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

Class:-	XI-SCI.
Subject:-	MATHEMATICS
Teacher Name:-	PRAVEEN

SYLLABUS

Ch. No.	NAME OF BOOKS	Name of Chapter	Working Day	Period	Topic	Month	Week
Sets and Functions Unit – 01	NCERT	Sets	23	30	Unit – 01 Sets and their representations Empty set, Finite and Infinite sets, Equal sets, Subsets Venn Diagrams	April	1,2
		Relations & Functions			Ordered Pairs, Cartesian Product of Sets, Cartesian Product of the set of reals with itself, Pictorial diagrams, Domain, Co-domain and Range of a relation, Real valued functions, modules, signum, exponential, logarithmic and greatest integer functions.		3,4
		Trigonometric Functions	13	17	Positive and Negative angles, Measuring angles in radians and in degrees and conversion from one measure, Signs of trigonometric functions, Domain and range of trigonometric functions and their graphs, Identities of trigonomtrics functions.	May	1,2
		Complex Numbers and Quadratic Equations	11	14	Need for compex numbers, especialy $\sqrt{-1}$, Algebraic properties of complex numbers	june	1,2

Algebra Unit - 02			Linear Inequalities	26	34	Algebraic solutions of linear inequalities in one variable and their representation on the number line	july	1
			Permutations and Combinations			fundamental principle of counting, factorial n, permutations and combinations, derivation of formula		2
			sequence and series			arithmatic mean, geometric progression, sum of n terms of a G.P., relation between A.M. and G.M.		3
			Binomial Theorem			historical perspective , statement and proof of the binomial theorem for positive integral indices		4
Coordinate Geometry Unit - 03			Straight Lines	24	32	slope of a line and angle between two lines, various forms of equation of a line;parallel to axis, slope of intersept, distance of a point from a line	august	1
			Conic Sections			sections of a cone, circles, ellipse, papabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section.		2, 3
			Introductions to Three-dimensional Geometry			coordinate axes and coordinate planes in 3-D, coordinate of a point, distance between two points		4

Calculus Unit – 04		Limits and Derivatives	23	30	derivatives introduced as a rate of change both as that of distance function and geometrically, limits of polynomials and rational functions, trignomatric exponential and logarithmic functions, tangent of curve, derivatives of sums, derivative of functions	september	1, 2, 3, 4
syllabus break due to exam period and holidays in the month of october							
Statistics and Probability Unit - 05		Statistics	23	30	Measure of dispersion :range, mean deviation,variance and standard deviation .	november	1, 2
		Probability			Events , occurrence of events, 'not', 'and' and 'or ' events, probability of an event, probability of 'not', 'and' and 'or' events		3, 4