BAGARIA BAL VIDYA NIKETAN

LAXMANGARH-SIKAR

SYLLABUS & LESSON PLANNER-2024-25

Class:-	IX
Subject:-	MATHEMATICS
Teacher Name:-	VIRENDRA KUMAR SONI

SYLLABUS

Ch.No	NAME OF BOOKS	Name of Chapter	working day	Period	Topic	Month	Week
CH 1 CH 2	N.C.E.R.T	NUMBER SYSTEMS POLINOMIALS	23	30	CH 1 Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers, Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$ and their representation on the number line. Definition of the nth root of a real number., Rationalization (with precise meaning) of real numbers of type $1/(a+b\sqrt{x})$ and $1/(\sqrt{x}+\sqrt{y})$ (and their combinations) where x and y are natural numbers and a and b are integers.	April	1 2 3 4
CH 3	N.C.E.R.T	COORDINATE GEOMETRY	13	1	CH 3 The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, and notations.	May	1,2
CH 4		LINEAR EQUATION IN TWO VARIABLES	11	14	CH 4 Recall of linear equations in one variable. Introduction to the equation in two variables. Focus on linear equations of the type axe + by + c=0. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line.	June	1,2
CH 5	N.C.E.R.T	INTRODUCTION TO EUCLID'S GEOMETRY			CH 5 History – Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomena into rigorous Mathematics with		1 2 3

CH 6		LINES AND ANGLES	26	34	definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Showing the relationship between axiom and theorem, for example: (Axiom), Given two distinct points, there exists one and only one line through them. (Theorem), (Prove) Two distinct lines cannot have more than one point in common	July	4
CH 7 CH8		TRIANGLES QUADRILATERALS	24	32	CH 7 (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence)., (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence)., (Motivate) Two triangles are congruent if the three sides of one triangle are equal to the three sides of the other triangle (SSS Congruence)., (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence).	August	1 2 3 4
CH 9	N.C.E.R.T	CIRCLES	23	30	CH 9 (Prove) Equal chords of a circle subtend equal angles at the centre and (motivate) its converse., (Motivate) The perpendicular from the centre of a circle to a chord bisects the chord and conversely, the line drawn through the centre of a circle to bisect a chord is perpendicular to the chord., (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the centre (or their respective centres) and conversely., (Prove) The angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle., (Motivate) Angles in the same segment of a circle are equal.	September	1,2,3,4
Syllabus Break due to Exam Period and Holidays in the month of October							
CH 10	N.C.E.R.T	HERON'S FORMULA	23	30	CH 10 Area of a triangle using Heron's formula (without proof).	November	1,2,3,4
CH 12	N.C.E.R.T	STATISTICS	23	30	CH 12 Bar graphs, histograms (with varying base lengths), and frequency polygons.	December	1,2,3,4