

**ST. XAVIER'S SCHOOL, DORANDA**  
**SYLLABUS - 2022-23**

**CLASS - IX**

**ENGLISH LANGUAGE**

MONTH	CHAPTERS
APRIL	<ul style="list-style-type: none"><li>➤ Notice writing</li><li>➤ Email writing</li><li>➤ Functional Grammar</li></ul>
MAY	<ul style="list-style-type: none"><li>➤ Précis writing</li><li>➤ Functional Grammar</li><li>➤ <b>UNIT TEST</b></li></ul>
JULY	<ul style="list-style-type: none"><li>➤ Letter writing – Informal</li><li>➤ Functional Grammar</li></ul>
AUGUST	<ul style="list-style-type: none"><li>➤ Letter writing – Formal</li><li>➤ Functional Grammar</li></ul>
SEPTEMBER	<ul style="list-style-type: none"><li>➤ Revision</li><li>➤ <b>FIRST TERM EXAM</b></li></ul>
OCTOBER	<ul style="list-style-type: none"><li>➤ Narrative Essay</li><li>➤ Functional Grammar</li></ul>
NOVEMBER	<ul style="list-style-type: none"><li>➤ Story writing</li><li>➤ Functional Grammar</li></ul>
DECEMBER	<ul style="list-style-type: none"><li>➤ Argumentative Essay</li><li>➤ Functional Grammar</li><li>➤ <b>UNIT TEST</b></li></ul>
JANUARY	<ul style="list-style-type: none"><li>➤ Descriptive Essay</li><li>➤ Functional Grammar</li></ul>
FEBRUARY	<ul style="list-style-type: none"><li>➤ <b>FINAL EXAM</b></li></ul>

➤ **Project Work – E mail & Notice writing**

❖ 8 each

- **Portion for 1<sup>st</sup> Unit Test (May)** – Functional Grammar
- **Portion for 2<sup>nd</sup> Unit Test (Dec)** - Functional Grammar

**Date of Submission of Project – 8<sup>th</sup> July 2022**

## ENGLISH LITERATURE

MONTH	CHAPTERS
APRIL	<ul style="list-style-type: none"><li>➤ Old man at the Bridge (Prose)</li><li>➤ After Blenheim (Poem)</li><li>➤ MOV – Introduction &amp; Act 1 Sc i</li></ul>
MAY	<ul style="list-style-type: none"><li>➤ A Face in the Dark (Prose)</li><li>➤ The Heart of The Tree (Poem)</li><li>➤ MOV – Act 1 Sc i</li><li>➤ <b>UNIT TEST</b></li></ul>
JULY	<ul style="list-style-type: none"><li>➤ The Cold Within (Poem)</li><li>➤ Chief Seattle’s Speech (Prose)</li><li>➤ MOV – Act 1 Sc ii</li></ul>
AUGUST	<ul style="list-style-type: none"><li>➤ Television (Poem)</li><li>➤ MOV – Act 1 Sc iii</li></ul>
SEPTEMBER	<ul style="list-style-type: none"><li>➤ Revision</li><li>➤ <b>FIRST TERM EXAM</b></li></ul>
OCTOBER	<ul style="list-style-type: none"><li>➤ MOV – Act 2 Sc i &amp; ii</li><li>➤ A Horse and Two Goats (Prose)</li></ul>
NOVEMBER	<ul style="list-style-type: none"><li>➤ Hearts and Hands (Prose)</li><li>➤ Daffodils (Poem)</li><li>➤ MOV – Act 2 Sc iii, iv, v</li></ul>
DECEMBER	<ul style="list-style-type: none"><li>➤ MOV – Act 2 Sc vi</li><li>➤ Angel in Disguise (Prose)</li><li>➤ <b>UNIT TEST</b></li></ul>
JANUARY	<ul style="list-style-type: none"><li>➤ The Bangle Sellers (Poem)</li><li>➤ MOV – Act 2 Sc vii, viii &amp; ix, Act 3 Sc i</li></ul>
FEBRUARY	<ul style="list-style-type: none"><li>➤ <b>FINAL EXAM</b></li></ul>

➤ **Project Work –**

‘Futilities of war is depicted well in the lessons Old Man at the Bridge and the poem After Blenheim. Keeping this in mind throw light on the ongoing war between Russia and Ukraine.’

