



NTPC (Gf)  
NTPC (UN)  
2019-2025

SSC CGL

class-1

# STRATEGY TO PREPARE APTITUDE & REASONING

10am - GA

**SSC/RRB/BANK**

Concept  
Variety on  
PVA

## APTITUDE (QUANTITATIVE APTITUDE) TOPICS

FOR RRB / SSC / BANK EXAMS

★ COMPLETE LIST OF TOPICS TO BE COVERED ★

**1 NUMBER SYSTEM** 123

- Natural Numbers, Whole Numbers
- Integers, Rational Numbers
- Irrational Numbers, Real Numbers
- Even & Odd Numbers
- Prime & Composite Numbers
- Co-prime Numbers
- Factors & Multiples
- Divisibility Rules
- HCF (GCD) & LCM
- Remainders, Cyclicity
- Unit Digit, Last Two Digits
- Surds & Indices
- Simplification, BODMAS

$1+2=$

**2 ARITHMETIC**

- Percentage (Basic, Increase/Decrease, Successive, Population Growth)
- Ratio & Proportion (Direct, Inverse)
- Partnership
- Average (Simple, Weighted)
- Profit, Loss & Discount
- Simple Interest (SI)
- Compound Interest (CI)
- Time & Work (Efficiency, Distribution, Alternate Days, Work & Wages)
- Pipes & Cisterns
- Time, Speed & Distance (Trains, Boats & Streams, Circular Track)
- Ages (Present, Past, Future)
- Mixture & Alligation
- Calendar (Odd Days, Day of Week)
- Clock (Angle Problems, Gain/Loss of Time)

**3 ALGEBRA**  $x^2$

- Algebraic Identities
- Factorization
- Polynomials
- Linear Equations (One Variable)
- Simultaneous Equations (Two Variables)
- Quadratic Equations
- Inequalities
- Functions (Basic - Rare)
- Logarithms (Bank PO Level)

$ax^2+bx+c=0$

Advance maths

Qdv  
m qd

**4 GEOMETRY**

**Lines & Angles**

- Complementary Angles
- Supplementary Angles
- Parallel Lines

**Triangles**

- Congruency, Similarity
- Pythagoras Theorem
- Area of Triangle

**Quadrilaterals**

- Square, Rectangle, Rhombus
- Trapezium, Parallelogram

**Circles**

- Chords, Tangents, Arcs, Sector

**Coordinate Geometry**

- Distance Formula
- Midpoint Formula

**5 MENSURATION**

**2D (Area & Perimeter)**

- Square
- Rectangle
- Triangle
- Circle
- Semicircle
- Sector

**3D (Surface Area & Volume)**

- Cube
- Cuboid
- Cylinder
- Cone
- Sphere
- Hemisphere

Rhos  
T  
Pz

**6 TRIGONOMETRY**

- Trigonometric Ratios  
 $\sin \theta, \cos \theta, \tan \theta, \cot \theta, \sec \theta, \operatorname{cosec} \theta$
- Standard Values  
 $0^\circ, 30^\circ, 45^\circ, 60^\circ, 90^\circ$
- Trigonometric Identities  
Fundamental Identities
- Heights & Distances

**7 DATA INTERPRETATION**

- Table DI
- Bar Graph DI
- Pie Chart DI
- Line Graph DI
- Mixed Graph DI
- Caselet DI
- Missing DI
- Radar DI

**8 DATA SUFFICIENCY**

- Two Statements
- Three Statements
- Quantity Comparison

(Mostly in Banking Mains)

**9 STATISTICS**

- Measures of Central Tendency (Mean, Median, Mode)
- Graph Interpretation
- Frequency Distribution

RRB  
SSC

(Mainly SSC CGL Tier-II)



**10 PROBABILITY**

- Basic Probability
- Coins
- Dice
- Cards
- Conditional Probability  
*(Bank PO Level)*

**11 PERMUTATION & COMBINATION (P & C)**  $nC_r$

- Arrangements
- Selections
- Circular Arrangement (Mathematical)
- Factorial Concepts

**12 NUMBER SERIES** 1, 2, 3, ?

- Missing Number Series
- Wrong Number Series
- Alphabet-Number Series
- Mixed Series

*(Very Important for Banking & RRB)*

**13 SIMPLIFICATION & APPROXIMATION**  $\sqrt{x}$

- BODMAS ✓
- Fractions, Decimals ✓
- Square Roots, Cube Roots ✓
- Approximation ✓

*(Extremely Important)*

**14 QUADRATIC EQUATIONS**  $ax^2+bx+c=0$

- Factorization Method
- Comparison Method
- Root Analysis

*(Very Important in Bank PO/Clerk)*

**15 MISCELLANEOUS TOPICS**

- Calendar ✓
- Clock ✓
- Ages ✓
- Pipes & Cisterns ✓
- Boats & Streams ✓
- Partnership ✓
- Mixture & Alligation ✓

