

**December:** December Unit Test  
(Ch- 8, 9, 10, 13)

**January:** Pre Board-1

**February:** Final Exam.

**+1 (Med./N.Med.)**

**ENGLISH**

**Books prescribed:**

1. Hornbill (NCERT)
2. Snapshot (NCERT)

**Reference book:** BBC compacta

Term-1 (April to September)

**April:**

Hornbill:

1. The Portrait of a Lady (prose)
2. A photograph (poem)

Snapshot: The summer of the beautiful (prose)

Writing- Short writing - Poster making

Grammar- Gap filling (Tenses)

**May:**

Hornbill:

3. We are not afraid to die
4. Poem- the laburnum top

Writing- Classified advertisement (to sale/purchase)

Grammar- Jumbled sentences

Revision and May Periodic Test

**June:** Summer vacation.

Project on the life of Khushwant Singh  
(for holidays homework)

**July:**

Snapshots- The address (prose)

Hornbill- Discovering that the saga continues

Grammar & Writing:

Advertisements and gap filling (clauses)

**August:**

Snapshot- Mother's Day (play)

Hornbill- Poem The voice of rain

Writing- Speech writing

Grammar:

Revision of gap filling and jumbled sentences.

SEA: ASL

Art integrated activity:

To make a collage of advertisement from newspaper

**September:**

Revision and Term I exams.

Term-II (October to March)

**October:**

Hornbill: Ch- The adventure

Poem- Childhood

Snapshot: Birth (prose)

Grammar: Sentence transformation

Reading: Note making.

SEA- Model making

**November:**

Hornbill: Prose- Silk Road

Poem- Father and Son

Snapshot: Poem- The Tale of Melon City

Writing: Debate

Grammar: Revision of gap filling through worksheets

Art integrated activity:

To make a first aid box based on chapter birth.

**December:** Revision + December Periodics

**January:** Exams

**February:** Revision of full syllabus and to conduct ASL

**March:** Final Exams.

## MATHEMATICS

**April:**

Ch-1 Sets

Ch-4 Complex numbers and quadratic equations.

Ch-5 Linear inequalities

**May:**

Ch-3 Trigonometry Functions

May unit test (Ch-1, 5, 3 and 4)

Subject enrichment activity- to represent set theoretic operations using venn's diagram.

**June:** Summer vacations

**July:**

Ch-12 Limits and Derivates

Ch-6 Permutations and Combinations

Ch-11 Introduction to three dimensional geometry.

Art integrated activity:

Operation on sets.

**August:**

Ch-14 Probability

Ch-7 Binomial Theorem

Ch-2 Relation and Functions

**September:**

September Exams (Ch-1,3,5,4,6,12,6,11,14,7,2)

**October:**

Ch-8 Sequence and series

Ch-9 Straight lines

Subject enrichment activity:

To construct a parabola

Art integrated activity: Geometry project.

**November:**

Ch-10 Conic Sections

Ch-13 Statistics

## PHYSICS

### April:

(Unit-1) Physical world and measurement.

Ch- Unit and Measurements need for measurement: units of measurement; system of units; SI unit, fundamental & derived units. Significant figures. Dimension of physical quantities, dimensional analysis and its application.

(Unit-2) Kinematics

Chapter- motion in straight line

Frame of reference, motion in a straight line, elementary concepts of differentiation and integration for describing motion, uniform and non-uniform motion, instantaneous velocity, uniformly accelerated motion, velocity- time & position-time graphs. Relations for uniformly accelerated motion (graphical treatment)

### May:

Ch- Motion in plane

Scalar and vector quantities; position and displacement vectors; general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, unit vector; resolution of a vector in a plane, rectangular components, scalar and vector products of vectors.

Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion, uniform circular motion.

### May Unit Exam

**June:** Summer vacations

### July:

(Unit-3) Chapter: Laws of motion

Intuitive concept of force, inertia, newton's first law of motion: momentum and newton's second law of motion; impulse; newton's third law of motion.

Law of conservation of linear momentum & its application.