➤ **Portion for 1<sup>st</sup> Unit Test (May)** – After Blenheim, MOV Act 1 Sc i

➤ **Portion for 2<sup>nd</sup> Unit Test (Dec)** - Hearts and Hands, Daffodils

**Date of Submission of Project – 8<sup>th</sup> July 2022**

-----  
=====

# Mathematics

## 1<sup>st</sup> term syllabus:

- 1) Rational and irrational numbers, representation on number lines. Surds.  
Rationalisation
- 2) Compound interest without using formula --- compound interest as a repeated simple interest, Computation with a growing principal. Relation between C.I and S.I
- 3) Compound interest using formula to find Principal ,rate, time, and miscellaneous problem (half yearly and yearly)
- 4) Expansions-- Identities like  $(a+b)^2$ ,  $(a-b)^2$ ,  $(a+b)^3$ ,  $(a-b)^3$
- 5) Factorisation by taking the common factor by splitting the middle terms, difference of two squares, sum or difference of two cubes.
- 6) Simultaneous equation including word problems, Methods of solving simultaneous equation by substitution, elimination, cross-multiplication, Equations reducible to linear equation, Solution of simultaneous linear equation graphically.
- 7) Indices – Introduction, law of indices, simplification of expression, solving exponential equations.
- 8) Logarithm – Interchange of form, laws of logarithm.
- 9) Trigonometrical Ratios – Concept of perpendicular, base and hypotenuse in a right triangle, Reciprocal relation.
- 10) Trigonometrical Relations of standard angle
- 11) Solution of right triangle, miscellaneous problem.
- 12) Complimentary angles for sine and cosine.
- 13) Triangle – Conditions for congruency of triangles.
- 14) Isosceles triangle – Different theorems related to this.

## 1<sup>st</sup> Unit Test:

- a) Indices
- b) Logarithm
- c) Expansion
- d) Factorisation
- e) Rational and Irrational numbers

## 2nd Term Syllabus:

- 15) Mid-point Theorem and it's converse, equal intercept theorem
- 16) Pythagoras Theorem – Proof and sums based on it
- 17) Rectilinear figures, regular polygon, quadrilaterals.
- 18) Construction of polygon – Construction of quadrilateral and regular hexagon

- 19) Area theorem – Figures between the same parallel, triangles with the same vertex and bases along the same line.
- 20) Circle – Arc, segment, sector, chord properties.
- 21) Statistics – Variable, tabulation, frequency distribution, graphical representation of data, histogram, frequency polygon.
- 22) Mean and median
- 23) Area and perimeter of plane figures – Some special types of triangles, area and perimeter of all types of quadrilaterals, circumference and area of a circle.
- 24) Solids – cube, cost of an article, cross-section, flow of water
- 25) Co-ordinate Geometry – Dependent and independent variable, ordered pair, co-ordinate of points, plotting of points, graphing a linear equation, inclination and slope, finding the slope and y-intercept of a line.
- 26) Distance formula – To find the distance between two given points, circum-centre of a triangle.
- 27) Inequalities – Introduction and related theorems
- 28) Chapters of first term are also included in the final term.

