

**ST. JOSEPH SCHOOL, AMBALA CITY**  
**CLASS- X , SESSION – 2020-21**  
**SYLLABUS**

**1. ENGLISH :**

PERIODIC TEST - I	PERIODIC TEST - II	PERIODIC TEST- III
<p><b><u>First Flight:</u></b>            Ch-1, 2            Poem-1, 2  <u>Footprints without Feet:</u>            Ch-1, 2  <b><u>Writing Skills:</u></b>            Story-Writing  <b><u>Grammar:</u></b>            Tenses,            Determiners</p>	<p><b><u>First Flight:</u></b>            Ch-1, 2, 3, 4, 5, 6            Poem-1, 2, 3(ii), 4, 6  <u>Footprints without Feet:</u>            Ch-1, 2, 5, 6  <b><u>Writing Skills:</u></b>            Story-Writing            Diary Entry            Article Writing            Analytical passage based on given outline/data/chart/cue(s).  <b><u>Grammar:</u></b>            Tenses, Modals,            Determiners, Subject-Verb Concord  <u>Comprehensions</u></p>	<p><b><u>First Flight:</u></b>            Ch-1, 2, 3, 4, 5, 6, 7, 9, 10, 11            Poem-1, 2, 3(ii), 4, 6, 9  <u>Footprints without Feet:</u>            Ch-1, 2, 5, 6, 7, 8, 9  <b><u>Writing Skills:</u></b>            Story-Writing            Diary Entry            Analytical passage based on given outline/data/chart/cue(s).            Article Writing            Formal letters based on a situation.  <b><u>Grammar:</u></b>            Tenses, Modals, Determiners,            Subject-Verb Concord, Reported Speech  <u>Comprehensions</u></p>
<b>ACTIVITY :</b>	<b>ASL</b>	

## 2. HINDI :

PERIODIC TEST - I	PERIODIC TEST - II	PERIODIC TEST- III
स्पर्श --- पद्य खंड - पाठ 1,2 गद्य खंड - पाठ1 संचयन -- पाठ 1(हरिहर काका ) व्याकरण -- समास लेखन भाग--अनुच्छेद लेखन	स्पर्श -- पद्य खंड - पाठ 4,5 गद्य खंड - पाठ 3,6 व्याकरण -- रचना के आधार पर वाक्य रूपांतरण , मुहावरे लेखन भाग - पत्र, विज्ञापन लेखन + PT1 ( पूर्णपाठ्यक्रम व्याकरण सहित ).	स्पर्श - पद्य खंड-पाठ 8 गद्य खंड - 8 संचयन - पाठ 2,3 व्याकरण - पदबंध लेखन भाग - सूचना लेखन, लघु कथा लेखन + PT1 और PT2 ( पूर्ण पाठ्यक्रम व्याकरण सहित )
<b>ACTIVITY :</b>	1.वाचन गतिविधि(क) कबीर की साखी (ख) कर चले हम फिदा 2. श्रवण गतिविधिअपठित गद्यांश	

### 3. MATHEMATICS:

PERIODIC TEST - I	PERIODIC TEST - II	PERIODIC TEST- III
<b>Ch 1</b> Real Numbers (except Euclid's division lemma)	<b>Ch 4</b> Quadratic equations(except situational problems based on equations reducible to quadratic equations)	<b>Ch 3</b> Pair of Linear equations in two variables (except cross multiplication method)
<b>Ch 2</b> Polynomials (except statement and simple problems on division algorithm for polynomials with real coefficients)	<b>Ch 5</b> Arithmetic Progressions(except application in solving daily life problems based on sum to n terms )	<b>Ch 6</b> Triangles (except proof of the following theorems are deleted: *the ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides *In a triangle, if the square on one side is equal to the sum of squares on the other two sides , the angle opposite to the first side is a right angle)
<b>Ch 11</b> Constructions(except construction of a triangle similar to given triangle)	<b>Ch 7</b> Coordinate Geometry (except area of triangle)	<b>Ch 8</b> Introduction to Trigonometry (except motivate the ratios whichever are defined at 0degrees and 90 degrees )
<b>Ch 15</b> Probability	<b>Ch 10</b> Circles	<b>Ch 9</b> Some Applications of Trigonometry
	<b>Ch 14</b> Statistics	<b>Ch 12</b> Areas Related to

