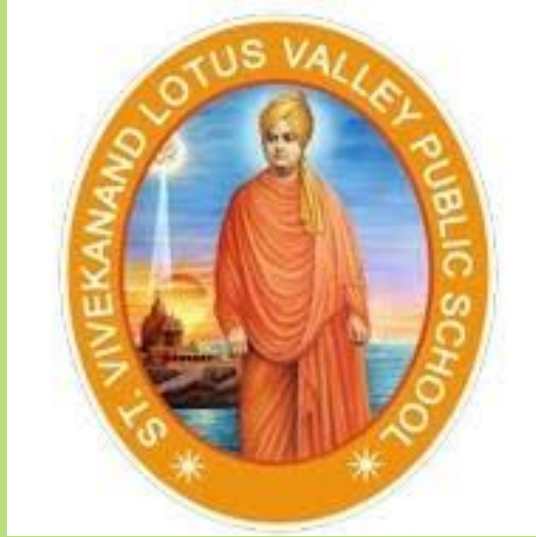




SUMMER HOLIDAYS
HOMEWORK FOR CLASS
X
SESSION(2026-27)

**“Vacation is the time to discover,
create, learn, and grow.”**

Dear Students,

Holidays are not only meant for rest and enjoyment but also for exploring new ideas and improving your creativity. The holiday homework has been carefully planned to make learning interesting, meaningful, and enjoyable for you.

Complete your work with honesty, neatness, and dedication. Make a balance between study and recreation so that your holidays become both productive and refreshing.

Read good books, practice healthy habits, spend quality time with your family, and try to learn something new every day.

Remember: ✦ Success comes to those who work sincerely.

✦ Every small effort adds to your knowledge and confidence.

✦ Learning during holidays keeps your mind active and creative.

May your holidays be filled with happiness, positivity, and valuable learning experiences.

✦ Stay Safe • Stay Healthy • Keep Learning ✦

Best Wishes for a Happy and Productive Vacation!

GENERAL INSTRUCTIONS

- **Complete all the assigned work sincerely and submit it on the given date.**
- **Maintain neatness, proper presentation, and clarity in all subjects.**
- **Read the instructions of each task carefully before starting.**
- **Make proper use of textbooks, notebooks, and other reference materials whenever required.**
- **Parents/Guardians are requested to guide and encourage their children while completing the homework.**

Important Guidelines

- **Revise all completed work before submission.**
- **Keep your handwriting neat and your work well-organized.**
- **Feel free to contact subject teachers for any clarification or help.**

ENGLISH

Section A: First Flight & Footprints Without Feet

Prepare the following assignment questions.

(Answer in about 100–120 words each.)

1. Why did Lencho write a letter to God in A Letter to God?
- 2 How did the postmaster help Lencho?
- 3 What message does A Letter to God convey?
- 4 What ideas of freedom are presented in Nelson Mandela's speech?
- 5 How did apartheid affect the people of South Africa?
- 6 Describe the young seagull's fear in Two Stories About Flying.
- 7 How did the seagull finally learn to fly?
- 8 What impression do you form of Anne Frank from From the Diary of Anne Frank?
- 9 Why did Anne think she could confide in her diary more than people?
- 10 Describe Coorg as explained in Glimpses of India.
- 11 Why is tea important in Tea from Assam?
- 12 Why did the doctor think Tricki needed strict treatment in A Triumph of Surgery?
- 13 How did Tricki recover at the surgery?
- 14 Why is The Midnight Visitor called a detective story with a difference?
- 15 How did Ausable outsmart Max in The Midnight Visitor?
- 16 What made Horace Danby a thief in A Question of Trust?
- 17 How did the lady deceive Horace Danby?
- 18 Why did Griffin become a lawless person in Footprints Without Feet?
- 19 What message do you get from the poem Dust of Snow?
- 20 Explain the central idea of Fire and Ice.

