

**ADITYA BIRLA VANI BHARATI**  
**SYLLABUS FOR ADMISSION TEST, 2022-23**  
**SUBJECT: MATHEMATICS**

**CLASS I**

- 1) 1 to 100
  - a) In numbers and words
  - b) After, before and between numbers.
- 2) Addition and Subtraction [ Single Digit]
- 3) Basic Shapes

**CLASS II**

- 1) Numbers (1 to 100)
  - a) Forward and backward counting
  - b) Before, after and between
  - c) Ascending- Descending numbers
- 2) Patterns
  - a) Alphabets
  - b) Digits
  - c) Shapes
- 3) Addition and Subtraction [ Two-digit numbers]

**CLASS III**

- 1) Counting in groups (ordering numbers, greatest and smallest numbers, Numbers in expanded form and select form)
- 2) Addition and Subtraction of Two-digit numbers.
- 3) My Fundays (Days, Weeks and Months)

**CLASS IV**

- 1) Fun with Numbers [3-digit numbers]
  - a) Counting by 2s, 3s, 5s and 10s
  - b) Expanding form and Place value
  - c) Ascending and Descending order
- 2) Arithmetical Operations
  - a) Addition
  - b) Subtraction
  - c) Multiplication [Two rows]
  - d) Division
- 3) Two dimensional shapes

**Class 5**

1. Measurements
  - I. Conversion of units
  - II. Addition
  - III. Subtraction

- IV. Word Problems
- 2. Clock
  - I. Reading a clock
  - II. Elapsed Time
  - III. 24 Hour clock
  - IV. Time in Real Life Situations
- 3. Calendar
  - I. Days, Months and years
  - II. Writing dates
  - III. Real time situation of calendar
- 4. Fraction
  - I. Numerator and denominator
  - II. Reading and writing fractions
  - III. Word problems

### Class VI

- 1. Operations on large numbers
  - I. Addition of large numbers
  - II. Subtraction of large numbers
  - III. Multiplication of large numbers
  - IV. Division of large numbers
  - V. Word problems
- 2. Factors and multiples
  - I. Test of divisibility
  - II. HCF by prime factorization method, short division and long division method
  - III. LCM by listing the multiples by prime factorisation and by short division method
  - IV. Relationship between HCF and LCM
  - V. Word Problems
- 3. Fractions
  - I. Addition of fractions
  - II. Subtraction of fractions
  - III. Multiplication of fractions
  - IV. Division of fractions
  - V. Simplifying fraction using the BODMAS rule
  - VI. Word problems
- 4. Decimals
  - I. Reading and writing decimal numbers
  - II. Expanded form for decimal numbers
  - III. Addition of decimal numbers
  - IV. Subtraction of decimal numbers
  - V. Multiplication of a decimal number
  - VI. Division of a decimal number by decimal number
  - VII. Estimation (Rounding off) of decimals

## CLASS VII

### TOPIC 1: Number System:

- Sub Topics :-
- i) Knowing Our Numbers
  - ii) Whole Numbers
  - iii) Playing with Numbers

### Topic 2: Geometry:

- Sub Topics :-
- i) Basic Geometrical Ideas
  - ii) Understanding Elementary Shapes

### Topic 3:- Integers:

- Sub Topics :-
- i) Representation on Number Line
  - ii) Addition of Integers
  - iii) Subtraction of Integers

### Topic 4: Fractions:

- Sub Topics :-
- i) Representation on Number Line
  - ii) Proper, Improper and Mixed fractions
  - iii) Equivalent fractions, Simple Forms of Fractions, Like-Unlike fractions
  - iv) Addition and Subtraction of Fractions

### Topic 5: Decimals:

- Sub Topics:-
- i) Representation on Number Line
  - ii) Fractions and Decimals
  - iii) Comparing Decimals
  - iv) Addition and Subtraction of Decimals

## CLASS VIII

1. Simple equations
  - I. Meaning of simple equation
  - II. Setting up of an equation
  - III. Converting equations in statement form
  - IV. Solving an equation
  - V. Applications of simple equation to practical situations
2. Fractions and decimals
  - I. Types of fractions
  - II. Equivalent fractions
  - III. Addition, subtraction, multiplication and division of fractions
  - IV. Conversion of decimal numbers
  - V. Comparison of decimal numbers
  - VI. Multiplication and division of decimal numbers
  - VII. Applications of fractions and decimals to practical situations
3. Rational numbers
  - I. Positive and negative rational numbers
  - II. Rational numbers on a number line
  - III. Rational numbers in standard form
  - IV. Comparison of rational numbers
  - V. Rational numbers between two rational numbers
  - VI. Addition, subtraction, multiplication and division of rational numbers
4. The Triangle and its properties
  - I. Medians and altitudes of a triangle
  - II. Exterior angle of a triangle and its properties
  - III. Angle sum property of a triangle
  - IV. Equilateral and isosceles triangles
  - V. Some of the lengths of two sides of a triangle
  - VI. Right-angled triangles and Pythagoras property
5. Comparing Quantities
  - I. Ratio
  - II. Percentage
  - III. Profit and loss
  - IV. Simple interest