

[For English Medium Students Only]

## TSET-F1

Foundation Biology-1	Life Processes - Nutrition, Respiration, Transportation, Excretion, Control and Coordination
Foundation Physics-1	Electricity, Magnetic Effects of Electric Current, Sources of Energy
Foundation Chemistry-1	Chemical Reactions & Equations, Acids, Bases & Salts, Metals & Non-metals
Foundation Mathematics-1	Real Numbers, Polynomials, Linear Equations in Two Variables
Foundation Mathematics-2	Introduction to Trigonometry, Similar Triangles, Statistics
Foundation SST-1	History: The rise of nationalism in Europe, Nationalism in India Civics: Power Sharing Geography: Resources & Development, Forest & Wildlife Resources Economics: Development
Foundation SST-2	History: The Making of a Global World, The Age of Industrialisation Civics: Federalism, Democracy and Diversity, Gender, Religion & Caste Geography: Water Resources, Agriculture Economics: Sectors of the Indian Economy
Foundation English-1	Section A (Grammar): Subject verb Concord, Tenses, Prepositions, Modal Auxiliaries, Determiners, Active Passive Voice, Reported Speech, Connectors, Integrated Grammar Exercises. Section B (Writing) : Letter Writing, Article Writing, Report Writing, Story Writing. Section C (Literature): Figures of Speech. FIRST FLIGHT: A Letter To God, Dust Of Snow, Fire And Ice, Nelson Mandela : Long Walk To Freedom, Two Stories About Flying (Part 1 – His First Flight, Part – 2 Black Aeroplane), How To Tell Wild Animals, The Ball Poem, From The Diary Of Anne Frank, Amanda, The Hundred Dresses – I, The Hundred Dresses – II. FOOTPRINTS WITHOUT FEET: A Triumph Of Surgery, The Thief's Story, The Midnight Visitor, A Question Of Trust, Footprints Without Feet.

## TSET-A TARGET:: NTSE & Olympiads

Advance 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.
Advance 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.
Advance Physics-1	Concerns about our Environment, Thermal Phenomena, Light, Current Electricity, Magnetic effect of Electric Current, Atomic Nucleus.
Advance Physics-2	Measurement, Motion, Force and NLM, Matter: Structure and Properties, Work, Energy and Power, Waves and Sound.
Advance Chemistry-1	Behaviour of gases, Chemical calculations, Periodic table, Chemical bonding, Electrochemistry, Inorganic chemistry in the laboratory and in Industry, Metallurgy, Organic chemistry.
Advance Chemistry-2	Atomic structure, Mole concept, Solution, Acids bases and salts, Separation of Substances, Water.
Advance 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.
Advance 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-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.
Advance 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, 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, 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

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Advance 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 Buddhism, The Delhi Sultanate, The Mughal Empire, Sufi and Bhakti Movements, Periodisation in History. Geography: Earth as a planet, Movements of 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.
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## TSET-E1 (E)#TARGET:: FOUNDATION ENGINEERING

Excellent Physics	Units and Dimensions, Significant Figures & Errors in Measurement, Vectors, Motion in one dimension, Projectile Motion, Circular Motion, Newton's Laws of Motion, Friction, Work, Energy & Power, Gravitation, Simple Harmonic Motion, Wave Motion
Excellent Chemistry	General Concepts in Chemistry, States of Matter, Atomic Structure, Periodic Classification of Elements, Chemical Bonding, Equilibrium, Redox reactions, Basic Concepts of Organic Chemistry.
Excellent Mathematics-1	Sets and Relations, Functions, Complex Numbers, Logarithm, Trigonometry, Sequences and series, Binomial Theorem, Permutations and Combinations, Points, Straight Lines, Circles, Parabola, Ellipse, Hyperbola

## TARGET:: NMTC ROUND-1

Excellent Mathematics-2	Algebra, Geometry, Number System, Inequalities
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## TSET-E1 (M)#TARGET:: FOUNDATION MEDICAL

Excellent Physics	Units and Dimensions, Significant Figures & Errors in Measurement, Vectors, Motion in one dimension, Projectile Motion, Circular Motion, Newton's Laws of Motion, Friction, Work, Energy & Power, Gravitation, Simple Harmonic Motion, Wave Motion
Excellent Chemistry	General Concepts in Chemistry, States of Matter, Atomic Structure, Periodic Classification of Elements, Chemical Bonding, Equilibrium, Redox reactions, Basic Concepts of Organic Chemistry.
Excellent Biology	Diversity in Living Organisms, Cell, Cell Cycle and Cell Division, Biomolecules, Morphology of Flowering Plants, Anatomy of Flowering Plants and Animals, Plant Physiology, Animal Physiology – Animal Nutrition, Respiratory System, Circulatory System, Excretory System, Control and coordination. # Will be dispatched according to choice given by student at the time of enrollment for preparing for Foundation Engineering or Foundation Medical respectively.

## TSET-F2

Foundation Biology-2	How do Organisms Reproduce, Heredity and Evolution, Our Environment, Sustainable Management of Natural Resources
Foundation Physics-2	Optics: Reflection of Light, Optics: Refraction of Light, The Human Eye & The Colorful World
Foundation Chemistry-2	Carbon and its Compounds, Periodic Classification of Elements
Foundation Mathematics-3	Quadratic Equations, Heights and Distances, Constructions, Arithmetic Progressions
Foundation Mathematics-4	Probability, Circles, Co-ordinate Geometry, Areas Related to Circles, Surface Areas and Volumes
Foundation SST-3	History: Print Culture and the Modern World Civics: Political Parties Geography: Mineral and Power, Resources, Manufacturing Industries Economics: Money And Credit, Globalisation & The Indian Economy
Foundation SST-4	Civics: Outcomes of Democracy, Challenges to Democracy Geography: Life Lines of National Economy Economics: Consumer Rights
Foundation English-2	Literature: FIRST FLIGHT : Animals, Glimpses of India (Part 1 – A Baker from Goa, Part 2 – Coorg, Part 3 - Tea from Assam), The Trees, Mijbil the Otter, Fog, Madam Rides the Bus, The Tale of Custard the Dragon, The Sermon at Benares, For Anne Gregory, The Proposal. FOOTPRINTS WITHOUT FEET: The Making of a Scientist, The Necklace, The Hack Driver, Bholi, The Book that Saved the Earth. Grammar: Integrated Grammar Exercises

## TSET-E2\*TARGET:: NMTC FINAL ROUND

Excellent Mathematics-3	Same Topics as in Round-1
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\* Module will be dispatched to NMTC Round-1 Qualified Students.

## TSET-E3\*\*TARGET:: NTSE STAGE 2

NTSE Question Bank 1	Mental Ability Test (MAT)
NTSE Question Bank 2	Language Comprehensive Test (LCT)
NTSE Question Bank 3	Scholastic Aptitude Test (SAT)
Practicing NTSE	Booklet of Sample Papers

\*\* Module will be dispatched to those students who will be selected for Stage-II of the National Talent Search Examination (NTSE).