



SACRED HEART SCHOOL

Jhumri Telaiya, Koderma

SUMMER VACATION ASSIGNMENT (2020– 2021)

Class - IX

Subject –ALL

HISTORY

1. Who were the clergies?
2. Write a short note on the French Revolution.
3. Describe the Declaration of Rights of Men and Citizen.
6. What is liberty? State the two conflicting views about it.
7. Write a brief note on “The life of a revolutionary woman – Olympe de Gouges”.

CIVICS

1. Write a note on democracy. Mention some of the features of democracy.
2. What kind of election constitutes a democratic election?
3. What is direct democracy? Explain.
4. What are the arguments against democracy? Explain.
5. A democratic government is a better government because it is a more accountable form of government. True or False? Justify.
6. What are the main differences between democracy and dictatorship? Give three points at least.

GEOGRAPHY

1. Classify the states into four groups each having common borders with (i) Pakistan (ii) China (iii) Myanmar (iv) Bangladesh
2. Name the water body that separates Sri Lanka from India?
4. Give the significance of India’s central location. Explain how India’s land routes have been important since ancient times.
5. Write a brief note about India and Its neighbours.
6. Write a note on National River Conservation Plan.

Map based questions:

Draw an outline map of India and identify the following areas:

(Outline Political Map of India)

Chapter -1: India-Size and Location

India- Tropic of Cancer, Standard Meridian

Chapter -2: Physical Features of India

Mountain Ranges: The Karakoram, The Zasker, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats

Mountain Peaks – K2, Kanchan Junga, Anai Mudi

Plateau - Deccan Plateau, Chotta Nagpur Plateau, Malwa Plateau

Coastal Plains - Konkan, Malabar, Coromandal & Northern Circar

Chapter -3: Drainage

Rivers: (Identification only)

o The Himalayan River Systems-The Indus, The Ganges, and The Satluj

o The Peninsular rivers-The Narmada, The Tapi, The Kaveri, The Krishna, The Godavari, The Mahanadi

Lakes: Wular, Pulicat, Sambhar, Chilika.

ECONOMICS

1. What is land? Suggest any three ways to sustain land.
2. Distinguish between fixed, working and human capital.
3. State any five reasons as to why farm labourers are considered poor.
4. Discuss the impact of chemical fertilizers on land.
5. Why do modern farming methods require more capital? Explain.

CHEMISTRY

1. What remains unchanged during interconversion of state of a substance?
2. Why boiling is called bulk phenomenon?
3. Evaporation is called a surface phenomenon, why?
4. It is easier to walk in an open field than in a pond water. Which characteristic of matter does this observation shows?
5. A large amount of air can be pumped into the small volume of a cycle tube or Football bladder. Justify with reason.
6. Smell of perfume spreads rapidly in summer season than that in winter season. What is the reason?
7. How can you differentiate between solids, liquids and gases on the basis of diffusion and fluidity?
8. Gases exert pressure on the walls of the container. Explain.
9. Naphthalene balls disappear with time without leaving any solid residue. Why?
10. What are the differences between mixtures and compounds?
11. What is the difference between carbon dioxide gas and dry ice?
12. A solution of common salt and water is passed through a filter paper. On the consequence of this, filter paper remains unchanged. Explain.

Activity Based Questions

13. If the copper sulphate pentahydrate is heated to 650 degree Celsius then what will be the nature of condensed vapour?
14. An iron nail is dipped in copper sulphate solution. What will be the final colour of the solution?
15. When you try to measure the melting point or boiling point of any mixture, you do not get a sharp fixed point. Explain its reason.

PHYSICS

1. What is difference between straight line motion and circular motion? Prepare a list of these motions from your environment, you observed in your daily life. Also take a snap and paste it on your copy with heading.

Ex- A bike rider, riding motor cycle on the straight roadside. i.e. rider, riding bike along straight line motion.

2. What is law of inertia? Write some examples from your daily life. Also do one experiment out of them and write your observation in your copy.

Ex- falling of leaves from the branches.

3. Prepare a paper presentation with block diagram, derivation and with some practical examples on Newton's law of motions on the basis of your knowledge.
4. What do you mean by conservation of momentum? Derive the equation for it.
5. Derive all the equations of motion by graphical representation.
6. Solve all the questions of your NCERT book from chapter 8 and 9.

Note: To strengthen your knowledge, you should read the following reference books thoroughly.

Reference book:

1. NCERT class IX
2. S. Chand class IX
3. Foundation science physics, class IX (H.C. Verma)

BIOLOGY

1. Write the activity to prepare slides of onion and cheek cells for microscopic observation.
2. Draw a neat labelled diagram of following: - Golgi apparatus, mitochondria, parenchyma and phloem.
3. To prepare a tabular chart to show that plants and animal tissues are different.
4. Complete the blue and exercise question answer of ch.5 Cell & ch.6 up to plant tissue.

ENGLISH

- 1) Write the character sketches of the characters.
A) Margie Jones B) Toto

2) Write a short profile of the following writers.

