Arithmetic Maths

Class Schedule

Sl. No.	Topic
	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
	• 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
	Simple Interest
	• 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
	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 $(x)^n$ times in (n x t) years. • Difference Between CI and SI • Ratio of CI and SI • Principle added to each year • Concept of Installment • Mescellaneous and PYP
	Ratio and Proportion
	• 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
	• 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

	• Diagram Representation • Average • Mixture • Ratio • Percentage • Profit and Loss • Milk and water • Time and Distance • Simple Interest • Mescellaneous
	Mixture
	• 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
	• 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
	• Past, Present and Future Ratio Related problems • Sum of Ages • Product and ages • Tricky Language Based questions • Mescellaneous and PYP
	Time and work
	• 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
	• Basic concept of Pipe and cistern • Alternate method • Questions based on Efficiency • Inlet and outlet together • Mescellaneous and PYP
	Time, Speed and Distance
	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
	Basic concept of permutations and combinations
	Probability
	Data interpretation
	• Pie chart • Bar graph • Line graph • Tabular form • Caselet form • Radar/web • Missing Data interpretation • Data interpretation

Advance Maths

Class Schedule

Sl. No.	Topic
	Geometry
	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.)
	Previous year paper Discussion
	Mensuration

	a. Basic fundamental of 2D
	• Area, Area of shaded portion
	  Level – I
	  Level – II
	  Level – III
	  Leve – IV
	  Level - V

	Previous year paper Discussion
	b. Basic Fundamental of 3D • Cube & Cuboid • Cylinder • Cone & frustrum • Sphere & Mixed 3D • Prism • Pyramid & tetrahedron
	Previous year paper Discussion
	Trigonometry

	• Basic fundamental
	• Trigonometric ratios
	• Trigonometric relation
	• Trigonometric identities
	• Algebraic concepts of trigonometry
	• Trigonometry equation
	• Maxima & Minima
	• Height & distance
	  Level – I
	  Level – II
	  Level - III

	Previous year paper Discussion
	Number System

	• 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

	Previous year paper Discussion
	Algebra
	• 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

	Previous year paper Discussion
	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
	Previous year paper Discussion