

SYLLABUS for Grade - 7:

A.	SIMPLIFICATION
1.	Simplification using: • D- MAS • BODMAS
2.	Fractions
3.	Operations of Fractions
4.	Decimals
5.	Operations of Decimals
6.	Integers
7.	Operations of Integers
8.	Squares and Square Root
9.	Cube and Cube Root
10.	Exponents and Powers
B.	NUMBER SYSTEM
1.	Rational Number
2.	Binary System
C.	ARITHMETIC
1.	Ratio and Proportion
2.	Unitary Method
3.	Chain Rule
4.	Direct and Inverse Variation
5.	Average
6.	Percentage
7.	Alligation and Mixture
8.	Pipes and Cisterns

D.	EQUATIONS AND INEQUATIONS
1.	Linear Equation in One Variable
2.	Linear Equations in Two Variables (Basic – Intermediate)
3.	Word Problems Based on Linear Equation in One Variable
4.	Quadratic Equations (Basic – Intermediate)
E.	PROGRESSIONS
1.	Arithmetic Progressions
2.	Geometric Progressions
F.	SPEED, DISTANCE AND TIME
1.	Problems on Speed, Distance and Time
2.	Problem based on Trains
3.	Problem based on Boat
4.	Problem based on Streams (Up Stream/ Down Stream)
G.	COMMERCIAL MATHEMATICS
1.	Partnership
2.	Profit and Loss
3.	Discount
4.	Simple Interest
5.	Compound Interest
6.	Time and Work
7.	Work and Wages
H.	ALGEBRA

1.	Concepts of Algebra
2.	Operations on Algebraic Expressions
3.	Algebraic Identities
4.	Expansion of Algebraic Equations
5.	Factorization
6.	Factorization of Algebraic Expressions
I.	GEOMETRY
1.	Introduction to Geometry
2.	Lines and Angles
3.	Triangles
4.	Circles
5.	Quadrilaterals
6.	Polygons
J.	VOLUME AND SURFACE AREA
1.	Areas and Perimeter
2.	Volume and Surface Area (Basic – Intermediate)
3.	Pythagoras Theorem (Basic – Intermediate)
4.	Mensuration
K.	COORDINATE GEOMETRY
1.	Basics of Coordinate Geometry
2.	Mid- Point and Intercept Theorems
3.	Reflection
4.	Section and Mid – Point Formula
5.	Equation of a Straight Line

L.	STATISTICS
1.	Measures of Central Tendency (Mean)
2.	Median, Quartiles and Mode
M.	PROBABILITY
1.	Problems on Probability (Basic – Intermediate)