### 2nd Unit Test:

- a) Mid-point theorem, intercept theorem
- b) Pythagoras Theorem
- c) Statistics
- d) Mean and median
- e) Circle

### Month-Wise Breakup

April:

- 1) Indices
- 2) Logarithm
- 3) Expansions

May:

- 1) Factorisation
- 2) Rational and Irrational Numbers
- 3) Simultaneous Equation

June:

- 1) Simultaneous Equation (continued)
- 2) C.I. without using formula

July:

- 1) C.I. using formula
- 2) Trigonometrical Ratios
- 3) Trigonometrical Ratios of standard angle

August:

- 1) Solution of right triangles
- 2) Complementary Angles
- 3) Triangles

September:

- 1) Isosceles Triangle

October:

- 1) Mid-Point Theorem
- 2) Pythagoras Theorem
- 3) Statistics

November:

- 1) Mean and median
- 2) Circle
- 3) Rectilinear Figures

December:

- 1) Construction of Polygon
- 2) Area Theorem (Geometry)
- 3) Area and Perimeter (Mensuration)

January:

- 1) Solids
- 2) Co-ordinate Geometry
- 3) Distance formula

February:

- 1) Inequities

---

---

# HISTORY /CIVICS

## **1<sup>st</sup> Term**

<u>Topic</u>	<u>Month &amp;Week</u>
• The Harappan Civilization	April (2 <sup>nd</sup> &3 <sup>rd</sup> )
• Our Constitution	April (4 <sup>th</sup> & 5 <sup>th</sup> )
• The Renaissance	May (2 <sup>nd</sup> &3 <sup>rd</sup> )
• The Vedic Period	May (4 <sup>th</sup> &5 <sup>th</sup> )
• Jainism and Buddhism	July (2 <sup>nd</sup> &3 <sup>rd</sup> )
• The Reformation	July (4 <sup>th</sup> )
• The Industrial Revolution	July (5 <sup>th</sup> )
• Elections	August (1 <sup>st</sup> & 2 <sup>nd</sup> )
• The Mauryan Empire	August (3 <sup>rd</sup> &4 <sup>th</sup> )
<b>Revision</b>	<b>September (1<sup>st</sup>)</b>

**Portion for First Unit Test - The Harappan Civilization, Our Constitution**

**Portion for First term examination - All the chapters taught in the first term.**

**Project - Discuss the art and architectural features of the following monuments of Brihadeshwar Temple, Red Fort, Taj Mahal**

**Date of submission of project – 8<sup>th</sup> July 2022**

## **Final Term**

• The Sangam Age	September (2 <sup>nd</sup> & 3 <sup>rd</sup> )
• The Age of the Guptas	September (4 <sup>th</sup> )October(3 <sup>rd</sup> )
• Local Self Government	October ( 4 <sup>th</sup> & 5 <sup>th</sup> )
• South India and The Cholas	November (1 <sup>st</sup> &2 <sup>nd</sup> )
• The Delhi Sultanate	November (3 <sup>rd</sup> &4 <sup>th</sup> )
• The Great Mughals	December (1 <sup>st</sup> &2 <sup>nd</sup> )
• The Emergence of Composite Culture	January (2 <sup>nd</sup> &3 <sup>rd</sup> )
<b>Revision</b>	<b>January (4<sup>th</sup> )</b>

**Portion for Final Unit Test -The Sangam Age, Local Self Government**

**Portion for Final term examination – Entire syllabus mentioned above**

-----

# **GEOGRAPHY**

## **MID TERM (April to September)**

### **April and May**

#### **Ch.2: Geographic Grid - Latitude and Longitudes.**

Concept of latitudes: Main latitudes, their location with degrees, parallels of latitude and their uses, Concept of longitude - Prime meridian, time( local standard and time zones), Greenwich Mean Time and International Date Line. Eastern and Western hemisphere. Great and small circle.

#### **Ch.3: Rotation and Revolution**

Rotation - direction, speed and its effects (occurrence of day and night, the sun rising in the east and setting in the west, Coriolis effect)

Revolution of the Earth and its inclined axis- effects: the variation in the length of day and night and seasonal changes with equinoxes and solstices.

