Assessment Test</b>		
16-31st December (14 days)	<b>Ch11. Constructions</b> Division of a line Segment Construction of a triangle similar to a given triangle Construction of Tangents to a Circle	Ex. 11.1 to 11.2	
<b>January</b> 15 -31st January (13 days)	<b>Pre- Board Examination</b>		
<b>February</b> 1-15 (12 days)	<b>Revision for Annual Exam</b>		
16-28 (10 days)	<b>Revision for Annual Exam</b>		
<b>TERMWISE SYLLABUS</b>			
<b>Unit Test - I</b>			

**Ch. 1, 2, 3**

**Half Yearly Exam**

**Ch. 1, 2, 3, 6, 8, 9, 14**

**Assessment Test**

**Ch. : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 15**

**Preboard Exam**

**Complete Syllabus**

**Annual Exam**

**Complete Syllabus**