Section B: Grammar Practice

Complete the following topics in BBC (GRAMMAR MODULES):

1. Tenses

Present Tense

Past Tense

Future Tense

2. Subject–Verb Concord

3. Modals

4. Reported Speech

5. Editing & Omission

Section C: Writing Skills

Write ANY FIVE Editorial Letters.

- 1 Rising pollution in cities
- 2 Importance of reading habits
- 3 Effects of excessive mobile phone usage
- 4 Water conservation
- 5 Importance of cleanliness in public places
- 6 Online education advantages and disadvantages

Write ANY FIVE Complaint Letters.

- 1 Complaint about irregular electricity supply
- 2 Complaint regarding damaged roads
- 3 Complaint about poor sanitation in locality
- 4 Complaint against defective product
- 5 Complaint regarding noise pollution
- 6 Complaint about shortage of water supply

Section D: Project Work

Prepare a Project File on ANY ONE topic:

Option 1 – Robert Frost

Include:

Introduction of Robert Frost

Famous poems

Themes in his poetry

Poetic devices

Inspirational quotes

Pictures and illustrations

Conclusion

Option 2 – Nelson Mandela

Include:

Introduction of Nelson Mandela

Early life and struggles

Apartheid movement

Contributions to society

Inspirational speech excerpts

Awards and achievements

Conclusion

Section E: Subject Enrichment Activity

Prepare a chart , poster and collage according to their models:

Prepare working models according to the allotted Roll Numbers.

It is compulsory to all students as it is being conducted for assessment purpose.

- | | |
|---|-----------------------------|
| 1. A Letter to God – Village & Farm Diorama | Roll no. (1 to 7) |
| 2. Nelson Mandela – Freedom & Equality Model | Roll no. (8 to 14) |
| 3. The Tiger in the Zoo – Wildlife Conservation Model | Roll no. (15 to 22) |
| 4.The Midnight Visitor & A Question of Trust-Detective Theme Model | Roll no. (23 to 30) |
| 5 Two stories about flying Activity – Working & Flying Models | Roll no.(31 to 35) |
| 6. Glimpses of India- Show Indian Culture & Tradition | Roll no (36 to 39) |

Instructions

Complete all work neatly in separate notebook/file.

Maintain proper handwriting and presentation.

Use coloured headings and relevant pictures.

Project work should be handwritten and creative.

Submit the homework after summer vacation positively.

HINDI

प्रश्न (1) निम्नलिखित विषयों पर 80 से 100 शब्दों में अनुच्छेद लिखिए-

(क) ग्लोबल वार्मिंग मनुष्य के लिए खतरा

(ख) शिक्षा का व्यवसायीकरण

(ग) समाचार पत्र ज्ञान और मनोरंजन का साधन

(घ) ई -कचरा- 21वीं सदी का कचरा

(ङ) अखंड भारत: धारा 370 का समापन

प्रश्न (2) निम्नलिखित विषयों पर औपचारिक पत्र लिखिए

(क) दैनिक समाचार पत्र के संपादक को अपनी कविता प्रकाशित करवाने का अनुरोध करते हुए पत्र लिखिए।

(ख) अपने विद्यालय की प्रधानाचार्या को प्रार्थना पत्र लिखिए जिसमें कंप्यूटर का महत्व बताते हुए कंप्यूटर शिक्षक की व्यवस्था करवाने का अनुरोध किया गया हो।

(ग) कल- कारखानों के कारण आपके नगर में बढ़ते हुए प्रदूषण तथा उसके खतरों को देखते हुए किसी दैनिक समाचार पत्र के संपादक को पत्र लिखिए।

(घ) आपका नाम मुदित/ मुदिता है। प्रतियोगी परीक्षाओं में प्रवेश हेतु प्रदेश सरकार द्वारा आर्थिक दृष्टि से कमजोर, प्रतिभाशाली छात्रों के लिए निःशुल्क शिक्षण की जो व्यवस्था की गई है, उसकी सराहना करते हुए किसी दैनिक हिंदी समाचार- पत्र के संपादक को लगभग 100 शब्दों में एक पत्र लिखिए ।

