

ARMY PUBLIC SCHOOL, BANGALORE
CURRICULUM (MONTHWISE) 2025-26

CLASS - XI
SUBJECT- MATHEMATICS

SL. NO.	MONTH	CONTENT
1.	APRIL	
2.	JUNE	SETS: Sets and their representations, types of Sets, Universal set, Venn diagram, Union of sets, Intersection of sets, difference of sets, Complement of a set, Properties of complement. RELATIONS AND FUNCTIONS: Ordered pairs, Cartesian product of sets, Definition of Relations, domain, range, co-domain. Types of Real valued function, Algebra of functions.
3.	JULY	TRIGONOMETRIC FUNCTIONS: Angles and their types, Conversion of degree and radian measures, Signs of trigonometric functions, Domain and Range of trigonometric functions and their graphs. Compound angle formula and their simple applications, Trigonometric functions transformation and multiple angle identities, simple applications. COMPLEX NUMBERS AND QUADRATIC EQUATIONS: Need for Complex number, Complex number as a combination of real and imaginary terms, Algebraic properties of complex numbers, Argand plane.
4.	AUG	LINEAR INEQUALITIES: Algebraic solutions of linear inequalities in one variable and their representation on the number line. PERMUTATIONS AND COMBINATIONS: Fundamental principle of counting, Factorial, Permutations, Combinations and their simple applications.

5.	SEPT	BINOMIAL THEOREM: Statement and proof of the Binomial theorem, Pascal's triangle, simple applications.
6.	OCT	SEQUENCES AND SERIES: Arithmetic mean, Geometric Progression – general term, sum of n terms, infinite G.P. and its sum, Geometric mean, relation between A.M. and G.M. STRAIGHT LINES: Slope of a line, Angle between two lines, Various forms of a line, Distance between a point and a line.
7.	NOV	CONIC SECTIONS: Sections of a cone: Circles, Parabola, Ellipse, Hyperbola, Standard equations and their simple applications. INTRODUCTION TO THREE - DIMENSIONAL GEOMETRY: Coordinate axes and Coordinate plane in 3D, coordinates of a point, Distance between two points.
8.	DEC	LIMITS AND DERIVATIVES: Derivatives introduced as rate of change, intuitive idea of limit, Limits of different types of functions, Relating derivative with tangent of the curve, algebra of derivatives, derivatives of polynomial and trigonometric functions. STATISTICS: Measures of dispersion, Range, Mean deviation, Standard deviation and variance of ungrouped and grouped data.
9.	JAN	PROBABILITY: Events, types of events, Axiomatic probability, Probability of an event.
10.	FEB	REVISION FOR ANNUAL EXAMINATION

11.	MARCH	
-----	--------------	--

BOOKS: NCERT TEXBOOK PART I AND PART II

NCERT EXEMPLAR TEXBOOK

REFERENCE: R D SHARMA, DHANPAT RAI PUBLICATIONS.

M L AGGARWAL, APC BOOKS.