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

MONTH	No. OF DAYS	CHAPTER
April + May	22 + 3	**Numbers & Quantification** ➢ **Prime Numbers, Encryptions using Prime Numbers** ➢ **Binary Numbers** ➢ **Complex Numbers** ➢ **Indices, Logarithm and Antilogarithm, applications of logarithm and antilogarithm** ➢ **Numerical Applications: Averages, Clock, Calendar, Time, Work and Distance, Mensuration, Seating arrangement**
JUNE	**18**	**Algebra** ➢ **Introduction to sets – definition, Types of sets and their notations, Subsets, Intervals, Venn diagrams, Operations on sets, Ordered pairs Cartesian product of two sets,** ➢ **Relations, Types of relations** **Sequences and Series** ➢ **Arithmetic Progression, Geometric Progression, Application**
JULY	**26**	**Permutations and Combinations** ➢ **Factorial, Fundamental Principle of Counting, Permutations with restrictions, Circular permutation, Combinations, Combination with repetition** **Mathematical reasoning** ➢ **Mathematical reasoning, Logical reasoning**
AUGUST	**22**	**Calculus** ➢ **Functions, Domain and Range of a function, Types of** ➢ **Functions, Graphical representation of functions, Concepts of** ➢ **limits and continuity of a function,** ➢ **Instantaneous rate of change, Differentiation as a process of finding derivative, Derivatives of algebraic functions using Chain Rule,** ➢ **Tangent line and Equation of tangent,**
SEPTEMBER	**23**	**Calculus (cont)** **Probability** ➢ **Introduction, Random experiment and sample space, Event, Conditional Probability, Total Probability, Bayes' Theorem**
OCTOBER	**11**	**Descriptive Statistics** ➢ **Types of data, Data on various scales, Data representation and data visualization, Measure of Central Tendency, Measure of Dispersion, Skewness and Kurtosis, Percentile rank and Quartile rank, Correlation,**
NOVEMBER	**21**	**Descriptive Statistics (Cont.)**

DECEMBER	**23**	**Financial Mathematics** ➢ **Interest and Interest Rates, Accumulation with simple and compound interest, Simple and compound interest rates with equivalency,** ➢ **Effective rate of interest, Present value, net present value and future value,**
JANUARY	**25**	**Coordinate Geometry** ➢ **Straight line** ➢ **Circle** ➢ **Parabola**
FEBRUARY	**23**	Revision and Annual Exams