**EXAM-WISE TOPIC PRIORITY (★ = Importance)**

TOPIC	SSC	RRB	BANK
Number System	★★★★☆	★★★★☆	★★★☆☆ <i>→ Simplification</i>
Arithmetic	★★★★☆	★★★★☆	★★★★★
Algebra	★★★★☆	★★★☆☆	★★★☆☆
Geometry	★★★★☆	★★★☆☆	★★☆☆☆
Mensuration	★★★★☆	★★★★☆	★★★☆☆
Trigonometry	★★★★☆	★★★☆☆	★★☆☆☆
Data Interpretation	★★★★☆	★★★★☆	★★★★★
Data Sufficiency	★★★★☆	★★★☆☆	★★★★★
Statistics	★★★★☆	★★★☆☆	★★★☆☆

# BEST STUDY ORDER

## (Beginner → Advanced)

- |    |                                     |    |                           |
|----|-------------------------------------|----|---------------------------|
| 1  | Number System                       | 12 | Ages                      |
| 2  | Simplification                      | 13 | Mixture & Alligation      |
| 3  | Percentage                          | 14 | Partnership               |
| 4  | Ratio & Proportion                  | 15 | Data Interpretation       |
| 5  | Average                             | 16 | Algebra ✓                 |
| 6  | Profit & Loss                       | 17 | Geometry ✓                |
| 7  | Simple Interest & Compound Interest | 18 | Mensuration ✓             |
| 8  | Time & Work                         | 19 | Trigonometry ✓            |
| 9  | Pipes & Cisterns                    | 20 | Probability               |
| 10 | Time, Speed & Distance              | 21 | Permutation & Combination |
| 11 | Boats & Streams                     | 22 | Statistics                |



# REASONING ABILITY TOPICS

## FOR RRB / SSC / BANK EXAMS

★ COMPLETE LIST OF TOPICS TO BE COVERED ★

### 1 ANALOGY / RELATIONSHIP

- Number Analogy
- Word Analogy
- Letter Analogy
- Symbol Analogy
- Mixed Analogy

انalogy

### 2 CLASSIFICATION

- Alphabetical Classification
- Number / Figure Classification
- Coding Classification
- Grouping Identical Figures
- Odd One Out

### 3 SERIES

- Number Series
- Letter Series
- Alpha-Numeric Series
- Figure Series
- Missing Term / Next Term
- Wrong Term in the Series

### 4 CODING - DECODING

#### Coding

- Letter / Number Coding
- Mixed Coding
- Coding by Position

#### Decoding

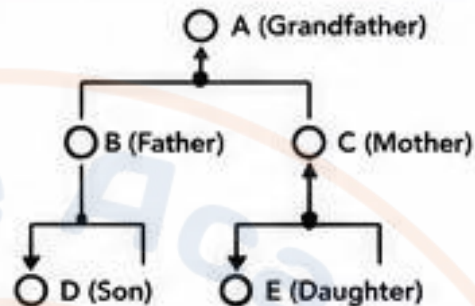
- Letter / Number Decoding
- Decoding by Position
- Word / Sentence Decoding



## 5 BLOOD RELATION



- Family Tree
- Generation
- Relations
- Blood Relations Based on Coding-Decoding
- Complex Blood Relations



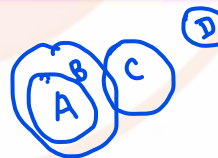
## 6 DIRECTION SENSE

- Direction Sense Test
- Cardinal Directions
- Intercardinal Directions
- Directions in Movement
- Direction Based on Coding
- Map Reading



## 7 SYLLOGISM

- Categorical Syllogism
- Venn Diagram
- Syllogism with Statements
- Syllogism with Multiple Conclusions



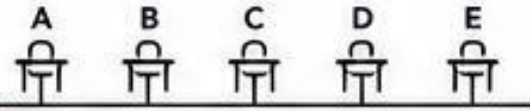


## 8 SEATING ARRANGEMENT

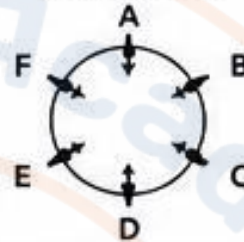


- Linear Arrangement ✓
- Circular Arrangement ✓
- Square Arrangement ✓
- Double Line Arrangement ✓
- Facing Inside / Outside ✓
- Corner Based Arrangement ✓
- Arrangement with Conditions ✓

Linear Arrangement



Circular Arrangement  
(Facing Centre)



## 9 PUZZLES



- Floor Based Puzzles ✓
- Box / Stack / Shelf Puzzles ✓
- Month / Date / Year Puzzles ✓
- Age Puzzles ✓
- Symbol Based Puzzles ✓
- Logical Sequence Puzzles ✓
- Matrix / Grid Puzzles ✓

