

**SYLLABUS- SA-II**  
**CLASS IX**

**Physics**

**Chapter 10: GRAVITATION**

Thrust and pressure, Buoyancy, Archimedes principle, conditions for floatation and sinking, elementary idea of relative density.

**Chapter 11: WORK, ENERGY AND POWER**

Mechanical work done by a force, conditions for work done, Energy , potential and kinetic energy, Law of conservation of energy, Commercial unit of energy and its relationship with the S.I unit of energy, Power.

**Chapter 12: SOUND**

Production and propagation of sound, Transverse and Longitudinal waves. Sound needs a medium to travel, Speed of sound in different media, Characteristics of sound waves, Echo, Reverberation, Range of hearing , SONAR, Structure of the human ear and the functions of each part.

**LIST OF EXPERIMENTS**

1. To observe and compare the pressure exerted by a solid iron cuboid / glass slab on fine sand / refined flour while resting on its three different faces and to calculate the pressure exerted in the three different cases.
2. To determine the density of solid (denser than water) by using spring balance and a measuring cylinder.
3. To establish the relation between the loss in weight of a solid when fully immersed in
  - (a) tap water
  - (b) strongly salty water, with the weight of the water displaced by it by taking at least two different solids.
4. To verify laws of reflection of sound.
5. To determine the velocity of a pulse propagated through a stretched string / slinky.

**BIOLOGY**

UNITS	MARKS
UNIT II ORGANISATION IN THE LIVING WORLD: CHAPTER: 7: DIVERSITY IN LIVING ORGANISMS CHAPTER:11: WHY DO WE FALL ILL?	26

UNIT IV OUR ENVIRONMENT: CHAPTER: 14: NATURAL RESOURCES	10

Note: The material for Open Text Book Assessment (OTBA) for SA-II will be from Unit IV: Our Environment. This unit will be tested through OTBA only.

MCQ based on following experiments List of Experiments (this will carry 15% weightage in the paper)

1. To study the characteristics of *Spirogyra/Agaricus*, Moss/Fern, *Pinus* (either with male or female cone) and an Angiospermic plant. Draw and give two features of the group they belong to.
2. To observe pictures/charts/models of earthworm, cockroach, fish and bird.
3. For each organism draw and record:
  - i. one phylum feature
  - ii. one adaptive feature
4. To study the external features of root, stem, leaf and flower of monocot and dicot plants.
5. To study the lifecycle of mosquito.

## CHEMISTRY

### Chapter – 3 Atoms and Molecules.

- Law of chemical combination.
- Law of conservation of mass.
- Dalton's atomic theory.
- Atomic mass.
- Molecule and molecular mass.
- Chemical formulae.
- Mole concept.

### Chapter 4 – Structure of atom.

- Nature of matter.
- Discovery of electrons, protons and neutrons.
- Thomson's model of atom.
- Rutherford alpha ray scattering experiment.

- Rutherford's Model of an atom.
- Atomic number.
- Mass number.
- Electron distribution
- Valences.
- Isotopes and isobars.

## **Chapter 14 - Natural resources**

1. Introduction.
2. The breath of life – Air
3. Air pollution.
4. Water – A wonderful liquid.
5. Water pollution.

**MCQ BASED ON Experiment:** To verify the law of conservation of mass in a chemical reaction .

## **MATH**

Chapter-4: Linear Equations in two Variables

Chapter-8: Quadrilaterals

Chapter-9: Areas of Parallelograms and Triangles

Chapter-10: Circles

Chapter-11: Constructions

Chapter-13: Surface Areas and Volumes

Chapter-14: Statistics

Chapter-15: Probability

## **GERMAN**

### **Module 8**

**Lek 1-** Wie hast du Mutti kennen gelernt?

**Lek 2-** Wie war es damals?

**Lek 3-** Es war einmal

**Section A-** 2 Comprehension Texts

### **Section B :- Writing Skills**

- Message/ letter/Email writing (any 1 of these writing skills)
- Paragraph or Postcard writing
- summarizing a German passage in English.