Equilibrium of concurrent forces, static and kinetic friction,

## BIOLOGY

### Books Prescribed:

1) NCERT BIOLOGY 11

2) Pardeep's publication 11

Practical Manual- Vijay Fundamental (New) 11

### April:

(Unit-1) Diversity in living world

Ch-1 The living world

Ch-2 Biological classifications

Ch-3 Plant kingdom

Practical:

i) To study the parts of microscope.

ii) Specimens identification (2, 3)

iii) Study of specimens and identification with reason:  
amoeba, hydra, liverfluke, ascans, leech, earthworm,  
prawn, snail, starfish, rohu, frog, lizard

### May:

(Unit-1) Diversity in living world

Ch- 4 Animal kingdom

Practical:

i) Study of tissue & diversity in shapes and sizes in plants and animals.

**June:** Summer vacations

### July:

Unit-2 Structural organization in plants and animals.

Ch-5 Morphology of flowering plants

Ch-6 Anatomy of flowering plants

Ch-7 Structural organization in animals (animal tissues)

Practical:

i) Mitosis and meiosis

ii) Modification in roots, stem

iii) Inflorescences

iv) Describe 3 families of flowering plants

**August:**

Ch-8 Structural organization in animals.

Ch-9 Cell unit of life.

Ch-10 Biomolecule

Ch-11 Cell cycle and cell division

Practical:

i) T.S of dicot and monocot roots and stem.

ii) External morphology of earthworms, cockroach and frog

iii) Osmosis by potato osmometer

iv) Plasmolysis in epidermal peel

**September:**

(Unit-4) Plant physiology

Ch-12 Transport in plants

Ch-13 Mineral nutrition

Ch-14 Photosynthesis in higher plant

Practical:

i) Imbibition in seed

ii) Distribution of stomata on surface of leaves

iii) Chromatography

iv) Respiration in germinating seeds

**October:**

Ch-15 Respiration in plants

Ch-16 Plant growth and development

Ch-17 Digestion and absorption.

Ch-18 Breathing and exchange of gases

Practical:

i) Human skeleton

ii) Presence of sugar in blood sugar

**November:**

Ch-19 Body fluid and circulation

Ch-20 Excretory system

Ch-21 Locomotion movement

Ch-22 Neural control

Ch-23 Chemical co-ordination

**December:** Unit Exams

**January:** Revision

**February:** Final Exams

## CHEMISTRY

### Books Prescribed:

1. NCERT
2. Moderns's abc by S.P. Jauhar
3. Dinesh by S. K. Malhotra

### April:

1. Some basic concepts of chemistry
2. Structure of atom

Subject enrichment activity:

1. Make a formulas chart of some basic concepts of chemistry

Art integrated activity:

1. Make an atomic structure model.

**May:** Revision, Tests and First Unit Test

**June:** Summer vacations.

### July:

3. Classification of elements and periodicity in properties.
4. Chemical bonding and molecular structure.

Practicals:

A. Basic laboratory techniques

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a jet glass
4. Boring a cork

B. Characterization and purification of chemical substances.

1. Determination of melting point of an organic compound
2. Determination of boiling point of an organic compound
3. Crystallization of impure sample of any one of the following: alum, copper sulphate, benzoic acid.

Subject enrichment activity:

1. Make a waves doodle notes

laws of friction, rolling friction, lubrication, dynamics of uniform circular motion: centripetal force, examples of circular motion ( vehicle on a level circular road, vehicle on a banked road )

(Unit-4) Work energy and power.

Ch- Work energy and power.

Work done by constant force and a variable force; kinetic energy, work - energy theorem, power. Notion of potential energy, potential energy of spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

### August:

(Unit-5) Motion of system of particles and rigid body.

Ch- System of particles and rotational motion.

Centre of mass of two - particle system , momentum conservation and centre of mass motion. Centre of mass of rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.

Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation)

(Unit-5) Gravitation

Ch- Gravitation

Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential , escape velocity, orbital velocity of satellite.

**September:** Half Yearly Exam.

### October:

(Unit-6) Properties of Bulk Matter

Ch- Mechanical Properties of Solids.

Elasticity, stress-strain relationship, hooke's law, young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), poisson's ratio: elastic energy.