A) Ruskin Bond B) Isaac Asimov

3) Prepare a chart of the taught grammar topic: - Clause. It's definition and types with examples.

4) Read the book 'Wings of Fire' by A.P.J. Abdul Kalam and write a book review for the same.

5) Revise 'tense', and taught chapters of literature (Beehive and Moments).

HINDI

1 ग्रीष्मावकाश के किन्ही पांच दिनों की कार्ययोजना को अपने शब्दों में लिखें।

2 प्रेमचंद की कहानियों में नशा, प्रायश्चित और शतरंज के खिलाड़ी में से किसी एक कहानी को पढ़कर उसका सारांश अपने शब्दों में लिखें।

3 "दो बैलों की कथा" कहानी में हीरा और मोती नामक दो बैलों की चर्चा है। आप अपने आसपास में पाए जाने वाले पशुओं की एक सूची तैयार करें। तैयार सूची में से किन्ही दो पशुओं से होने वाले लाभ को अपने शब्दों में लिखें।

4 वैश्विक महामारी "कोरोना" को लेकर होनेवाले लॉक डाउन का नदियों, प्रदूषण और प्रकृति पर पड़नेवाले प्रभाव को अपने शब्दों में लिखें।

5 रसखान के किन्हीं दो सवैयों को याद करें और उसका अर्थ लिखें।

6 "दो बैलों की कथा" कहानी में कौन-कौन से नीति विषयक मूल्य उभर कर आए हैं?

7 पुनर्जन्म लेने पर रसखान क्या-क्या कामना करते हैं?

8 तिब्बत में हथियार का कानून नहीं होने से क्या क्या होता है?

SANSKRIT

1 संधि के सभी नियमों को याद करें और तीनों संधि से 10-10 उदाहरण लिखें।

2 किन्ही 20 शब्दों का वर्ण विन्यास करें।

3 मुख का चित्र बनाकर उसके उच्चारण स्थान को दर्शाएं। (फाइल में)

4 रामायण के सभी पात्रों के नाम (वंशावली, फैमिली ट्री) लिखें। राजा हरिश्चंद्र से लव कुश तक (फाइल में)

5 संस्कृत के महत्व के विषय में लिखें।

MATH

1. Represent the following irrational numbers on number line.

(i) $\sqrt{10}$ (ii) $\sqrt{17}$ (iii) $2+\sqrt{2}$

2. Represent geometrically $\sqrt{8.1}$ on number line.

3. Write the following numbers in p/q form (i) $2.0\overline{15}$ (ii) $0.\overline{235}$

4. Find two rational numbers and two irrational numbers between

5. Simplify (i) $2\sqrt{50} + 3\sqrt{32} + 4\sqrt{18}$

(ii) $\sqrt[4]{16} - 6\sqrt[3]{343} + 18 \times \sqrt[5]{243} - \sqrt{196}$

(iii) $\sqrt[4]{81} - 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225}$

6. If $x=3+2\sqrt{2}$, Check whether $x + \frac{1}{x}$ is rational or irrational.

7. Rationalise the denominator

(i) $\frac{4\sqrt{3} + 5\sqrt{2}}{4\sqrt{3} + 3\sqrt{2}}$

(ii) $\frac{\sqrt{2}}{\sqrt{2} + \sqrt{3} - \sqrt{5}}$

8. If $x=2 + \sqrt{3}$, find $\left(x + \frac{1}{x}\right)^3$

9. Simplify: $\frac{\sqrt{6}}{\sqrt{2} + \sqrt{3}} + \frac{3\sqrt{2}}{\sqrt{6} + \sqrt{3}} - \frac{4\sqrt{3}}{\sqrt{6} + \sqrt{2}}$

10. Simplify: $\frac{\sqrt{72}}{5\sqrt{72} + 3\sqrt{288} - 2\sqrt{648}}$

11. Evaluate $\frac{15}{\sqrt{10} + \sqrt{20} + \sqrt{40} - \sqrt{5} - \sqrt{80}}$
if $\sqrt{5}=2.236$ and $\sqrt{10}=3.162$

12. Find a and b if $\frac{7+3\sqrt{5}}{3+\sqrt{5}} - \frac{7-3\sqrt{5}}{3-\sqrt{5}} = a + b\sqrt{5}$

13. If $\sqrt{18-6\sqrt{5}} = \sqrt{a} - \sqrt{b}$, then prove that $a+b=18$.

14. Simplify: $\left(\frac{x^b}{x^c}\right)^{b+c-a} \times \left(\frac{x^c}{x^a}\right)^{c+a-b} \times \left(\frac{x^a}{x^b}\right)^{a+b-c}$

15. Prove that $(x^{a-b})^{a+b} \cdot (x^{b-c})^{b+c} \cdot (x^{c-a})^{c+a} = 1$

16. Prove that: $\frac{a^{-1}}{a^{-1}+b^{-1}} + \frac{a^{-1}}{a^{-1}-b^{-1}} = \frac{2b^2}{b^2-a^2}$