

# Grade 9 Term 1 Syllabus 2016-17

**Subject**

**Syllabus**

English

**Literature:** 1. How I Taught My Grandmother to Read

2. A Dog Named Duke

3. The Brook

4. The Road Not Taken

5. The Solitary Reaper

6. Lord Ullin's Daughter

7. Villa for Sale

8. Three Men in a Boat- Chapters 1-10

## **Main Course Book**

1. People

2. Adventure

3. Environment

4. The Class IX Radio and Video Show

## **Writing Skills**

1. Diary

2. Article

3. Short Story Writing

## **Grammar**

1. Integrated grammar- Gap Filling, Editing/Omission, Sentence Reordering/ Sentence Transformation

Hindi

हिंदी

अपठित बोध -	अपठित गद्यांश व पद्यांश
व्यवहारिक व्याकरण -	वर्ण-विचार, संधि, उपसर्ग- प्रत्यय, विराम-चिह्न।
साहित्य (स्पर्श) -	रैदास के पद, रहीम के दोहे, आदमीनमा, धूल, दुख का अधिकार, ए शिखर यात्रा, तुम कब जाओगे अतिथि।
संचयन -	गिल्लू, स्मृति, कल्लू कुमहार की उनाकोटि।
रचना -	अनुच्छेद-लेखन, अनौपचारिक पत्र-लेखन, संवाद-लेखन, विज्ञापन

Math

1. Number Systems
2. Polynomials
3. Coordinate Geometry
4. Lines and Angles
5. Triangles
6. Euclid's Geometry
7. Heron's Formula

**Social Science**  
(History/Civics/Geography/Economics)

**Grade IX (2016-17) Social Science Term 1 Syllabus**

1. **History** : L-1 French Revolution + Map  
L-3 Nazism and the Rise of Hitler  
Entire lessons along with Notebook Work, Re Exercises and Smart Skills
2. **Political Science** : L-1 Democracy in the Contemporary World  
L-2 What is Democracy? Why Democracy?  
L-3 Constitutional Design  
Entire lessons along with Notebook Work, Re Exercises and Smart Skills
3. **Geography** : Chapter-1 India size, location  
Chapter-2 India Physical Features  
Chapter-3 India Drainage  
Maps for all three chapters according to the n  
Diagrams from all chapters.  
Entire chapters, Handouts, Smartskills, revisio  
& notebook work.
4. **Economics** : Chapter-1 The story of Palampur  
Chapter-2 People as a resource  
Entire chapters, Smart Skills, revision exercis  
assignment sheets.

## Physics

### Unit III: Motion, Force and Work

Motion: Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, derivation of equations of motion by graphical method; elementary idea of uniform circular motion.

Force and Newton's laws : Force and Motion, Newton's Laws of Motion, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration. Elementary idea of conservation of Momentum, Action and Reaction forces. Gravitation: Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Free fall.

## Chemistry

### I: Matter-Nature and Behaviour

Definition of matter; solid, liquid and gas; characteristics - shape, volume, density; change of state-melting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation.

Nature of matter : Elements, compounds and mixtures. Heterogenous and homogenous mixtures, colloids and suspensions.

MCQ on Practicals-

2. To prepare:

- a true solution of common salt, sugar and alum
- a suspension of soil, chalk powder and fine sand in water
- a colloidal solution of starch in water and egg albumin/ milk in water and distinguish between these on the basis of

1 transparency

1 filtration criterion

1 stability

3. To prepare

- a mixture
- a compound

using iron filings and sulphur powder and distinguish between these on the basis of:

- appearance, i.e., homogeneity and heterogeneity
- behaviour towards a magnet
- behaviour towards carbon disulphide as a solvent
- effect of heat

4. To carry out the following reactions and classify them as physical or chemical changes :

- Iron with copper sulphate solution in water
- Burning of magnesium ribbon in air
- Zinc with dilute sulphuric acid
- Heating of copper sulphate crystals
- Sodium sulphate with barium chloride in the form of their solutions in water

