Class 9 (High School Level & Core of Exam)

Subject	Core Topics for Examination
Maths	**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 & Distances), **Surface Areas & Volumes**, **Statistics & Probability**.
Science	**Physics:** Motion, Force & Laws of Motion, Gravitation, Work & Energy, Sound, **Light** (Reflection & Refraction), **Electricity**, Magnetic Effects of Electric Current. **Chemistry:** Chemical Reactions & Equations, Acids, Bases & Salts, Metals & Non-Metals, **Carbon & its Compounds**. **Biology: Life Processes** (Nutrition, Respiration, Circulation, Excretion), Control & Coordination, Reproduction, Heredity & Evolution, Our Environment.
English	Grammar (Advanced structures), **Reading Comprehension** (Factual, Discursive, Case-based - including inferential and critical questions), **Advanced Writing Skills** (Formal/Informal Letters, Analytical Paragraphs, Article Writing, Story Writing), Literature (Themes and critical appreciation from NCERT prescribed texts).

Class 9 (Advanced & Critical Reasoning)

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

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

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