Quantitative Aptitude

Semester VI

Unit–I: Number Systems and Simplification

- Number System: Types of Numbers, Divisibility Rules, Factors and Multiples
- LCM and HCF
- Simplification and Approximation
- Surds and Indices
- Percentage Concepts
- Ratio and Proportion
- Partnership Problems

Unit–II: Arithmetic Aptitude

- Profit, Loss and Discount
- Simple Interest and Compound Interest
- Averages
- Time and Work
- Pipes and Cisterns
- Time, Speed and Distance
- Boats and Streams

Unit–III: Algebra and Mensuration

- Algebraic Expressions and Equations
- Linear and Quadratic Equations
- Progressions (Arithmetic and Geometric)
- Mensuration of 2D Figures
- Mensuration of 3D Solids
- Geometry Basics
- Coordinate Geometry Fundamentals

Unit–IV: Data Analysis and Interpretation

- Data Interpretation using Tables
- Bar Graphs and Pie Charts
- Line Graphs
- Data Sufficiency
- Statistical Measures (Mean, Median, Mode)
- Probability Basics
- Permutations and Combinations

Unit–V: Logical Quantitative Reasoning and Competitive Aptitude

- Logical Reasoning Fundamentals
- Analytical Reasoning
- Series and Pattern Recognition
- Coding-Decoding
- Blood Relations and Directions
- Quantitative Aptitude Practice Sets
- Mock Tests and Problem-Solving Techniques for Competitive Examinations

Course Outcome:
Develop quantitative, analytical, and problem-solving skills required for academic excellence, competitive examinations, and placement assessments.