Advance Maths

Class Schedule

Days	Number System
12 Days	• Fundamental of numbers • Divisibility rules • Factor theorem • Remainder theorem Level – I Level – II • Unit digit & Ten digit • Number of Zeros at end place • LCM & HCF • Mixed concepts of LCM & HCF • AP & GP Based question • Surds and Indices • Sequence & series • Algebraic simplification Level – I Level – II
	Algebra
12 Days	• Basic Fundamental of Algebra • Linear equation • Quadratic & cubic equation • Relation between the roots • Factor theorem • Algebraic identities Level – I Level – II Level – III • Questions based on Algebraic functions • Algebraic equations & polynomial • Concept of symmetricity • Zero method • Maxima & minima • Algebraic inequalities
	Trigonometry
12 Days	• Basic fundamental • Trigonometric ratios • Trigonometric relation • Trigonometric identities • Algebraic concepts of trigonometry • Trigonometry equation • Maxima & Minima • Height & distance Level – I Level – II Level - III

	Mensuration
15 Days	a. Basic fundamental of 2D • Area, Area of shaded portion Level – I Level – II Level – III Level – IV Level – V b. Basic Fundamental of 3D • Cube & Cuboid • Cylinder • Cone & frustrum • Sphere & Mixed 3D • Prism • Pyramid & tetrahedron
	Geometry

20 Days	a. Lines & Angles (Basic) • Lines & Angles (Advance Level) b. Triangles • Basic properties of triangles • In equalities of triangles • Centre of triangles - Incentre - Circumcenter - Orthocenter - Centroid, etc… • Equilateral • Right angle triangle • Isosceles triangle • Congruency & similarity • Theorems of similarity & congruency c. Quadrilateral d. Square e. Rectangle f. Parallelogram & rhombus g. Trapezium & kite h. Polygon i. Circle & its properties • Basic • Medium • High j. Mass point geometry (M.P.G.) **Co-ordinate Geometry** • Basic concept of co-ordinate geometry • Distance formula & Section formula • Equation of straight lines • Slop of line • Parallel and perpendicular lines • Area of triangle and quadrilateral • Locus • Mirror image of a point & lines

Arithmetic Maths

	Ratio and Proportion
2 Days	• Properties of Ratio • Basic Ratio • Proportion and Variation • Ratio of two and More than two Numbers • Percentage change in Ratio • Changes Ratio in sum of two or more variables • Questions based on Coins • Questions based on proportion • Questions based on Income expenditure • Mescellaneous and PYP
	Partnership
2 Days	• Basic concepts on Partnership • When time duration be constant • Different partner invests different amount for different time period • Questions based on different Profit Ratio • Sleeping and active partners • Mescellaneous and PYP
	Allegations

2 Days	• Diagram Representation • Average • Mixture • Ratio • Percentage • Profit and Loss • Milk and water • Time and Distance • Simple Interest • Mescellaneous
	Mixture
3 Days	• Basic concept of mixture • Milk and Water Mixture Problem • Container Sizes are Different • Add water into Mixture • Some Liquid is Taken out • Successive change in Liquid • Miscellaneous and PYP
	Average
2 Days	• Properties of averages • Important Formulae • Basic concept • Weighted Average • Change average because of, one data is missing or count twice • Average Change due to New entry • Problems based on Ages • Question based on cricket • Mescellaneous and PYP
	Ages
2 Days	• Past, Present and Future Ratio Related problems • Sum of Ages • Product and ages • Tricky Language Based questions • Mescellaneous and PYP
	Time and work
5 Days	• Basic Concept • One day work concept • All work together • Man Leves the job • Man or woman or child type question • Man and woman – equation based questions • Efficiency

	• Work on percentage basis • Work on alternate process • Work and wages • Mescellaneous and PYP
	Pipe and Cistern
2 Days	• Basic concept of Pipe and cistern • Alternate method • Questions based on Efficiency • Inlet and outlet together • Mescellaneous and PYP
	Time, Speed and Distance
5 Days	**a. Motion equation** • Distance = Speed x Time • Average speed • Change in time according to speed • Speed and time, relation • Relative motion with two or more bodies • Continue Motion between to points • Questions based on Jodi breaker concept • Direct formulas
	b. Trains
	c. Race and games
	d. Boats and Streams e. miscellaneous and PYP
	Simple Interest
2 Days	• Basic Concept • Amount Principal • Interest change due to change in principal, change in rate, change in time • Principal and Amounts both are Given • Equations Based • Simple interest change According to Principal • Ratio of Amount • **Concept of Installments** • Miscellaneous and PYP
2 Days	**Compound Interest** • Basic Question • Change in Principal According to Time • If a sum becomes x times in t years at CI then it will be ( ) times in (x t) years. • Difference Between CI and SI • Ratio of CI and SI • Principle added to each year • Concept of Installment Mescellaneous and PYP
5 Days	**Percentage**

	• Fraction & its application • Relation between Fraction & percentage • Basic concepts of percentage • Questions based on JSM method • Percentage change • Application percentage change • Robin hood concept • Concepts of Product constancy • Percentage Increase/ decrease • Successive Increase or Decrease • Jodi breaker concept • Population Growth • Questions based on Elections • Quantity is Taken/ added successively • Percentage change – Evaporates/ Added • Pass/Fail in Exam Miscellaneous and PYP
	Profit & Loss
6 Days	• Basic concept of CP and SP • SP and CP equations • Cost Price and Selling Price are changed • Questions based on Fractional • Successive concept • Difference between CP and SP • Dishonest seller • Profit on selling Price • Article Passing through successively • Article sold on same selling Price • Equations Based on Profit and loss • Miscellaneous • Discount • Mark Price and Discount Miscellaneous and PYP
	Data interpretation
1 Day	• Pie chart • Bar graph