Ch- Mechanical properties of fluids.

Pressure due to fluid column; pascal's law and its applications (hydraulic lift & hydraulic brakes), effect of gravity on fluid pressure. Viscosity stoke's law terminal velocity, streamline and turbulent flow, critical velocity, bernoulli's theorem and its simple applications.

Ch- Thermal properties of matter.

Heat, temperature, thermal expansion; thermal expansion of solids, liquid and gases, anomalous expansion of water; specific heat capacity;  $C_p$ ,  $C_v$ - calorimetry; change of state latent heat capacity. Heat transfer - conduction, convection and radiation, thermal conductivity, qualitative ideas of blackbody radiations, wein's displacement law, Stefan's law.

### **November:**

(Unit-7) Thermodynamics

Ch- Thermodynamics.

Thermal equilibrium and definition of temperature zeroth law of thermodynamics, heat, work and internal energy.

First law of thermodynamics; second law of thermodynamics: gaseous states of matter, change of condition of gaseous state isothermal, adiabatic, reversible, irreversible, and cyclic process.

(Unit-9) Behaviour of perfect gases and kinetic theory of gases.

Ch- Kinetic theory of gases.

Equation of states of perfect gas, work done in compressing gas. Kinetic theory of gases assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecule; degree of bokefreedom; law of equipartition of energy ( statement only ) and application to specific heat capacities of gases; concept of mean free path, avogadro's number.

(Unit-10) Oscillations and waves

Ch- Oscillations

Periodic motion time period, frequency, displacement as a function of time, periodic functions and their application. Simple harmonic motion (S. H. M.) and its equations of motion; phase; oscillations of loaded pendulum derivation of expression for its time period.

Ch- Waves

Wave and transverse motion: longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, beats.

**December: Revision** December Unit Exam.

**January:** Revision and Practical

**February:** Final Exams.

## PAINTING

### April:

U-1 Elements and principles of art.

- Practical- 1. Still Life  
2. Nature study

### May:

U-1 Pre Historic rock paintings

May unit test

### July:

U-2 Art of Indus valley civilization

- Practical-1. Landscape  
2. Composition folk art

Activity: Lippan art (art integrated)

### August:

U-4 Art of Ajanta

Practical:

1. Composition mosaic art
2. Advertisement

**September:** Half yearly examination.

### October:

U-5 1. Indian sculptures

2. Indian architecture

Practical:

1. Land scape
2. Portrait

### November:

Artist-

1. M.F Hussain
2. Rabindranath Tagore
3. Raja Ravi Verma
4. Nand Lal Bose
5. Jamini Roy

Art integrated activity:

1. Make a periodic test Rubik's cube to study the properties of periodic table.

### August:

5. Chemical thermodynamics

6. Equilibrium

Practical:

C. Experiment based on pH

1. Any one of the following experiments.

\*determinations of pH of some solutions obtained from fruit juices solution of known and varied concentration of acids, bases and salts using pH paper or universal indicator.

\*comparing the pH of solution of strong and weak acids of same concentration. Study the pH change in the titration of a strong base using universal indicator.

2. Study the pH change by common-ion in case of weak acids and weak bases.

D. Chemical equilibrium

One of the following experiments:

1. Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either of the ions.

2. Study the shift of equilibrium between  $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$  and chloride ions by changing the concentration of either of the ions.

E. Quantative estimation

1. Using a mechanical balance/electronic balance.

2. Preparation of standard solution of oxalic acid.

3. Determination of strength of given solution of sodium hydroxide by titrating it against standard solution of oxalic acid.

Solution of oxalic acid

4. Preparation of standard solution of sodium carbonate.

5. Determination of strength of a given solution of hydrochloric acid by titrating it against standard.

Sodium carbonate solution.

**September:**

Revision Tests and Half Yearly Exam

**October:**

7. Redox reactions.

8. Organic chemistry:some basic principles & techniques.

Practical:

F. Qualitative Analysis

a. Determinations of one anion and one cation in a given salt.

