NEW ERA SENIOR SECONDARY SCHOOL, NIZAMPURA , VADODARA.
MATHS SYLLABUS CLASS-XI 2025-26

MONTH	No. OF DAYS	CHAPTER
APRIL	**22**	**# Sets** (1) * Sets & their representation * Empty Set, Infinite & finite set, Power set, Universal set * Venn Diagram * Union & Intersection sets Difference of sets, Complement of set **# Relations & Functions (2)** * Cartesian Product of sets * Definition of Relation, Domain Co- domain, Range * Function, Real valued function of real variable * Types of function & Sum, Diff., Product & Quotient of fn
MAY	**03**	**# Relations & Functions (contd.) (2)**
JUNE	**18**	**# Trigonometric Functions(3)** ***** Positive & Negative Angles. * Measuring angles in radians and in degrees & conversion * Signs of trigo functions, Basic identities * Expression of trigo fn in the form X±Y, 2X, 3X, * Deduction of identities of sinx ± siny & for other functions
JULY	**26**	**# Trigonometric Function continue** **# Complex numbers & Quadratic equation(4)** * Need for complex numbers, * Operation on complex numbers * Argand plane and polar representation of complex numbers * Solution of quadratic equations in complex number system # **Linear Inequalities (5)** ***** Linear Inequalities & its Algebraic solution in one variable * Graphical solution of L.E. in two variables
AUGUST	**22**	**# Linear Inequalities continue** # **Permutations & Combinations (6)** * Fundamental principle of counting * Factorial n * Permutations and combination * Derivation of formulae and their connections * Simple applications **# Binomial Theorem (7)** ***** Statement & proof of the binomial theorem * Pascal's triangle * General & middle term in binomial exp. & its application
SEPTEMBER	**23**	**# Binomial Theorem continue** **# Sequence & Series (8)** ***** Introduction to Sequence & Series * Arithmetic Progression, Geometric Progression,

		* Relation between A.M. & G.M. * Sum of n terms of special series # **Straight lines (9)** ***** Slope of a line & angle between two lines * Various forms of lines : - Parallel to axes - Slope – intercept form - Point-slope form - Intercept form - Slope – intercept form - Normal form - Two point form * General equation of line & distance of point from line
OCTOBER	**11**	**# Straight Lines Continue** # **Conic Section (10)** ***** Circle : General equation of circle, equation of circle when radius & centre of circle is given, Intersection of circle with line & co-ordinate axes, simple application * Parabola : Introduction, definition, symmetry, Equation of parabola, Latus Rectum. * Ellipse : Definition, Eccentricity, Relation between const a, b, c. Standard equation of ellipse, latus Rectum * Hyperbola : Definition, Eccentricity, Standard equation, latus Rectum.
NOVEMBER	**21**	**# Conic Section Continue** # **Three Dimensional Geometry (11)** ***** Coordinate axes & coordinate planes in three dimensions,
DECEMBER	**23**	# **Limits & Derivatives (12)** ***** Introduction to limit & limits of function * Definition of derivative * Derivative by first principle * Derivative of sum, difference, product & quotient * Derivative of polynomial and trigonometric functions # **Statistics (13)** ***** Measure of dispersion : Mean deviation, variance, and standard deviation * Analysis of frequency distributions with equal means but different variances.
JANUARY	**25**	**# Statistics Continue** # **Probability (14)** ***** Random experiments, outcomes, sample space, event * Axiomatic approach of probability * Probability of ‘not’ & ‘or’ events

FEBRUARY	**22**	**# Probability continue**
MARCH		**# Annual Exam**