## **UNIT TEST - Ch.2: Geographic Grid - Latitude and Longitudes.**

### **July**

#### **Ch.4: Earth's structure**

Core, mantle, crust- meaning, extent and their composition.

#### **Ch.6: Rocks**

Difference between rocks and minerals, types of rocks: igneous, sedimentary, metamorphic - their characteristics and formation; rock cycle.

### **August**

#### **Ch 9: Weathering and Denudation**

Meaning, types and effects of weathering.

Types: Physical weathering: block and granular disintegration, exfoliation;

Chemical weathering: oxidation, carbonation, hydration and solution;

Biological weathering: caused by humans, plants and animals.

### **September**

#### **Ch.7: Volcanoes**

Meaning, types – active, dormant, extinct. Effects - Constructive and destructive.

Important volcanic zones of the world.

#### **Ch.8 : Earthquakes**

Meaning, causes and measurement.

Effects: Destructive and constructive.

Earthquake zones of the world.

Map work for Mid term:

The oceans, Seas, Gulfs and Straits – all major oceans,  
Rivers – Mississippi, Colorado, Amazon, Paraguay, Nile, Zaire, Niger, Zambezi, Orange, Rhine,  
Volga, Danube, Murray, Darling, Hwang Ho, Yangtse Kiang, Ob, Indus, Ganga, Mekong,  
Irrawady, Tigris, Euphrates

**FINAL TERM (October to February)**

**October**

Ch.10: Hydrosphere

Meaning of hydrosphere.

Tides – formation and pattern.

Ocean currents- their circulation pattern and effects. (specifically of Gulf Stream, North Atlantic Drift, Labrador Current, Kuro Shio and Oya Shio.)

**November and December**

Ch. 11: The Atmosphere

Composition and Structure of the Atmosphere – Troposphere, Stratosphere, Ionosphere and Exosphere; Ozone in the Stratosphere, its depletion.

Global Warming and its impact.

Ch. 13: Atmospheric Pressure and Winds

Meaning and factors that affect atmospheric pressure.

Major pressure belts of the world.

Factors affecting direction and velocity of wind - pressure gradient, Coriolis Effect.

Permanent winds - Trades, Westerlies and Polar Easterlies.

Periodic winds – Land and sea breezes, monsoons

Local winds – Loo, Chinook, Foehn and Mistral

Variable winds – Cyclones and anticyclones

Jet streams – Meaning and importance

Ch. 14: Humidity and Precipitation

Precipitation – forms: rain, snow and hail

Types of rainfall - relief/orographic, convectional, cyclonic/frontal with examples from different parts of the world.

**UNIT TEST - Ch.10: Hydrosphere and Ch. 11: The Atmosphere**



## **January**

### Ch. 16: Natural Regions of the world

Location, area, climate, natural vegetation and human adaptation.

Equatorial region, Tropical grassland, Tropical Deserts, Tropical Monsoon, Mediterranean, Temperate grasslands, Tundra and Taiga .

### Map work for Final term:

Mountains - Rockies, Andes, Appalachian, Alps, Himalayas, Pyrenees, Scandinavian Highland, Caucasus, Atlas, Drakensburg, Khingan, Zagros, Urals, Great Dividing Range

Plateaus

Major Natural Regions of the world.

PROJECT: Weather Record

\*\*\*\*\*

# **PHYSICS**

## **FIRST TERM**

### **First term unit test**

Measurement and Experimentation

(A) System of unit and units in S.I system

(B) Measurement of Length (c) Measurement of time and simple pendulum.

### **Chapter 1:-**

#### **Measurement and Experimentation:-**

(A) systems of units and unit in S.I systems, units of length, mass and time, (B) Measurements of Length, (c) Measurement of time and simple pendulum.

### **Chapter 6:-**

#### **Heat and Energy (Revision from class VIII)**

### **Chapter 2:-**

**Motion in One Dimension:-** (A) some terms related to motion, (B) Graphical Representation of linear motion, (C) Equation of motion.