## 10 INPUT - OUTPUT



main

- Machine Input - Output
- Coding Machine
- Number / Letter Input Output
- Word / Sentence Input Output
- Symbol Based Input Output



## 11 STATEMENT BASED TOPICS

- Statement – Conclusion
- Statement – Assumption
- Statement – Cause & Effect
- Statement – Inference
- Statement – Action Course
- Statement – Strong / Weak
- Statement – Argument
- Statement – Principle
- Statement – Example

## 12 ASSERTION – REASON

- Both A and R are true and R is the correct explanation of A
- Both A and R are true but R is not the correct explanation of A
- A is true but R is false
- A is false but R is true
- Both A and R are false

## 13 VENN DIAGRAM

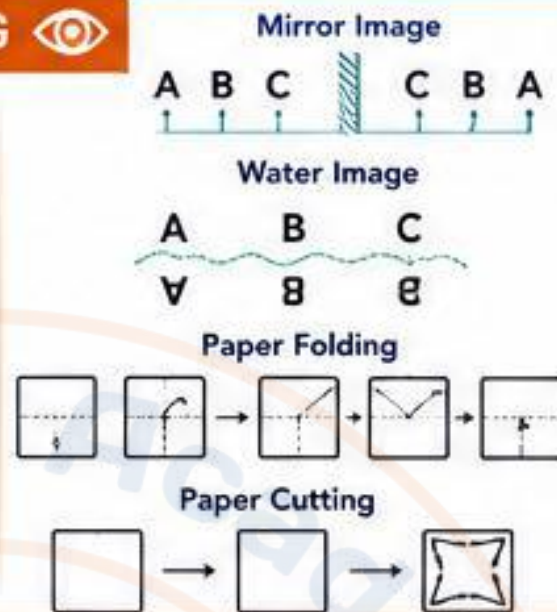
- Basic Venn Diagrams
- 2 Set Diagrams
- 3 Set Diagrams
- 4 Set Diagrams
- Shading Based Questions
- Venn Diagram with Statements

Guiding you to get through



## 14 NON – VERBAL REASONING

- Mirror Images
- Water Images
- Paper Folding
- Paper Cutting / Hole Punching
- Figure Formation & Analysis
- Embedded Figures
- Figure Matrix
- Figure Series
- Analogy (Figures)
- Odd One Out (Figures)
- Missing Figure / Next Figure



## 15 DATA SUFFICIENCY

- Two Statements are given
- Check whether the data is sufficient to answer the question
- Mark: (1) Statement I alone is sufficient  
(2) Statement II alone is sufficient  
(3) Both I and II together are sufficient  
(4) Either I or II alone is sufficient  
(5) Neither I nor II is sufficient

**16****PRIORITY TABLE (STUDY ORDER)**

Priority	Topics (Recommended Order)	Importance
1	Seating Arrangement	★★★★★
2	Puzzles	★★★★☆
3	Blood Relation	★★★★☆
4	Coding – Decoding	★★★★☆
5	Direction Sense	★★★★☆
6	Syllogism	★★★☆☆
7	Series	★★★☆☆
8	Statement Based Topics	★★★☆☆
9	Non – Verbal Reasoning	★★☆☆☆
10	Input – Output	★★☆☆☆
11	Data Sufficiency	★★☆☆☆
12	Assertion – Reason	★★☆☆☆
13	Venn Diagram	★★☆☆☆
14	Analogy / Classification	★★☆☆☆

10am - History

1pm - CA

5am - class 1 (Aptitude + Reasoning Preparation Tricks)

# BEST STUDY ORDER

(Recommended)

- |                              |                                      |
|------------------------------|--------------------------------------|
| <b>1</b> Analogy             | <b>10</b> Input-Output               |
| <b>2</b> Classification      | <b>11</b> Statement-Assumption       |
| <b>3</b> Series              | <b>12</b> Statement-Conclusion       |
| <b>4</b> Coding-Decoding     | <b>13</b> Statement-Course of Action |
| <b>5</b> Blood Relation      | <b>14</b> Assertion-Reason           |
| <b>6</b> Direction Sense     | <b>15</b> Venn Diagram               |
| <b>7</b> Syllogism           | <b>16</b> Data Sufficiency           |
| <b>8</b> Seating Arrangement | <b>17</b> Practice Full Length Sets  |
| <b>9</b> Puzzles (Logical)   |                                      |



## TIPS FOR SUCCESS



Understand  
Concepts  
Clearly



Practice  
Topic-wise  
Questions

Variety



Solve  
Previous Year  
Papers



Practice =  
Focus on  
Speed &  
Accuracy

(Tricks)

(Square, Cube,  
Table  
:-)



Mock =  
Revise  
Formulas &  
Short Tricks



(class 1) 5am  
June 22 - Intro class

June 23 (class 2) - classification of Numbers

June 24 (" 3) - Divisibility rule

June 25 (" 4) - Unit Digit & Factor

June 26 (class 5) - Remainder theorem & Binary Number

