SCHOLASTIC APTITUDE TEST

Mathematical Reasoning parts outline-2

Chapter 8: The Number System & Algebra

8.1 The Number System

- Prime and Composite Numbers
- Divisibility Tests (2, 3, 4, 7, 8, 9, 11, 13)
- Division Algorithm (Dividend = Divisor × Quotient + Remainder)
- Integers (Consecutive, Even, Odd)
- Number of Divisors
- LCM and GCF
- Exponents and Square Roots

Cont...

8.2 Equations

- Solving Linear Equations
- Solving Quadratic Equations
- Systems of Equations

Cont...

8.3 Word Problems

- Age Problems
- Distance (Motion) Problems
- Work Problems
- Mixture Problems
- Interest, Discount, and Profit

8.4 ***Entrance Exam Practice***

Chapter 9: Functions & Sequences

9.1 Functions

- Function Notation and Evaluation
- Graphs of Functions

9.2 Sequences and Series

- Arithmetic Sequences
- Geometric Sequences

9.3 ***Entrance Exam Practice***

Chapter 10: Counting & Probability

10.1 Principle of Counting

- Fundamental Counting Principle
- Permutations (nPr)
- Combinations (nCr)
- Group Problems (Neither/Both)

10.2 Probability

- Basic Probability (Favorable/Total)
- Mutually Exclusive Events
- Conditional Probability
- Odds in Favor and Odds Against

10.3 ***Entrance Exam Practice***

Chapter 11: Geometry & Measurement

11.1 Geometry

- Triangles (Types, Properties, Inequality, Pythagorean Theorem, Area)
- Quadrilaterals (Square, Rectangle, Rhombus)
- Circles (Area, Circumference)
- Solid Geometry (Surface Area and Volume)

11.2 Trigonometry

- Right Triangle Trigonometry (SOH CAH TOA)

11.3 ***Entrance Exam Practice***

Chapter 12: Data & Quantitative Comparison

12.1 Comparison of Quantity

- Inequalities
- Quantitative Comparison Strategies

12.2 Data Interpretation

- Reading Tables and Graphs
- Averages (Mean, Combined Average, Average Speed)
- Percentages from Data

12.3 ***Entrance Exam Practice***

Thank you!!