### **Chapter 7:-**

#### **Reflection of Light. (Revision from class VIII)**

### **Chapter 3:-**

**Laws of Motion:-** (A) Contact and Non Contact forces, (B) Newton's first law of motion and inertia, (C) Linear momentum and Newton's second Law of Motion, (D) Newton's third Law of Motion, (E) Gravitation.

### **Chapter 4:-**

#### **Pressure in Fluids and Atmospheric Pressure:**

(A) Pressure in Fluids and its transmission, (B) Atmospheric pressure and its measurement.

## FINAL TERM

### 2<sup>nd</sup> Unit Test

**Upthrust in Fluids, Archimedes' Principle and flotation:-**(A) Upthrust and Archimedes' Principle, (B) Relative Density and its measurement by Archimedes' Principle,(C) Floatation. **Pressure in Fluids and Atmospheric Pressure:**

(A) Pressure in Fluids and its transmission,(B) Atmospheric pressure and its measurement.

#### Chapter 5:-

**Upthrust in Fluids, Archimedes' Principle and flotation:-**(A) Upthrust and Archimedes' Principle, (B) Relative Density and its measurement by Archimedes' Principle, ,(C) Floatation

#### Chapter 8:-

**Propagation of Sound Waves. (Revision from class VIII)**

**Chapter 9:-Current Electricity (Revision from class VIII)**

**Chapter 10:-Magnetism. (Revision from class VIII)**

### Month wise break up of the Syllabus.

**April:-** Measurement and Experimentation:- (A) Systems of unit and units in S.I systems, units of length, mass and time,(B) Measurement of Length.

**May:-** (C) Measurement of time and simple pendulum.

Heat and Energy.( Revision from class 8)

Motion in One Dimension:- (A)Some terms related to motion, (B) Graphical representation of linear motion.

**June :-** (C) Equations of motion

**July :-**

Reflection of Light.( Revision from class 8)

Laws of Motion:- (A) Contact and non contact forces, (B)Newton's first law of motion and inertia, (C)Linear momentum and Newton's second law of motion

**August:-** Laws of Motion:- ,(D) Newton's third law of motion,(E) Gravitation. Pressure in Fluids and Atmospheric Pressure:- (A) Pressure in Fluids and its transmission,

**September:-** (B) Atmospheric pressure and its measurement

**October:-** Upthrust in Fluids, Archimedes' Principle and Floatation:- (A) Upthrust and Archimedes' Principle, (B) Relative density and its measurement by Archimedes' Principle, (C) Floatation

**November:-** Propagation of Sound Waves. ( Revision from class 8 ),.

**December:-** Current Electricity (Revision from class 8).

**January:-** Magnetism (Revision from class 8)

**February:-** Revision.

**(All the chapters of First Term is included in the Final Term Exam).**

---

---

# BIOLOGY

<u>MID TERM</u>	<u>FINAL TERM</u>
• Cell: The Unit of Life	• Nutrition
• Tissues: Plant and Animal tissues	• Digestive System
• The Flower	• Skeleton- Movement and I • Locomotion
• Pollination and Fertilization	• Skin-“The Jack of All Trades”
• Seeds- Structure and Germination	• The Respiratory System
• Respiration in Plants	• Diseases: Cause and Control
• Five Kingdom Classification	• Aids to Health
• Economic Importance of Bacteria and Fungi	• Health Organisations
• Hygiene	• Waste Generation and Management.

## MID TERM

### April-May 2022

#### ❖ Cell- The Unit of Life

- Basic Understanding of the cell theory.
- Structure of the plant and the animal cells with basic with the functions of various cell organelles.
- Major differences between a prokaryotic and eukaryotic cell.
- Differences between a plant cell and an animal cell with respect to cell wall, centrosomes, vacuoles and plastids.

