

### Class 10 (High School Level & Core of Exam)

<b>Subject</b>	<b>Core Topics for Examination</b>
<b>Maths</b>	<b>Number Systems (Real Numbers), Polynomials, Linear Equations (in 2 Variables), Quadratic Equations, Geometry (Triangles, Circles, Area related to Circles), Coordinate Geometry, Trigonometry (Ratios, Identities, Heights &amp; Distances), Surface Areas &amp; Volumes, Statistics &amp; Probability.</b>
<b>Science</b>	<b>Physics:</b> Motion, Force & Laws of Motion, Gravitation, Work & Energy, Sound, <b>Light</b> (Reflection & Refraction), <b>Electricity</b> , Magnetic Effects of Electric Current. <b>Chemistry:</b> Chemical Reactions & Equations, Acids, Bases & Salts, Metals & Non-Metals, <b>Carbon &amp; its Compounds.</b> <b>Biology:</b> <b>Life Processes</b> (Nutrition, Respiration, Circulation, Excretion), Control & Coordination, Reproduction, Heredity & Evolution, Our Environment.
<b>English</b>	Grammar (Advanced structures), <b>Reading Comprehension</b> (Factual, Discursive, Case-based - including inferential and critical questions), <b>Advanced Writing Skills</b> (Formal/Informal Letters, Analytical Paragraphs, Article Writing, Story Writing), Literature (Themes and critical appreciation from NCERT prescribed texts).

### Class 10 (Advanced & Critical Reasoning)

This section must test **critical thinking**, matching the level of preliminary competitive exams like NTSE or Olympiads.

<b>Subject Area</b>	<b>Core Topics</b>	<b>High-Level Focus (for Exam)</b>
<b>Verbal Reasoning</b>	<b>Seating Arrangements</b> (Linear/Circular), <b>Statement and Assumption/Conclusion/Argument</b> , Syllogism (with 3 or more statements), Critical Reasoning, Input-Output Tracing.	<b>Complex Seating Puzzles</b> (with conditions and variables) and <b>in-depth Critical Reasoning</b> requiring evaluation of logical strength.
<b>Non-Verbal Reasoning</b>	Advanced Pattern Series (involving geometric progression), Figure Grouping, Data Sufficiency (determining if given facts are enough to solve), Visualizing 3D structures (Unfolding Cubes/Cuboids).	<b>High-complexity figure matrix</b> and <b>spatial visualization</b> under time pressure.

Subject Area	Core Topics	High-Level Focus (for Exam)
<b>Quantitative Aptitude</b>	<b>Advanced Time &amp; Work</b> (Pipes & Cisterns, chain rule), <b>Time, Speed &amp; Distance</b> (Boats/Streams, Trains, Circular tracks), <b>Permutation &amp; Combination</b> (basic), <b>Probability</b> (advanced), Simple & Compound Interest.	Problems requiring <b>algebraic application</b> to core aptitude topics (e.g., quadratic equations in Age problems).