

[For English Medium Students Only]

## TSET-F1

Foundation Biology-1	Life Processes - Nutrition, Respiration, Transportation, Excretion, How do Organisms Reproduce
Foundation Physics-1	Electricity, Magnetic Effects of Electric Current, Optics-Reflection of Light
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: Rise of Nationalism in Europe, Nationalism in India. Civics: Power Sharing, Federalism. Geography: Resources & Development, Agriculture. Economics: Development, Sectors of the Indian Economy.
Foundation English-1	Section A (Grammar): Tenses, Subject-Verb Concord, Modals, Connectors, Reported Speech, Articles & Determiners, Integrated Grammar Exercises. Section B (Writing): Letter Writing, Analytical Paragraph 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, A Tiger in the Zoo, Two Stories About Flying (Part 1 - His First Flight, Part - 2 Black Aeroplane), The Ball Poem, From the Diary Of Anne Frank, Amanda. FOOTPRINTS WITHOUT FEET: A Triumph Of Surgery, The Thief's Story, Footprints Without Feet.

## TSET-A TARGET:: NTSE & Olympiads

Advance Biology-1 :	Nutrition, Respiration, Transportation in Plants and Animals, Excretion, Control and Coordination, Reproduction, Growth and Development, Heredity and Evolution, Our Environment.
Advance Biology-2 :	Cell, Tissues, Bio diversity and Classification, Our Health, Habitat, Waste and its Management
Advance Physics-1:	Electricity And Chemical Effects Of Current, Magnetic Effects Of Electric Current, Light, Sources Of Energy, Heat, Miscellaneous
Advance Physics-2:	Motion, Force & NLM, Gravitation, Thrust And Pressure; Work, Energy, Power; Waves And Sound
Advance Chemistry-1:	Chemical Reactions and Equations, Acids, Bases and Salts, Periodic Classification of Elements, Metals and Metallurgy, Chemistry of Non-Metals, Derivatives of hydrocarbons, Chemistry in daily Life.
Advance Chemistry-2:	Matter: Nature and behaviour, Atomic structure, Chemical Bonding, Chemical formula and Mole Concept, Hydrocarbons, Coal, Petroleum and Petrochemicals.
Advance Mathematics-1 :	Linear Equations in Two Variables, Number System, Surds and Indices, Polynomials, 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, Lines and Angles, Quadrilaterals, Area of Parallelogram & Polygon, Linear Equations in One Variable, Symmetry
Advance 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, Banking and Taxation
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	Resources and Development, Land Resources, Agriculture, Mineral Resources & Industrialization, Human Resources, Human Settlement, The First World War, Between the Two World Wars - The Russian Revolution and the Great Depression, Between the Two World Wars - Nazism in Germany and World War-II, End of Colonialism and the Cold War, Mass Media in the 20th Century, The Making of the Indian Constitution, The Constitution, Government System and their Social Concerns, Democracy in Independent India and the Working of Political Institutions, People's Participation in Democracy, Democracy and Social Movements, Understanding Development, Money and Credit, Government Budget and Taxation, Food Security, Globalisation.
Advance SST-2	Cartography and Study of Maps, India – An Introduction, India's Climate, The Rivers of India and their Drainage System, Natural Vegetation and Communities Dependent on Forests, The Dawn of Modern Culture in Europe and India The Early-Modern Age (1300 –1800 CE), The Reformation and the Enlightenment (1300–1800 CE), Democratic and Nationalist Revolutions (1600-1900 CE), The Industrial Revolution and Social Change (1750-1900), Colonialism, The Idea of Democracy

[For English Medium Students Only]

and its Spread, The Main Features of Democracy, Rights, Gender Equality and Women's Rights, Understanding Economic Activities, The Nature of the Indian Economy, How does Production take Place?.

## 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

## 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 Heredity, Our Environment, Sustainable Management of Natural Resources, Evolution, Control and Coordination

Foundation Physics-2 Optics: Refraction of Light, The Human Eye & The Colorful World, Sources of energy

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-2 History: The Making of a Global World, The Age of Industrialization.

Civics: Political Parties, Outcomes of Democracy.

Geography: Manufacturing Industries, Lifelines of the National Economy.

Economics: Money & Credit, Globalization & The Indian Economy.

Foundation English-2 Section A (Grammar): Integrated Grammar Exercises.

Section B (Writing): Letter Writing, Analytical Paragraph Writing

Literature: FIRST FLIGHT: The Hundred Dresses - I, The Hundred Dresses - II, Animals, Glimpses of India (Part 1 - A Baker from Goa, Part 2 - Coorg, Part 3 - Tea from Assam), Madam Rides the Bus, The Tale of Custard the Dragon, The Sermon at Benares, The Proposal.

FOOTPRINTS WITHOUT FEET: The Making of a Scientist, The Necklace, The Hack Driver, Bholi.

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

Excellent Mathematics-3 Same Topics as in Round-1

\* 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 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).