

## NTSE STUDY MATERIAL SYLLABUS FOR WEST BENGAL

TARGET: NTSE 2022

BIOLOGY	
Biology-1	Control and Coordination in Living System, Continuity of Life, Heredity and Common genetic diseases, Evolution and Adaptation, Environment its resources and their conservation
Biology-2	Basic properties of life ,Classification of diversity of life: Taxonomy, Biomolecules and their behaviour, Cell, Tissue, Major Organs of Human body and their functions, Photosynthesis, Mineral nutrition & Transpiration in Plant, Respiration, Nutrition, Circulation, Excretion, Immunity and Human Diseases, Ecology and Ecological Organisation, Natural Resources and it's Sustainable use
PHYSICS	
Physics-1	Concerns about our Environment, Thermal Phenomena, Light, Current Electricity, Magnetic effect of Electric Current, Atomic Nucleus
Physics-2	Measurement, Motion, Force and NLM, Matter Structure and Properties, Work, Energy and Power, Sound
CHEMISTRY	
Chemistry-1	Behaviour of gases, Chemical calculations, Periodic table, Chemical bonding, Electrochemistry, Inorganic chemistry in the laboratory and in Industry, Metallurgy, Organic chemistry
Chemistry-2	Atomic structure, Mole concept, Solution, Acids bases and salts, Separation of Substances, Water
MATHEMATICS	
Mathematics-1	Number System, Surds and Indices, Coordinate Geometry, Linear Equations in Two Variables, Polynomials, Logarithm, Trigonometry, Statistics, Mensuration of Plane Figures, Mensuration of Solid Figures, Triangle, Quadrilateral and Area of Parallelograms, Circles, Sets, Probability, Quadratic Equations, Inequalities
Mathematics-2	Every Day Mathematics: Percentage, Profit, Loss and Discount, Partnership, Mixtures and Alligations, Simple and Compound Interest, Instalments, Ratio and Proportion, Time Speed & Distance, Unitary Method, Time and Work, Pipes And Cisterns, Problems on Ages, Uniform Rate of growth
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 & Ordering 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, Figure Matrix, Paper Folding & Paper Cutting, Rule Detection, Construction of Shapes, Dice, Cube, Dot Situation, Grouping of Identical Figures
SOCIAL SCIENCE	
SST-1	History: The advent of Europeans to India, The foundation of British Administration and its effects, Social and Religious reforms, The First war of Independence, Effects of British rule in India, The Freedom Struggle, India after Independence, The Political dimensions of 20th CE, First World War, Russian Revolution, League of Nations, Development of Nazism and Fascism, Second World War, United Nations Organisation, Cold War.  Civics: The Indian Constitution, Democracy in India, Functioning of Indian Democracy  Geography: Lithosphere, Hydrosphere, Atmosphere, India-Size and Location, Physical Divisions of India, Drainage, Climate, Natural Vegetation and Wildlife, Agriculture, Manufacturing Industries, Lifelines of National Economy  Economics: Development, Money and Credit, Globalisation and Indian Economy
SST-2	History: Historical derivation of land and source of history, The evolution of Indian society, Vedic Civilisation, Ancient India, Jainism and Buddhism, The Growth of Kingship, The Delhi Sultanate, The Mughal Empire, Sufi and Bhakti Movements, Periodisation in History  Geography: Earth as a planet, Movements of the Earth, Determination of Location of a place on Earth's surface, Geomorphic processes and landforms of Earth, Weathering, Hazards and Disasters, Resources and Development, Minerals and Energy Resources, West Bengal, Maps and Scale