	(except:*step deviation method for finding the mean*cumulative frequency graph)+ PT 1 Syllabus	Circles (except problems on central angle of 120 degrees)
		<b>Ch 13</b> Surface Areas and Volumes (except frustum of a cone )+ PT 2 Syllabus
<b>ACTIVITIES:</b>	<b>1 Activity based on HCF and LCM</b> <b>2 Activity based on Probability</b> <b>3 Activity based on Arithmetic progressions</b> <b>4 Activity based on Circles</b> <b>5 Activity based on Pythagoras Theorem</b>	

#### 4. SCIENCE :

##### PERIODIC TEST – I

L– 1,6,15,16

##### PERIODIC TEST – II

L-1, 2,3,6,8, 10, 15

##### PERIODIC TEST – III

##### **Unit 1 chemical substances - Nature and Behaviour**

Chemical reactions: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

Acids, bases and salts: Their definitions in terms of furnishing of H<sup>+</sup> and OH<sup>-</sup> ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

Metals and nonmetals: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

Carbon compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.

Periodic classification of elements: Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic

## **Unit II: World of Living**

Life processes: 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

Reproduction: Reproduction in animals and plants (asexual and sexual) reproductive health- need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.

Heredity: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction

## **Unit III: Natural Phenomena**

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.

Refraction; Laws of refraction, refractive index.

Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

## **Unit IV: Effects of Current**

Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and

its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R. Magnetic effects of current : Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule.

### **Unit V: Natural Resources**

Our environment: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances

### **LIST OF EXPERIMENTS**

1. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with
  - A) Litmus solution (Blue/Red)
  - B)Zinc metal
  - C) Solid sodium carbonate
- 2.Performing and observing the following reactions and classifying them into:
  - A) Combination reaction
  - B)Decomposition reaction
  - C)Displacement reaction
  - D)Double displacement reaction
  - a)Action of water on quicklime
  - b)Action of heat on ferrous sulphate crystals
  - c)Iron nails kept in copper sulphate solution
  - d)Reaction between sodium sulphate and barium chloride solutions
- 3.Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:
  - A)  $\text{ZnSO}_4(\text{aq})$
  - B)  $\text{FeSO}_4(\text{aq})$
  - C)  $\text{CuSO}_4(\text{aq})$
  - D)  $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

4. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determining its resistance. Also plotting a graph between V and I.

5. Experimentally show that carbon dioxide is given out during respiration.

6. Determination of the focal length of (i) Concave mirror and (ii) Convex lens by obtaining the image of a distant object.

7. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.

8. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.

9. Tracing the path of the rays of light through a glass prism.

**ACTIVITY:** 1) Digrammatically presentation with explanation of all life processes on assignment sheets (Digestive system, Respiratory system, circulatory system and Excretory system) in human beings

2) Practical exam

## 5. SOCIAL SCIENCE:

PERIODIC TEST - I	PERIODIC TEST - II	PERIODIC TEST- III
Geography=L 1,4 Demo= L 1,2	Geography=L-1,4,6, Demo=L-1,2,6,7 History=L-3 Economics=L-1,2,3,4	FULL SYLLABUS
ACTIVITY:	Project based on "Consumer Awareness" .	

## 6. EN. ED

PERIODIC TEST - II	PERIODIC TEST- III
L – 1,7,9	L- 14,16,24

## 7. G. K

<b>PERIODIC TEST - II</b>	<b>PERIODIC TEST- III</b>
CURRENT AFFAIRS	CURRENT AFFAIRS

## 8. DRAWING

### TERM I :

Introduction of Art : Elements of Art – Line, shape, shading, colours, perspective.

Landscapes – 2 ( water colours , pencil shading)

Still life – 2 ( pencil shading , pencil colours.)

Nature study – 2 Flowers and Leaves (pencil shading and colours)

### TERM – II :

Mehendi design – 2 , posters – 2 ( poster colours),

Rangoli design – 2 (pencil colours)

Human body parts (pencil shading)

## 9. COMPUTER

PT I	PT II	PT III
<b>PART B: UNIT 1(Session 1 To 8)</b>	<b>PART B: UNIT 2 Session:1,2,3,4,7,8,9,11) UNIT 3 (Session 1,2,3,5,8,9) + PT 1 syllabus</b>	<b>PART B: UNIT 4 (Session: 1to 7, 9,11) UNIT 6 (Session 1) + PT I + PT II</b>

## 10. FRONT OFFICE

<b>PT II</b>	<b>PT III</b>
<b>L-1,2,6</b>	<b>L-3,4,5 + PT II</b>