

## English

**Section-A (Reading):** Reading Comprehension. (Passage Reading)

**Section-B (Writing):** Story Writing, Diary Writing, Article Writing.

**Section-C Grammar):** Tense, Conditionals, Subject-Verb Concord, Reported Speech, Determiners, Modals, Pronoun & Adjective , Active-Passive Voice, Prepositions, Connectors.

**Section-D (Literature):** How I taught my Grandmother to read ,A dog named duke ,The man who knew too much, Keeping it from Harold ,Best seller ,The brook ,The Road not taken ,The solitary reaper ,The seven ages, Oh! I wish I'd looked after me teeth , Song of the rain, Villa for sale, The bishop's candlesticks, Three men in a boat (Term I & II), Gulliver's travels (Term I & II),Literary terms.

**Section-E (Practice Exercise):** Practice exercise (Grammar)

## CHEMISTRY

**MATTER IN OUR SURROUNDING:** Physical Nature of Matter, Interconversion of States of Matter, Evaporation

**IS MATTER AROUND US PURE:** Classification of Matter, Types of Solutions, Separation Techniques, Physical and Chemical changes.

**ATOMS AND MOLECULES:** Introduction of Atoms & Molecules, Chemical Combination and Laws, Mole Concept

**STRUCTURE OF ATOM:** Fundamental Particles of an Atom, Atomic Models, Atomic Structure & Electronic Configuration, Quantum numbers

## BIOLOGY

**FUNDAMENTAL UNIT OF LIFE:** Cell, Cell Theory, types of Cell, Cell Shape, Cell Size, Components of a Cell, Microscope.

**TISSUE:** Tissue, Plant Tissue, Animal Tissue, Nervous Tissue.

**IMPROVEMENT IN FOOD RESOURCES:** Sources of Food, Improvement in Crop Yield, Animal Husbandry.

**DIVERSITY OF LIVING ORGANISMS:** Diversity and Classification, Classification of Organisms, Plant Kingdom, Animal Kingdom.

**WHY DO WE FALL ILL:** Human health and Disease, What is a Disease?

**NATURAL RESOURCES:** Natural Resources, Pollution, Water, Lithosphere, Biogeochemical Cycles

## PHYSICS

**MOTION:** Rest and Motion, Uniform and non Uniform Motion, Acceleration and Equation of Motion, Graphical Representation of Motion.

**CIRCULAR MOTION:**

**NETWON'S LAWS OF MOTION (NLM):** Force & Newton's First Law of Motion, Momentum & Newton's Second Law of Motion, Newton's Third Law of Motion & Conservation law of Linear Momentum.

**GRAVITON:** Newton's law of Gravitation, Bodies Falling Near the Surface of the Earth, Mass, Weight & Kepler's Law.

**FLUID:** Thrust and Pressure, Archimedes Principle.

**WORK, ENERGY & POWER:** Work, Energy, Power.

**WAVE MOTION AND SOUND:** Wave, Reflection of Sound, The Human Ear.

## **Maths**

**Number System:** Introduction to number system & rational number, Irrational numbers, Surds and their application, Exponents.

**Polynomials:** Introduction and classification of polynomial, Algebraic identities, Factorization.

**Coordinate Geometry:** Introduction to coordinate geometry.

**Linear Equation:** Introduction to equation.

**Introduction to Euclid's Geometry:** Introduction to Euclid geometry.

**Lines and Angles:** Angles and their types, Angles made by transversal, Triangles.

**Triangles:** Congruent triangles, Some inequality relations in a triangle.

**Quadrilaterals:** Quadrilaterals, Mid point theorem and its converse.

**Area of Parallelograms And Triangles:** Area of parallelograms and triangles.

**Circles:** Introduction and chord properties of circles, Results on angles subtended by arcs and cyclic quadrilateral.

**Constructions:** Constructions.

**Heron's Formula:** Heron's formula.

**Surface Area And Volumes:** Cube & Cuboid, Cylinder & Cone, Sphere & Hemisphere, Inter Conversion and mixed problems.

**Statistics:** Tabular representation of statistical data, Graphical representation of data, Measures of central tendency.

**Probability:** Probability.

## **Social Studies**

**The French Revolution:** The Ancient Regime and its crises, The social forces that led to the revolution, The different revolutionary groups and ideas of the time, The legacy. Compulsory

**Socialism in Europe and the Russian Revolution:** The crises of Tzarism, The nature of social movements between 1905 and 1917, The First World War and foundation of Soviet state, The legacy.

**Nazism and the Rise of Hitler:** The growth of social democracy (b) The crises in German, The basis of Hitler's rise to power, The ideology of Nazism, The impact of Nazism

**Forest Society and Colonialism:** Relationship between forests and livelihoods, Changes in forest societies under colonialism, Case studies Focus on two forest movements one in colonial India (Bastar) and one in Indonesia.

**Pastoralists in the Modern World:** Pastoralism as a way of life, Different forms of pastoralism, What happens to pastoralism under colonialism and modern states? Case studies Focus on two pastoral groups, one from Africa and one from India.