#### ❖ Tissues- Plant and Animal Tissues

- Introduction to Tissues
- Plant Tissues - Meristematic Tissue and Permanent Tissue
- Meristematic tissue – Apical, Intercalary, Lateral Meristem
- Permanent tissues
  - Protective tissues
  - Supportive Tissues - Parenchyma, Collenchyma and Sclerenchyma
  - Conducting tissues - Xylem and Phloem
- Animal tissues
- Epithelial tissues – Squamous, Cuboidal, Columnar, Ciliated, Glandular, Stratified
- Connective Tissue
  - Connective tissue proper- Areolar, Adipose and Fibrous
  - Supportive Connective Tissue- Cartilage and Bone
  - Fluid Connective Tissue- Blood and lymph
- Muscle Tissue - Striated Muscles, Unstriated Muscles, Cardiac Muscles

- Nervous tissue
- ❖ **The Flower**
  - Structure of the bisexual flower and the functions of its various parts,
  - A brief introduction to complete and incomplete flowers.
  - Essential and non-essential whorls of a bisexual flower, their various parts and functions.
  - Inflorescence and Placentation (meaning only)
- ❖ **Pollination and Fertilization**
  - Explanation, advantages and disadvantages of self and cross pollination.
  - Agents of pollination and the characteristic features of the flowers pollinated by various agents such as insects, wind and water.
  - Contrivances to prevent Self-pollination.
  - Events taking place between pollination and fertilization leading to the formation of the zygote in the embryo sac.
  - A brief explanation of the term double fertilization and triple fusion.

- ❖ **Portion for the First Unit Test (20 marks)- starting from 21<sup>st</sup> May 2022**
- **Cell- The Unit of Life**
- **Tissues-Plant and Animal Tissues**

### **July-August 2022**

- ❖ **Seed- Structure and germination**
  - Fruit and Seed (definition and Significance)
  - Structure of dicot and monocot seed.
  - Germination of seeds, types and conditions for seed germination.
  - Structure and germination of Bean seed and maize grain.
  - Differences between monocot and dicot seeds.
  - Differences between hypogeal and epigeal germination.
  - Conditions for seed germination to explained and supported by experiments.
- ❖ **Respiration in Plants**
  - Outline of the Process, gaseous exchange.
  - Explanation of the terms Glycolysis and Krebs Cycle and their significance.
  - Reference to Aerobic and Anaerobic respiration with balanced chemical equations in each case.
  - Experiments on Gaseous exchange and on Heat production during respiration.
- ❖ **Five Kingdom Classification**
  - Main Characteristics of each kingdom with suitable examples of Monera, Protista, Fungi, Plantae (Thallophyta, Bryophyta, Pteridophyta and Spermatophyta)
  - Animalia (Porifera to Echinodermata and chordates -all five classes).
- ❖ **Economic Importance of Bacteria and Fungi**

- Useful role of Bacteria- Medicine: Antibiotics, serums and vaccines.
- Nitrogen Cycle
- Industry- Curing of tea, Tanning of leather.
- Harmful role of bacteria -Spoilage of food, diseases in plants and animals, bioweapons.
- Economic importance of Fungi- A brief idea of the useful role in fungi in breweries, bakeries, cheese processing, mushroom cultivation.

### **September 2022**

#### ❖ **Hygiene**

- A brief introduction to maintaining good health
- General idea of personal hygiene, public hygiene and sanitation.
- Modes of transmission of diseases: air borne, water borne, vectors (housefly, mosquito, cockroach).

### **Portion for the Mid-term Exam (80 marks)- 19<sup>th</sup> Sept. 2022 onwards**

- ❖ Cell- the unit of life
- ❖ Tissues: Plant and Animal Tissues
- ❖ The flower
- ❖ Pollination and fertilization
- ❖ Seeds- Structure and Germination
- ❖ Respiration in Plants
- ❖ Five Kingdom Classification
- ❖ Economic Importance of Bacteria and Fungi
- ❖ Hygiene.