Cations-

$Pb^{2+}$ ,  $Cu^{2+}$ ,  $As^{3+}$ ,  $Al^{3+}$ ,  $Fe^{3+}$ ,  $Mn^{2+}$ ,  $Ni^{2+}$ ,  $Zn^{2+}$ ,  $Co^{2+}$ ,  $Ca^{2+}$ ,  $Sr^{2+}$ ,  $Ba^{2+}$ ,  $Mg^{2+}$ ,  $Ng_4^+$

Anions-

$(CO_3)^{2-}$ ,  $S^{2-}$ ,  $NO_2^-$ ,  $SO_3^{2-}$ ,  $SO_4^{2-}$ ,  $NO_3^-$ ,  $Cl^-$ ,  $Br^-$ ,  $I^-$ ,  $PO_4^{3-}$ ,

$C_2O_4^{2-}$ ,  $CH_3COO^-$

(Note: Insoluble salts excluded)

b. Detection of- nitrogen, sulphur, chlorine, in organic compounds

G. Projects

Scientific investigations involving laboratory testing and collecting information from other sources.

**November:**

9. Hydrocarbons

Revision and Tests

Subject enrichment activity:

1. Make a mind map of redox reactions

Art integrated activity:

1. Make a water distillation model.

**December:** Revision and December unit test

**January:** Revision and revision tests

Pre-board exam

**February:** Final practicals exam and final exam.

**Hindi Music Vocal**

अप्रैल:

परिभाषाएं – नाद, श्रुति, ध्रुत, ताल–तीनाताल एवं तानपुरे

का विवरण

मई:

स्वर, सप्तक, मार्गी–देसी, राग, जीवनी–पंडित नारायण

भातखंडे, ताल–एकताल, राग, भैरवी, नाट्य–शास्त्र

जून: प्रैक्टिकल फाइल

जुलाई:

परिभाषाएं– थाट, जाति, राग बिहाग, ताल–चौताल,

रागो की पहचान कर लिखो, तराना।

अगस्त:

जीवनी पंडित विष्णु दिगम्बर पुलस्कर, ख्याल, जीवनी तानसेन।

सितंबर:

राग बिहाग स्वरलिपि, राग भीमपलासी स्वरलिपि,

राग भैरवी स्वरलिपि।

अक्टूबर: दोहराई



**November:** Preliminary Test

**December:** Pre-Board Examination-I

**January:** Pre-Board Examination-II

**February:** Final Examination.

Activity:  
3D Model of Taj Mahal

**December:**  
December Unit Test.

**January:**  
Practical:  
1. Still Use  
2. Landscape

**February:** Revision

**March:** Final examination.

## PHYSICAL EDUCATION

### April:

1. Changing trends and career in physical education.
2. Olympic value education.

### May:

3. Physical fitness, wellness and lifestyle
4. Physical education and sports for (CWSN)

### July:

5. Yoga
6. Physical activity and leadership training.  
Revision and periodic test.

### August:

7. Test, Measurement and evaluation
8. Fundamental of anatomy, physiology and  
Kinesiology in sports.

**September:** Half Yearly Exam

### October:

9. Psychology and Sports
10. Training and doping in sports

**November:** Revision and test  
Practical work.

## INFORMATION TECHNOLOGY

### Books Prescribed: C.B.S.E. (NCERT)

1. Information technology (802) study material
2. Employability skills.

### April:

Part-A  
Unit-1 Communicating skills IV  
Part-B  
Unit-1 Database concepts RDBMS tools  
Part-B  
Unit-2 Operating web based applications.

### May:

Part-A  
Unit-2 Self management skills IV  
Revision and May Periodic Test

### July:

Part-A  
Unit-3 ICT skills- IV  
Part-B  
Unit-3 Java-fundamental of Java programming (First Half)  
Activity:  
Quiz will be conducted based on Java and My SQL.

### August:

Part -A - Unit 4: Entrepreneurial Skills - IV  
Part - B - Unit 3: Java - Fundamentals of Java  
Programming (Second Half)

**September:** Half Yearly Exam

### October:

Part-B  
Unit-4 Work integrated learning- IT-DMA  
Part-A  
Unit-5 Green skills IV