प्रश्न(3) निम्नलिखित विषयों के लिए एक सुंदर एवं आकर्षक विज्ञापन तैयार कीजिए-

(क) आपके भाई ने वातानुकूलित यंत्र बनाने की एक कंपनी खोली है। उसके प्रचार- प्रसार के लिए 30- 40 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए।

(ख) अपने पुराने मकान को बेचने हेतु एक सुंदर एवं आकर्षक विज्ञापन 25 से 30 शब्दों में बनाइए।

(ग) विद्यालय में नर्सरी के दाखिले के लिए 30- 40 शब्दों में एक विज्ञापन तैयार कीजिए।

प्रश्न(4) निम्नलिखित प्रश्नों के उत्तर पाठ्यपुस्तक के आधार पर दीजिए-

(क) आदर्श स्थिति बनाए रखने के लिए बड़े भाई साहब का बचपन कैसे तिरोहित हो जाता है?

(ख) कबीर ने किस घर को जलाने की बात की है? वर्तमान में यह कितना युक्ति संगत है?

(ग) कथा नायक को क्या-क्या करना पसंद था?

(घ) कबीर दास जी ने अपने दोहे में हिरण का उदाहरण किस संदर्भ में दिया है? क्या आप भी कबीर दास जी के विचार से सहमत हैं या नहीं? तर्क सहित उत्तर दीजिए।

(ङ) अहंकार का भाव भक्ति मार्ग की सबसे बड़ी बाधा है। इस विषय पर अपने विचार व्यक्त कीजिए।

(च) भक्ति भाव को जागीर क्यों कहा गया है ?इसके लिए क्या आवश्यक है?

(छ) निर्गुण और सगुण भक्ति में क्या अंतर है? दोनों से संबंधित किन्हीं दो कवि या कवियत्रियों के नाम लिखिए।

(ज) स्वतंत्रता प्राप्त करने के लिए भारतीयों को कौन-कौन से कष्ट सहने पड़े? 'डायरी का एक पन्ना' पाठ के आधार पर उत्तर दीजिए।

(झ) कृष्ण की चाकरी से मीरा को क्या लाभ मिलेगा?

(ष) कबीर दास जी किन जीवन मूल्यों को मानव के लिए आवश्यक मानते हैं?

(ट) ततारा की तलवार एक रहस्य क्यों थी?

(ठ) 'डायरी का पन्ना' पाठ के आधार पर बताइए कि पुलिस ने कैसा दमन चक्र चलाया और क्यों ?लोगों ने किस प्रकार उसका मुंह तोड़ जवाब दिया?

(ड) प्रेम का संबंध किसी विशेष धर्म, जाति, भाषा से नहीं है। उसे सीमाओं में नहीं बांधा जा सकता _ततारा वामीरो पाठ के आधार पर इस कथन का मूल्यांकन कीजिए।

(ढ) मानव को अपने ऊपर कभी घमंड नहीं करना चाहिए। यह जीवन के लिए नुकसानदायक है। यह हमारा नाश कर देता है तथा सामाजिक रूप से बहिष्कार के योग्य बना देता है।

आपके द्वारा इस पाठ्यक्रम में पढ़े गए पाठ में घमंड के नुकसान के बारे में बताया गया है। इस कथन को स्पष्ट करने के लिए बड़े भाई साहब ने कौन-कौन से उदाहरण दिए? अपने शब्दों में लिखिए।

(ण) मीरा सांसारिक सुखों को त्याग कर श्री कृष्ण की चाकरी क्यों करना चाहती है? 'मीरा के पद' पाठ के आधार पर स्पष्ट कीजिए।