### **FINAL TERM**

#### **October- November 2022**

#### ❖ **Nutrition**

- Definition
- Need of Nutrition
- Classes of Nutrients
- Balanced diet

#### ❖ **Digestive System**

- Need for Digestive System
- Parts of the Digestive System
- Structure and Types of teeth with Dental formula
- Peristalsis
- Physiology of digestion and absorption

- Assimilation of food
- Liver

❖ **Skeleton-Movement and Locomotion**

- Functions of Human skeleton
- Constituents of Skeleton
- Structure of a long bone
- The Human Skeleton
- Axial Skeleton
- Appendicular Skeleton
- Joints and its types
- Muscles and its types

❖ **Skin - The Jack of All Trades**

- Functions of the skin
- Structure of the skin- Epidermis and Dermis
- Derivatives of the skin
- Skin and Regulation of heat of body.

**December 2022-January 2023**

**Portion for the Second Unit test (20 marks) -5<sup>th</sup> December 2022 onwards**

- **Nutrition**
- **Digestive System**
- **Skeletal System**

❖ **The Respiratory System**

- Need for Respiration
- Glucose as Respiratory Substrate
- Two kinds of Respiration
- Parts of Respiration
- Respiratory Organs (Breathing)
- Blood supply to lungs
- Respiratory cycle
- Control of Breathing movements
- Lung Capacities
- Effects of Altitude on Breathing
- Hypoxia and Asphyxiation
- Some Experiments on Breathing and Respiration

❖ **Diseases: Cause and Control**

- A brief introduction to communicable, non-communicable, endemic, pandemic and sporadic diseases. Modes of transmission
- Bacterial diseases- Cholera, typhoid, tuberculosis.
- Viral Diseases- AIDS, Chicken pox, Hepatitis



- Protozoan diseases- Malaria, Amoebic Dysentery, Sleeping Sickness.
- Helminthic Diseases-Ascariasis, Taeniasis, Filariasis.

❖ **Aids to Health**

- Active and Passive immunity
- An understanding of the use and action of the following-
  - Vaccination
  - Immunisation
  - Antitoxin
  - Serum
  - Antiseptics
  - Disinfectants
  - Antibiotics.
- An idea of local defence system and its merits.
- Difference between antiseptics and disinfectants.

❖ **Health organisations**

- Health organisations- Red cross and WHO
- Main activities of Red Cross and WHO

❖ **Waste Generation and Management**

- What is Waste?
- Categories of Waste
  - Domestic, Industrial, Agricultural, Municipal, E-waste, laboratories waste.
- Methods of Safe Disposal of Waste
  - Segregation
  - Dumping
  - Composting
  - Drainage
  - Treatment of effluents before discharge
  - Incineration
  - Scrubbers
  - Electrostatic Precipitators

**February 2023**

❖ Revision

**Portion for Final Term Examinations (80 marks) -(9<sup>th</sup> February 2023 onwards)**

- **Cell-The Unit of life**
- **Tissues- Plant and Animal Tissues**
- **The Flower**
- **Pollination and Fertilization**
- **Seeds-Structure and Germination**
- **Respiration in Plants**
- **Five Kingdom Classification**

- **Economic Importance of Bacteria and Fungi**
- **Nutrition**
- **Digestive System**
- **Skeleton-Movement and Locomotion**
- **Skin-“The Jack of all trades”**
- **The Respiratory System**
- **Hygiene**
- **Diseases: Cause and Control**
- **Aids to health**
- **Health Organisations**
- **Waste Generation and Management.**

❖ **Project Work-(20 marks)**

**Topic: “Classification of Plant and Animal Tissues ” (Characteristic features and diagrams) in Biology Practical Copy**

