# Pre-Nurture & Career Foundation

# Study Material Syllabus for CLASS - X CBSE

[For English Medium Students Only]

Т	S	E.	T-	F	1

Foundation Biology-1 Life Processes - Nutrition, Respiration, Transportation, Excretion, Control and Coordination Foundation Physics-1 Optics: Reflection of Light, Optics: Refraction of Light, The Human Eye & The Colourful World

Foundation Chemistry-1 Chemical Reactions & Equations, Acids, Bases & Salts, Metals & Non-metals Foundation Mathematics-1 Real Numbers, Polynomials, Pair of 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, The Making of a Global World, The Age of Industrialisation.

Geography: Resources and Development, Forest and Wildlife Resources, Water Resources, Agriculture.

Civics: Power Sharing, Federalism, Democracy and Diversity, Gender, Religion and Caste.

Economics: Development, Sectors of the Indian Economy.

Foundation English-1 Section A (Grammar): Tenses, Subject-Verb Concord, Modals, 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, Hundred Dresses-I, 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-ATARGET:: NTSE & Olympiads

Advance Biology-1 Life Process - Nutrition, Life Process - Respiration, Life Process - Transportation, Life Process - Excretion, Control and

Coordination, Reproduction in Plants and Animals, Heredity and Evolution, Our Environment, Management of Natural

Resources.

Advance Biology-2 Cell, Tissue, Improvement in Food Resources, Diversity in Living Organisms, Why do we fall ill?

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 and NLM, Gravitation, Thrust and Pressure; Work, Energy, Power; Waves and Sound

Advance Chemistry-1 Chemical Reactions & Equations, Acid, Bases and Salts, Metals and Non-metals, Carbon and Its Compounds, Periodic

Classification of Elements.

Advance Chemistry-2 Matter in Our Surroundings, Is Matter Around us Pure, Atoms and Molecules, Structure of Atom.

Advance Mathematics-1 Linear Equations in Two Variables, Number System, Surds and Indices, Polynomials, Quadratic Equations, Arithmetic

Progression, 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

 $Parallelogram\, and\, Polygon.$ 

Advance Mathematics-2 Every Day Mathematics: Percentage, Profit, Loss and Discount, Partnership, Mixtures and Alligations, Simple and Compound

 $Interest, Ratio \ and \ Proportion, Time, Speed \ and \ Distance, Unitary \ Method, Time \ and \ Work, Pipes \ and \ Cisterns, Problems \ on \ Proportion \ Annual P$ 

Ages.

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.

Advance SST-1 History: The Making of a Global World, The Age of Industrialisation, Print Culture and the Modern World, The Rise of

Nationalism in Europe, Nationalism in India.

Civics: Power Sharing, Federalism, Democracy and Diversity, Gender, Religion and Caste, Popular Struggles and Movements, Annual Caste, Popular Struggles and Movements, Caste, Popular Struggles, and Movements, Caste, Popular Struggles, and Movements, Caste, Popular Struggles, Caste, Popular Struggles, Caste, Caste, Popular Struggles, Caste, C

Political Parties, Outcomes of Democracy, Challenges to Democracy.

 $Geography: Resources \ and \ Development, Forest \ and \ Wildlife \ Resources, Water \ Resources, A griculture, Mineral \ and \ Energy \ Resources, A griculture, Mineral \ and \ Resources, Water \ Resources, A griculture, Mineral \ and \ Resources, Water \ Resources, A griculture, Mineral \ and \ Resources, A griculture, Mineral \ A griculture, Mineral$ 

Resources, Manufacturing Industries, Lifelines of National Economy.

Economics: Development, Sectors of the Indian Economy, Money And Credit, Globalisation and The Indian Economy,

Consumer Rights.

Advance SST-2 History: The French Revolution, Socialism in Russia and the Russian Revolution, Nazism and the Rise of Hitler, Forest Society

and Colonialism, Pastoralists in the Modern World.

## Pre-Nurture & Career Foundation

# Study Material Syllabus for CLASS - X CBSE

[For English Medium Students Only]

Civics: What is Democracy? Why Democracy?, Constitutional Design, Electoral Politics, Working of Institutions, Democratic Rights

Geography: India Size And Location, Physical Features of India, Drainage, Climate, Natural Vegetation and Wildlife,

Economics: The Story of Village Palampur, People as resource, Poverty As a Challenge, Food Security in India.

#### TSET-E1 (E)#TARGET:: FOUNDATION ENGINEERING

Excellent Physics Units and Dimensions, Significant Figures & Errors in Measurement, Vectors, Motion in one dimension, Projectile Motion,

Newton's Laws of Motion, Friction, Work, Energy & Power, Circular Motion, 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, Quadratic Equation & Expression, 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,

Newton's Laws of Motion, Friction, Work, Energy & Power, Circular Motion, 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 Electricity, Magnetic Effects of Electric Current, 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: Print Culture and the Modern World.

Geography: Minerals and Energy Resources, Manufacturing Industries, Lifelines of National Economy.

Civics: Popular Struggles and Movements, Political Parties, Outcomes of Democracy, Challenges to Democracy.

Economics: Money and Credit, Globalisation and The Indian Economy, Consumer Rights.

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

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

Section C (Literature): FIRST FLIGHT: How to Tell Wild Animals, Amanda, Animals, Glimpses of India (Part 1 - A Baker from Goa, Part 2 - Coorg, Part 3 - Tea From Assam, Mijbil the Otter, The Trees, Fog, Madam Rides the Bus, The Tale of Custard the

Dragon, The Sermon at Benares, For Anne Gregory, The Proposal (Play), .

FOOTPRINTS WITHOUT FEET: The Making of a Scientist, The Necklace, The Hack Driver, Bholi, The Book That Saved the Earth.

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

Excellent Mathematics-3 Same Topics as in Round-1

<sup>\*</sup> Module will be dispatched to NMTC Round-1 Qualified Students.