

NTSE STUDY MATERIAL SYLLABUS FOR KERALA

TARGET: NTSE 2023

BIOLOGY		
Biology-1	Sensations and Responses, Windows of Knowledge, Chemical Messages for Homeostasis, Keeping Diseases Away, Soldiers of Defence, Unravelling Genetic Mysteries, Genetics for the Future, The Paths Traversed by Life	
Biology-2	Protectors of Biosphere, Food through Digestive Tract, Simple Nutrients into Cells, Breathing for Energy, To Maintain Homeostasis, The Biology of Movement, Division for Growth and Reproduction	
	PHYSICS	
Physics-1	Electricity and Chemical Effects of Current, Magnetic Effects of Electric Current, Light, Sources of Energy, Heat, Electronics, Universe and Space Exploration	
Physics-2	Motion, Force and NLM, Gravitation, Thrust and Pressure; Work, Energy, Power; Waves and Sound	
CHEMISTRY		
Chemistry-1	Electronic configuration and the periodic table, Gas laws and mole concept, Redox reactions and rate of chemical reaction, Reactivity series and electrochemistry, Production of metals, Carbon and its compounds	
Chemistry-2	Structure of atom, Chemical bonding, Classification of elements and the periodic table, Non-metals and their compounds, Acids bases and salts	
MATHEMATICS		
Mathematics-1	Linear Equations in Two Variables, Number System, Surds and Indices, Polynomials, Decimal Form, Quadratic Equations, Arithmetic Progressions, Coordinate Geometry, Trigonometry and Its Applications, Triangles, Circles and Tangent to the circle, Mensuration of Plane Figures, Mensuration of Solid Figures, Statistics, Probability, Lines and Angles, Quadrilaterals, Area of Parallelogram and Polygon, Equation of Straight Line	
Mathematics-2	Every Day Mathematics: Percentage, Profit, Loss and Discount, Partnership, Mixtures and Alligations, Simple and Compound Interest, Ratio and Proportion, Time, Speed and Distance, Unitary Method, Time and Work, Pipes and Cisterns, Problems on Ages.	
MENTAL ABILITY		
Mental Ability-1	Verbal: Series, Logical Sequence of Words, Coding & Decoding, Analogy, Classification, Logical Venn Diagrams, Mathematical Operations, Direction Sense Test, Alphabet Test, Puzzle Test, Number, Ranking & Time sequence Test, Alpha-Numeric Sequence Puzzle, Inserting The Missing Characters, Calendar, Arithmetical Reasoning, Blood Relations, Statements-Conclusions, Clock, Data Sufficiency, Sequential Output Tracing	
Mental Ability-2	Non Verbal: Series, Analogy, Classification, Analytical Reasoning, Mirror Images, Water Images, Spotting Out The Embedded Figures, Completion of Incomplete Pattern, Paper Folding & Paper Cutting, Dice, Cube, Dot Situation, Figure Matrix, Figure formation, Construction of Shapes & Grouping of Identical Figures	
SOCIAL SCIENCE		
SST-1	History: Revolution that influenced the World, World in the 20th Century, British Exploitation & Resistance, Culture & Nationalism, Struggle and Freedom, India After Independence, Kerala Towards Modernity, Civics: Public Administration, The State and Political Science, Civic Consciousness. Geography: Seasons and Time, In Search of the Source of Wind, Terrain Analyses Through Maps, Eye in the Sky and Data Analysis, India: The Land of Diversities, Resources of India. Economics: Human Resource Development in India, Public Expenditure and Public Revenue, Financial Institutions & Services, Consumer Protection & Satisfaction, Sociology.	
SST-2	History: Medieval World: Centres of Power, The East & West Era of Exchanges, Medieval India: Concept of Kingship and Nature of Administration, Society and Economy in the Medieval Period, India and The Land of Synthesis. Kerala: From Eight to Eighteenth Century. Civics: Indian Constitutions Rights & Duties, Election & Democracy, Towards Bright Future. Geography: Sun: The Ultimate Source, Signature of Time, By the Hands of Nature, For a Safer Future, Population, Migration & Settlements, Ocean and Man. Economics: National Income, Economic Growth and Development, Economic System & Economic Policies.	