**Peasants and Farmers:** Histories of the emergence of different forms of farming and peasant societies, Changes within rural economies in the modern world, **Case studies** Focus on contrasting forms of rural change and different forms of rural societies (expansion of large-scale wheat and cotton farming in USA, rural economy and the Agricultural Revolution in England and small peasant production in colonial India

**History and Sport (The Story of Cricket):** The emergence of cricket as an English sport, Cricket and colonialism, Cricket nationalism and de-colonization, Case studies Focus on spread of cricket in colonies like West Indies and India

**Clothing (A Social History):** A short history of changes in clothing, Debates over clothing in colonial India, Swadeshi and the movement for Khadi, Case studies Focus on changes which occurred in clothing style in Europe and How it became an emblem of nationalism in countries like India.

India: Size and Location

**Physical features of India:** Relief, structure, major physiographic units

**Drainage:** Major rivers and tributaries, lakes and seas, role of rivers in the economy, pollution of rivers, measures to control river pollution.

**Climate:** Factors influencing the climate; monsoon- its characteristics, rainfall and temperature distribution; seasons; climate and human life.

**Natural Vegetation and Wildlife:** Vegetation types, distribution as well as altitudinal variation, need for conservation and various measures. Major species, their distribution, need for conservation and various measures

**Population:** Size, distribution, age-sex composition, population change-migration as a determinant of population change, literacy, health, occupational structure and national population policy : adolescents as underserved population group with special needs

**Democracy in the Contemporary World:** How has democracy expanded in the world in recent times?, In which ways has this expansion changed the world?, Is this expansion changing democracy itself ?, Are we moving towards global democracy?  
[NOTE: Chapter removed from NCERT Syllabus]

**What is democracy? Why democracy:** What are the different ways of defining democracy? Why has democracy become the most prevalent form of government in our times? What are the alternatives to democracy? Is democracy superior to its available alternatives? Must every democracy have the same institutions and values?

Constitutional Design: How and why did India become a democracy? How was the Indian constitution framed?

What are the salient features of the Constitution? How is democracy being constantly designed and redesigned in India?

**Electoral Politics:** Why and how do we elect representatives? Why do we have a system of competition among political parties?

How has the citizens' participation in electoral politics changed? What are the ways to ensure free and fair elections?

**Working of Institutions:** How is the country governed? What does Parliament do in our democracy? What is the role of the President of India, the Prime Minister and the Council of Ministers? How do these relate to one another?

**Democratic Rights:** Why do we need rights in a constitution? What are the Fundamental Rights enjoyed by the citizen under the Indian constitution? How does the judiciary protect the Fundamental Rights of the citizen? How is the independence of the judiciary ensured?

**The Story of Village Palampur:** Economic transactions of Palampore and its interaction with the rest of the world through which the concept of production (including three factors of production (land, labour and capital) can be introduced  
People as Resource: Introduction of how people become resource / asset; economic activities done by men and women; unpaid work done by women; quality of human resource ; role of health and education; unemployment as a form of nonutilisation of human resource; socio-political implication in simple form.

**Poverty as a Challenge:** Who is poor (through two case studies: one rural, one urban); indicators; absolute poverty (not as a concept but through a few simple examples) - why people are poor ; unequal distribution of resources; comparison between countries; steps taken by government for poverty alleviation

**Food Security in India:** Variety across the nation - famines in the past - the need for self sufficiency - role of government in food security - procurement of food grains-overflowing of granaries and people without food - public distribution system-role of cooperatives in food security (food grains, milk and vegetables ration shops, cooperative shops, two-three examples as case studies)

## **MENTAL ABILITY**

**LOGICAL ALPHABET NUMBER:** Alphabetical order, Number ranking, Ranking Test

**CONDING DECODING:** Coding-Decoding

**NUMBER SERIES:** Number Series

**SERIES OF LETTERS:** Alphabet Series, Letter Repeating Series

**MISSING TERM IN FIGURE:** Missing term in Figures

**MATHEMATICAL OPERATION**

**DIRECTION SENSE TEST**

**SEATING ARRANGEMETN**

**BLOOD-RELATIONS:** Blood Relations, Direct-Relationship

**PUZZLE TEST**

**VENN DIAGRAM**

**SYLLOGISM**

**DAY, DATE AND TIME SEQUENCE:** Calendar Test, Odd Days, Counting of Odd Days, Time Sequence Test.

**DICE-TEST:** Dices

## **CUBES TEST**

**MIRROR & WATER IMAGES:** Mirror Image, Water Image.

**PAPER CUTTING & FOLDING:** Paper Cutting & Folding, Paper Cutting.

**FIGURE PARTITION & CUNTING:** Figure Partition.

**NON-VERABAL SERIES:** Type-I, Type-II, Type-III, Type-IV

**NON-VERBAL ANALOGY:** Analogy

**NON-VERBAL CLASSIFICATION**