5. To separate the components of a mixture of sand, common salt and ammonium chloride (or camphor) by sublimation.

6. To determine the melting point of ice and the boiling point of water.

Biology	<p>Organization in the Living World</p> <ol style="list-style-type: none"> <li>1. Cell - Basic Unit of life : Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.</li> <li>2. Tissues, Organs, Organ System, Organism: Structure and functions of animal and plant tissues (only four types of tissues in animals; Meristematic and Permanent tissues in plants).</li> <li>3. Improvement in food resources: Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming.</li> </ol> <p>Practicals for MCQ:</p> <ol style="list-style-type: none"> <li>1. To test (a) the presence of starch in the given food sample, (b) the presence of the 129 adulterant metanil yellow in dal.</li> <li>2. To prepare stained temporary mounts of (a) onion peel, (b) human cheek cells &amp; to record observations and draw their labeled diagrams.</li> <li>3. To identify Parenchyma and Sclerenchyma tissues in plants, striped muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.</li> <li>4. To determine the mass percentage of water imbibed by raisins.</li> </ol>
French	<p style="text-align: center;">Lessons 1,2,3,4,5,6 Unseen comprehension</p> <p>Writing skills: eg weather forecast , message writing ,picture description ,putting a dialogue in order ,postcard writing Grammar : Verbs ,articles ,negatives, prepositions ,etc Literature : Question and answers from the lessons , true and false , fill in the blanks ,etc and Value based questions</p>
Sanskrit	<p>मणिका - पाठ 1से 6 अपठित अवबोधनं <b><u>रचनात्मक कार्य</u></b></p> <ul style="list-style-type: none"> <li>● अनौपचारिक अथवा औपचारिक पत्र</li> <li>● चित्र वर्णन अथवा कथा रचना</li> </ul> <p><b><u>अनप्रयुक्त व्याकरण</u></b></p> <ul style="list-style-type: none"> <li>● उच्चारण स्थान</li> <li>● संधि संधिच्छेदं वा</li> <li>● उचितविभक्ति प्रयोगं</li> <li>● उचितधातु प्रयोगं</li> <li>● उपपदविभक्ति प्रयोगं</li> <li>● प्रत्यय विभज्यं संयोगं वा</li> </ul>
Spanish	<p>UNIT 1 - UNIT 6 BOOK</p> <p>TOPICS:</p> <ol style="list-style-type: none"> <li>1. Dialogue writing</li> <li>2. Email writing</li> <li>3. Description of a person using "ser, tener,estar and llevar.</li> <li>4. The difference between "ser , estar and hay.</li> </ol>

5. The prepositions used with *estar* for asking and telling directions.
6. The expressions of frequency. Meanings and making sentences.
7. The nationalities , masculine and feminine and countries.
8. Forming questions for the answers.
9. The expressions with “*tener*”
10. The verbs in the book and smart skills.
11. Making sentences with verbs.
12. Vocabulary in smart skills, book and workbook.
13. Opposites of adjectives (workbook)
14. *Gustar* and *encantar*
15. The difference between *Nadie, nunca, nada, algo , algun . alguien*
16. The difference between *muy, mucho,mucha,muchos,,muchas, poco,poca, pocos,pocas.*
17. The difference between *ningun, ninguna, ninguno /as*
18. The professions
19. General questions related to age, nationality, family, what you do normally etc.
20. The verbs “*creer, pensar, preferir, llevarse bien /mal .*
21. The verbs in smart skills .
22. The numbers
23. Literature

FIT

#### Chapter 1: Computer System – An Overview

- What is a Computer
- Functional Components of a Computer
- Basic applications
- Characteristics of a Computer

#### Chapter 2: Computer Components – Functional Overview

- Input Devices (Keyboard, Scanner, Mouse, OCR, MICR, Light Pen, Bar Code Readers, Magnetic Stripe Reader, Microphone and Digicam)
- Output Devices (Monitors, Printers, Plotters and Speakers)
- The Processing Unit (ALU and CU)
- Units of Memory(byte, kilobyte, megabyte, gigabyte)
- Types of Main memory (RAM and ROM)
- Storage Devices (Floppy Disks, Hard Disks, Compact Disks, DVDs)
- New Age Memories (Pen/Flash Drives, Memory Stick)

#### Chapter 3: Computer Software

- Types of Software
- System Software - Definition of System software and operating system, definition of language processor & device driver
- Utility Software -Compression utility and Anti virus Software
- Application Software -> Types, Definition and examples

#### Chapter 4: Basics of Operating Systems(OS)

- Functions of Operating System
- Operating Systems based on types of Interfaces
- Commonly used Operating Systems(Unix, Linux,Windows, Mobile Operating Systems.

#### Chapter 5 : Working with Operating System

- Introducing OS Windows 7.

- Basic Components of a GUI Window.
- Starting/running and closing Applications.
- Basic tools of Windows OS(Calculator, Paint, Notepad, Wordpad).
- Managing Files and Folders.

#### Chapter 6: MS-Word

- Features of Word Processor
- MS-Word Window components (Menu bar, title bar, formatting toolbar, standard toolbar, ruler bar, status bar, scroll bar, work area)
- Creating/Opening/Saving a document.
- Word processing terminology(Non-printing characters, Word-wrapping, Text alignment)
- Character Formatting(Bold/Italic/Underline, Superscript/subscript, Font-type/size, Change case)
- Page Formatting(Margins, header and footer, numbering pages, line spacing, page orientation, Border and shading)
- Using grammar and spell-check utility.
- Inserting Graphics(drawing objects, autoshapes, WordArt, pictures, Textbox).
- Bulleted and Numbered lists.

Home Science Chapter 1 : Concept and Scope of Home Science Education

Chapter 2 : Family - A unit of Society

Chapter 3 : Food, Nutrition & Health

Chapter 4 : Methods of Cooking

All the work done in the notebook, textbook and assignments.