

# SYLLABUS for ROOTS

## Topics for CUBE ROOTS Section (Std 5th and 6th together)

The students will be tested on their numerical ability, addition, subtraction, multiplication, division, fractions, decimals, divisibility tests, primes and composites, factors and multiples, LCM and HCF, change of bases from base 10 to some other base and vice versa, Integers, Basic geometry of circles, rectangles, squares, triangles, properties of angles of a triangle, quadrilateral and polygons. Alphamatics problems where digits are replaced by letters will be included. Knowledge of division algorithm will also be tested. Elementary counting problems and Puzzles involving logic may be included.

## Topics for SQUARE ROOT Section (Std 7th and 8th together)

Primes and Composites, Number of divisors of a number, LCM, GCD and their properties, Rational numbers and their properties, Time and distance, ratio and proportion, Integers, Basic algebra, laws of exponents, algebraic identities, expanding and factoring algebraic expressions, Modulo Arithmetic, Basic counting problems, Special quadrilaterals such as rectangle, square, parallelogram, rhombus, trapezium, simple properties of triangles such as isosceles and right triangles, Locus problems (Perpendicular bisector of a line segment and angle bisector), circumcentre, incentre, orthocentre and centroid and their properties, arcs and subtended angles and mensuration.



THE DEEPER YOU GO, THE MORE YOU GROW