BAGARIA BAL VIDYA NIKETAN
LAXMANGARH SIKAR
SYLLABUS & LESSON PLANNER - 2024-2025

Class:-	**X**
Subject:-	**MATHEMATICS**
Teacher Name:-	**PRAVEEN**

SYLLABUS

Ch. No.[UNIT]	NAME OF BOOKS	Name of Chapter	Working Day	Period	Topic	Month	Week
Number system Unit - 01	NCERT	Number systems	23	30	Fundamental theorem of Arithmetic- Statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality.	April	1,2
Algebra Unit - 02	NCERT	Polynomials			Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials. Solutions by substitution,by elimination,simple situational problems.		3,4
	NCERT	Pair of linear equations in two variables	13	17	Pair of linear equations in two variable and Graphical method of their solution, consistency/inconsistency.	May	1
	NCERT	Quadratic equations			Standard form of a quadratic equations. Solutions of quadratic Equations by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots.		2
	NCERT	Arithmetic Progressions	11	14	Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first terms of A.P. and their application in solving daily life problems.	june	1,2
Coordinate Geometry Unit - 3	NCERT	Coordinate Geometry			Concepts of coordinate geometry, graphs of linear equations, Distance formula, Section formula.		1

Geometry Unit - 4	NCERT	Triangles	26	34	Definitions, examples, counter examples of similar triangles. Prove:- If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio. A line divides two sides of a triangle in the same ratio, the line is parallel to the third side. (3,4,5)	july	2,3
	NCERT	Circles			Tangent to a circle at, point of contact The tangent at any point of a circle is perpendicular to the radius through the point of contact. The lengths of tangents drawn form an external point to a circle are equal.		4
Trigonometry Unit - 5	NCERT	Introduction to trigonometry	24	32	Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence motivate the ratios whichever are defined at 0 and 90. values of the trigonometic ratios.	august	1
	NCERT	Trigonometric Identities			Proof and applications of the identities. Only simple identites to be given.		2, 3
	NCERT	Heights and distance			Simple problems on heights and distances, Problems should not involve more than two right triangles. Angles of elevation/depression.		4
Mensuration Unit - 6	NCERT	Areas related to circles	23	30	Areas of sectors and segments of a circle. Problems based on areas and perimeter/ circumference of the above said plane figures.	september	1, 2
	NCERT	Surface areas and volumes			Surface areas and volumes of combinations of any two of the following:-Cubes, Cuboids, spheres, hemispheres and right circular cylinders/cones.		3,4
syllabus break due to exam period and holidays in the month of october							
Statistics and probability Unit - 7	NCERT	Statistics	23	30	Mean, Median and mode of grouped data.	november	1, 2
		Probability			Classical definition of probability. Simple problems on finding the probability of an event.		3, 4