**Note: Explain one type of tissue in one page with its corresponding diagrams.**

**CHEMISTRY**

<b><u>MID TERM:</u></b>	Study of gas laws
	Water
	The periodic table
	Atmospheric Pollution
<b><u>Unit test 1:</u></b>	Study of gas laws
<b><u>FINAL TERM:</u></b>	All chapters done in class 9
<b><u>Unit test 2:</u></b>	The periodic table
<b><u>MONTH-WISE BREAKUP:</u></b>	
<b>April:</b>	Study of gas laws
<b>May:</b>	Water
<b>July:</b>	The periodic table
<b>August:</b>	Atmospheric pollution

**September:** Revision

**October:** Practical chemistry

**November:** The language of chemistry  
Chemical changes and reactions

**December:** Study of the first element-Hydrogen

**January:** Atomic structure and chemical bonding  
Revision

**February:** Revision

**December:** Study of the first element-Hydrogen

**January:** Atomic structure and chemical bonding

Revision

---

# COMPUTER

TERMS	MONTH	CHAPTERS	Exam. Topics
<b>MID TERM</b>	April	Introduction to Java OOP : Elementary concepts of objects and classes. Class as a specification for objects and as an object factory.	All topics taught in first term  <b>Syllabus for Unit Test:OOPS,Elements of OOP, Java , Features, Operators in Java,</b>
	May	Values and types: Primitive types (like int, float, Boolean etc.) and their representation and ranges. Operators and types of operators.	
	June	Summer Vacation	
	July	Decision making statements jumping and branching, various forms of if..else, if..else., switch..case Use of ternary operators,	
	August	Ethical Issues in computing : intellectual property rights, protection of individual rights to privacy, data protection on the internet, protection against spam, software piracy, cyber crime, hacking, protection against malicious intent and malicious code.	
	September	Mathematical Functions used in Java	
<b>FINAL TERM</b>	October	Loops : Use of for loop, while loop Use of do..while in making java program both known and unknown iterations.	All topics taught in Mid Term and Final Term
	November.		
	December .	Programming based on loop Program based on series, Pattern, number system ,general questions.	
	January	Programming in Java	
	February	REVISION	
<i>Project</i>	Programming in Java(Questions will be given in class)		

## Class - 9

### HINDI

#### First Term

##### **Section A (40 Marks)**

भाषा-सरस हिंदी व्याकरण (तीनों परीक्षाओं हेतु)

1. प्रस्तावना
2. चित्र लेखन
3. पत्र लेखन- क) औपचारिक ख) अनौपचारिक
4. भाव-ग्रहण
5. व्यावहारिक व्याकरण:-

##### **Section B (40 Marks)**

साहित्य -साहित्य सागर

गद्य

1. बात अठन्नी की
2. काकी
3. महायज्ञ का पुरस्कार

पद्य

1. साखी
2. गिरिधर की कुण्डलियाँ
3. स्वर्ग बना सकते हैं

**Unit Test – बात अठन्नी की, साखी, व्यावहारिक व्याकरण**

**Project Work – प्रकृति एवं परंपरा**

#### **Second Term**

##### **Section A**

भाषा -सरस हिंदी व्याकरण

1. प्रस्तावना
2. चित्र लेखन
3. पत्र लेखन- क) औपचारिक ख) अनौपचारिक
4. भाव-ग्रहण
5. व्यावहारिक व्याकरण:-

---

**Section B (40 Marks)**

गद्य

1. नेताजी का चश्मा
2. अपना-अपना भाग्य
3. बड़े घर की बेटी
4. संदेह
5. भीड़ में खोया आदमी
6. भेड़े और भेड़िए
7. दो कलाकार
8. बात अठन्नी की

पद्य

1. वह जन्मभूमि मेरी
2. मेघ आए
3. सूर के पद
4. विनय के पद
5. भिक्षुक
6. चलना हमारा काम है
7. मातृ मंदिर की ओर
8. गिरिधर की कुण्डलियाँ

\*\*\*\*\*