

**ACADEMIC PLANNER 2017-18****Mathematics****Class IX**

<i>DATES/MONTHS</i>	<b>CONCEPT TO BE TAKEN</b>	<b>C.W/H.W./ASSIGN.</b>	<b>Maths lab Activity</b>
<b>APRIL</b>			
1-15 (8 days)	<b>Ch-1 NUMBER SYSTEM</b>  Introduction.  Irrational nos.  Representation of Real nos. on no. line.  Operations on Real Nos.  Laws of exponents for Real Numbers.	EX-1.1  EX-1.2  EX-1.3, 1.4  EX-1.5  EX-1.6	To construct the square root spiral
16-30 (12 days)	<b>Ch-2 POLYNOMIAL</b>  Introduction    Polynomials in one variable Zeroes of a polynomial Remainder Theorem Factor Theorem Factorization Algebraic Identities	EX-2.1    EX-2.2 EX-2.3 EX-2.4  EX-2.5	
<b>MAY</b>			
1-15	<b>Ch-3 COORDINATE GEOMETRY</b>	EX-3.1	

(9 days)	Introduction Cartesian System Plotting of a point	EX-3.2 EX-3.3	
	<b>Ch- 4 LINEAR EQUATION IN TWO VARIABLES</b>  Introduction Formation of Linear equations Solution of Linear equation	EX-4.1 EX-4.2	
<b>JULY</b>			
	<b>Ch- 4 LINEAR EQUATION IN TWO VARIABLES (contd.)</b> Graph of Linear Equation Equations of lines parallel to x-axis and y-axis	EX-4.3 EX-4.4	
1-15 (12 days)			
	<b>Ch- 6 LINES AND ANGLES</b>  Introduction Basic terms and Definition Intersecting and non intersecting lines. Pairs of angles Parallel lines and Transversal	EX-6.1 EX-6.2 EX-6.3 EX-6.4	To find the centroid of a triangle and verify that centroid divides the median in the ratio 2:1
16-31 (13 days)	<b>Ch- 7 Triangles</b> Introduction to congruence. Conditions for Congruence of triangles. Isosceles triangle property RHS congruency rule Inequalities in a triangle	EX-7.1 EX-7.2 EX-7.3 EX-7.4	
<b>AUGUST</b>			

1-15 (10 days)	<b>Ch- 12 HERON'S FORMULA</b> Introduction Area of a triangle when lengths of the sides of a triangle are given. Area of Quadrilaterals by Heron's formula	EX-12.1  EX-12.2	
16-31 (14 days)	<b>Ch- 5 INTRODUCTION TO EUCLID GEOMETRY.</b> Euclid's definitions, Axioms and Postulates. Equivalent versions of Euclid's Fifth Postulate.	EX-5.1  EX-5.2	
<b>Revision for Half Yearly</b>			
<b>SEPTEMBER</b>			
1-15 (11 days)	<i>Half Yearly Examination</i>		
16-30 (10 days)	<b>Ch- 13 SURFACE AREAS VOLUMES</b> Introduction SA of cuboids & cube SA of Right Circular Cylinder. SA of Right Circular Cone. SA of a Sphere.	Ex-13.1 Ex-13.2 Ex -13.3 Ex-13.4	To verify that CSA of cylinder = $2\pi rh$
<b>OCTOBER</b>			
1-15 (9 days)	Volume of Cuboid Volume of Right Circular Cylinder. Volume of Right circular cone Volume of sphere	Ex-13.5  Ex-13.6  EX-13.7 EX-13.8	
16-31	<b>Ch- 14 STATISTICS</b>		

(11 days)	Introduction Frequency Distribution for Grouped & Ungrouped Data. Histogram of uniform width	EX-14.1 EX-14.2	
<b>NOVEMBER</b>			
1-15 (11 days)	Histogram of varying width.	EX-14.3	
	Frequency Polygons Mean, Median , Mode of the ungrouped data	EX-14.3 EX-14.4	
	<b>Ch- 10 CIRCLES</b> Introduction to basic properties and various parts of a circle. Angles subtended by equal arcs at the centre are equal and vice- versa. Perpendicular from the centre to the chord bisects the chord and vice-versa Circle through three given non collinear points. Angle subtended by an arc at the centre. Angle by an arc in the same segment Cyclic Quadrilateral	Ex -10.1  Ex -10.2  Ex-10.3  Ex-10.4  Ex-10.5	To verify that angle subtended by an arc at the centre is double the angle subtended by it on the remaining part of circle.
<b>DECEMBER</b>			
1-15 (11 days)	<b>Ch- 8 QUADRILATERALS</b> Introduction Angle sum property of a quadrilateral		To verify that quadrilateral formed

	Properties of Parallelogram Properties of rectangle Properties of Rhombus Properties of Square Mid point theorem. Converse of Mid point theorem.	EX- 8.1 EX- 8.2	by joining the mid- points of a quadrilateral is a parallelogram
16-31 (12 days)	<b>Ch- 9 AREAS OF PARALLELOGRAM AND TRIANGLES</b> Introduction to figures on Same base & between same parallels Parallelograms on the same base and between same parallels are equal in Area Triangles on the same base & between the same parallels Median of a triangle divides it into 2 triangles of equal area	Ex -9.1 Ex -9.2 Ex -9.3	To verify that if a parallelogram and triangle are on the same base and between same parallels, then area of triangle is half of area of parallelogram.
16-30 (13 days)	<b>Ch- 11 CONSTRUCTIONS</b> Introduction Basic constructions Construction of triangles When sum of two sides is given. When difference of two sides is given. <b>Ch- 15 PROBABILITY</b> Introduction Probability	EX-11.1 EX-11.2 Ex-15.1	
<b>JANURARY</b>			

1 - 15 (1 day)	<b>Mock Test</b>
16-31 (13 days)	
<b>FEBRUARY</b>	
1-15 (11 days)	<b>Revision for Annual Exams</b>
16-28 (11 days)	<b>Annual Examination</b>
<b>TERMWISE SYLLABUS</b>	
Unit Test - 1	Chapter-1,2,3,4
Half yearly	Chapter-1,2,3,4,5,6,7,12
Unit Test - 2	Chapter-10,13,14
Mock Test	Chapter-8,9,10,11,13,14,15
Annual Exams	Chapter-1,2,3,4,5,6,7,8,9,10,11,12,13,14,15