Topics in CAT

Verbal Ability -

- Synonyms Antonyms (Vocabulary Based)
- Grammar or English Usage
- Correction in Sentence
- Fill in the blanks
- Jumbled Paragraph and Close Passage
- Analogies and Reverse Analogies
- Meaning/Usage Match
- Verbal Reasoning
- Summary Questions
- Reading Comprehension
- Facts Inferences Judgments

Past 3-4 years trend:

- Summary Questions
- Jumbled Paragraphs
- Odd sentences in Paragraph Jumbles.

Data Interpretation and Logical Reasoning -

- Level 1 consists of topics that you need to do to build a base.

- Level 2 consists of topics on which you can expect actual questions to be asked in the exam.

- Level 1 topics of CAT syllabus for LRDI section -

  - Coding – Decoding
  - Number Series
  - Letter Series
  - Symbol Series
  - Symbol based Logic
  - Number & Alphabet Analogies
  - Odd one out
  - Direction Sense
  - Blood Relations and Family Tree

- Cryptarithmetic (Verbal Arithmetic)
- Inequalities and Conclusions – Coded Inequalities
- Data Sufficiency
- Approximation of Values

- Level 2 topics of CAT syllabus for LRDI section -

- Bar Graphs
- Pie Charts
- Tables
- Binary Logic – True / False statements based questions
- Pan Balance / Spring Balance
- Linear and Circular Seating Arrangements
- Arrangement problems using Tables and Matrix
- Games and Tournaments (Part 1, Part 2, Part 3)
- Sequential Output / Input-Output
- Logical Conditions (If this, then that)
- Logical Grouping – Questions based on Team Formation
- Critical Path
- Cubes based problems
- Matchstick / Coin picking based problems
- Dice Related Problems
- Order and Ranking
- Quant Based LR Puzzles

Quantitative Aptitude

- The vast number of topics in the CAT syllabus means that it needs to be broken up into more manageable chunks. The sub-sections in the QA CAT syllabus includes:

- Commercial Maths
- Arithmetic
- Geometry
- Algebra
- Trigonometry
- Sequences and Series
- Allegations and Mixtures

- Given below are some of the topics that you should cover in Number System

  - Basics of Numbers
  - Properties of Numbers
  - Divisibility Rules
  - Successive Division
  - Divisibility and Factors
  - Factor Theory
  - Highest Common Factor and Lowest Common Multiple
  - Finding Out Last Digit
  - Finding Out Last Two Digits
  - Number of trailing zeroes
  - Sum of all numbers formed from given digits
  - Special cases of Factorials – Highest Power in a prime, rightmost non zero digit
  - Finding out Remainders
    - Based on basic divisibility rules
    - Based on Binomial Theorem
    - Based on Simplifying the Dividend (Single and / or Multiple Divisors)
    - Fermat's Theorem
    - Euler's Theorem
    - Pattern Recognition and cyclicity of remainders
    - Wilson's Theorem
  - Base Systems
    - Conversion of Bases
    - Addition / subtraction / multiplication in different bases

- Arithmetic Syllabus -

Part 1 – Basic concepts from the syllabus that you need to solve any question

- Averages
- Mean Median Mode
- Percentages
- Ratio and Proportion
- Partnerships
- Simple and Compound Interest

Part 2 – High probability areas of CAT

- Installments
- Profit and Loss

- Mixtures and Alligations
- Time Speed and Distance
  - Basic Concepts
  - Linear and Circular Races
  - Boats and Stream
  - Relative Speed
  - Escalator Based Questions
- Time and Work
  - Pipes and Cisterns
  - Relative Efficiencies

Part 3 – Concepts from CAT syllabus that you should know but are unlikely to be asked in the CAT

- Calendars
- Clocks
- Stocks and Shares

- Algebra Syllabus -

- Basics Algebraic Formulae
- Linear Equations
  - Problems on ages
  - Number of integer solutions
- Quadratic Equations
  - Finding out roots
  - Maxima and Minima
- Higher Degree Equations
  - Descartes Rule of Signs
- Inequalities
- Logarithm
- Functions
  - Modifications of graphs
  - Smallest value in a maximum function

- Geometry Syllabus -

- Lines and Angles
- Triangles – Basic Concepts
  - Area, Angles
  - Similar Triangles
  - Special Triangles (30-60-90, 45-45-90, 30-30,120)
- Polygons
- Circles
- Solids / Mensuration – 3D Geometry
- Co-ordinate Geometry
- Trigonometry

- Modern Math Syllabus -

Given below is a list of topics that are included in Modern Math section of CAT syllabus:

- Sequence and Series
- Binomial Theorem
- Set Theory
  - Venn Diagram based on 2 / 3 sets
  - Venn Diagram based on 4 sets
  - Maxima and Minima related to values in a set
  - 'At least n' type of problems
- Permutation and Combination
  - Fundamental Principles of Counting
  - Distribution of Objects
  - Division and Distribution of distinct objects
  - Problems on Grids, Paths, and Chessboards
  - Rank of a word in a dictionary
- Probability