### **Section C:- Applied Grammar**

- Subordinate Clauses

- Prepositions
- Partizip Perfekt
- Separable Verbs
- Präteritum
- Question Making (all W questions and Ja/ Nein questions)
- Personal pronouns (Akkusativ and Dativ)

#### **Section D – Value based Questions**

- Completing a Text with vocabulary provided
- Value based question

#### **ENGLISH**

1.	_Reading Comprehension
2.	(i) Article Writing (ii) Short Story Writing (iii) Diary Entry
3.	(i) Integrated Grammar ( Editing/Omission) (ii) Reported Speech (iii) Re ordering of Sentences
4.	(i) Keeping it from Harold (ii) The Man Who Knew Too Much (iii) The Best Seller (iv) Bishop’s Candlesticks ( v) Song of the Rain (vi) Oh, I Wish I’d Looked After Me Teeth (vii) Seven Ages of Man
5.	OTBA ( Open Text Book Assessment) (i) Let’s Welcome, Accept and Respect (ii) Indigenous Games of India
6.	Three Men in a Boat ( Chapters 11 – 19)
7.	MCB Units: i) Mystery ii) Children iii) Sports and Games

## **GEOGRAPHY**

1. Climate
2. Natural Vegetation and wild life
3. Population
4. (Map As per the map list for the 2nd term)

## **ECONOMICS**

1. Poverty as a challenge
2. Food security in India

## **HISTORY**

1. Forest Society and Colonialism
2. Clothing: Social History.  
Map

## **POLITICAL SCIENCE**

1. Electoral Politics.
2. Working of Institutions.
3. Democratic Rights

## **FRENCH**

- Unité III
- Leçon 7 L'argent de poche
- Leçon 8 Faire des achats
- Leçon 9 Un dîner en famille
- Bilan 3
- Unité IV
- Leçon 10 La mode
- Leçon 11 Les fêtes
- Leçon 12 La Francophonie
- Bilan 4
- All related grammar topics
  - Les pronoms personnels
  - Les pronoms relatifs simples (qui ,que où )
  - Les verbes
  - Le Comparatif et le superlatif
  - Les négations
  - L'adjectif et le pronom interrogatif
- Writing skills
  - Letter writing
  - Recipe writing

- Message writing
- Putting dialogues in order
- Unseen comprehension
- Question answers including Value based questions (Leçons 7 – 12)
- True and False
- Match the following
- Fill in the blanks

## Hindi

**अपठित बोध** - अपठित गद्यांश और पद्यांश ।

**व्याकरण** – वर्ण-विचार, उपसर्ग-प्रत्यय, संधि, विराम-चिह्न।

**स्पर्श** – वैज्ञानिक चेतना के वाहक : चंद्रशेखर वेंकट रामन, कीचड़ का काव्य, धर्म की आड़, शुक्रतारे के समान, एक फूल की चाह, गीत-अगीत, अग्नि-पथ, अरुण कमल।

**संचयन** – मेरा छोटा सा निजी पुस्तकालय, हमिद खाँ, दिये जल उठे।

**रचनात्मक लेखन** - अनुच्छेद-लेखन, औपचारिक पत्र-लेखन, चित्र- वर्णन, संवाद-लेखन, विज्ञापन-लेखन।

## **Sanskrit**

- अपठित गद्यांश,
- अनौपचारिक पत्र लेखन,
- चित्र वर्णन अथवा अनुच्छेद लेखन
- शब्द रूप - हलन्त एवम् सङ्ख्या वाचक शब्द
- धातु रूप - परस्मैपदी आत्मनेपदी एवम् उभयपदी
- उपपद विभक्तियाँ - द्वितीया से सप्तमी
- प्रत्यय - क्त क्तवतु शतृ एवं शानच्
- पठित अवबोधन - पुस्तक से पाठ एक से सात - अवबोधन कार्य, श्लोक अन्वय, प्रश्न निर्माण, कथा क्रम संयोजन, संदर्भ शब्दार्थ मेलनम्