प्रश्न(5) निम्नलिखित मुहावरों के अर्थ लिखकर उपयुक्त वाक्य बनाइए-

खून जलाना, सूक्ति बाण चलाना, जिगर के टुकड़े-टुकड़े होना, गाढ़ी कमाई, आड़े हाथों लेना, घाव पर नमक छिड़कना, तलवार खींचना, दिमाग हो जाना, अंधे के हाथ बटेर लगना, चुल्लू भर पानी देने वाला ना होना, बे-सिर पैर की बातें करना, आटे- दाल का भाव मालूम होना, प्राणांतक परिश्रम करना, आपा खोना, लाज रखना, रंग दिखाना, कलंक धुलना, हाथ पांव फूलना, दबे पांव आना, पापड़ बेलना।

प्रश्न(6) निम्नलिखित रिक्त स्थानों की पूर्ति उचित मुहावरों से कीजिए-

(क) कभी नौकरी ढूंढने निकलोगे तो..... होगा।

(ख) बेटे के अनुत्तीर्ण होने का समाचार सुनकर पिताजी।

(ग) यदि आर्थिक स्थिति ठीक ना हो तो ठीक बात नहीं।

(घ) अपने मेहमानों के स्वागत मेंहम भारतीयों की संस्कृति है।

(ङ) गरीब माता-पिता अपना..... कर बच्चों का पालन पोषण करते हैं।

Activities:

(1) अनुक्रमांक(1-23) के विद्यार्थी 'बड़े भाई साहब' पाठ पर एक सुंदर आकर्षक प्रवाह तालिका बनाएंगे।

अनुक्रमांक (24-45) के विद्यार्थी 'कबीर की साखी' पाठ की प्रवाह तालिका बनाएंगे

- (2) प्रकृति पर आधारित एक सुंदर कविता लिखिए और चित्र भी बनाइए।
- (3) राष्ट्रीय एवं सांस्कृतिक धरोहरों के चित्र एवं उनके नाम लिखिए।
- (4) किन्हीं पांच निडर, साहसी और बुद्धिमान देश भक्तों के चित्र, नाम तथा उनका संक्षिप्त परिचय लिखिए।
- (5) किसी एक विषय पर सुंदर, आकर्षक, रंगीन विज्ञापन बनाइए।
- (6) 'मीराबाई जी' का सचित्र जीवन परिचय तथा साहित्यिक विशेषताएं लिखिए।
- (7) 'सुमित्रानंदन पंत जी' का सचित्र जीवन परिचय तथा साहित्यिक विशेषताएं लिखिए

Note-

जुलाई परीक्षा के लिए निम्नलिखित पाठ्यक्रम याद कीजिए-

गद्य भाग- डायरी का एक पन्ना, ततारा वामीरो कथा।

पद्य भाग- मीरा के पद, पर्वत प्रदेश में पावस।

हिंदी व्याकरण-

मुहावरे, वाक्य भेद तथा वाक्य रूपांतरण।

अपने अनुक्रमांक अनुसार मॉडल तैयार कीजिए-

अनुक्रमांक 1 से 5- मुहावरों की दुकान।

अनुक्रमांक 6 से 11- नीट जैसी बड़ी परीक्षा पर भ्रष्टाचार का पलड़ा भारी।

अनुक्रमांक 12 से 17 - वसीयत का पेड़।

अनुक्रमांक 18 से 23 -जीवन जीने के दो रास्ते।

अनुक्रमांक 24 से 29 -भारत के नक्शे पर विभिन्न राज्यों की भाषाएं (विविधता में एकता)

अनुक्रमांक 30 से 35 - (polling booth model) क्या हिंदी राष्ट्रभाषा बननी चाहिए? समर्थन या सुझाव।

अनुक्रमांक 36 से 40 - तुलसीदास की कुटिया (3D model)

MATHS

Maths Work Sheet Class - X

Chapter:- Real Numbers

Q01 :} Find the smallest number which when divided by 30, 40 and 60 leaves the remainder 7 in each case.

Q02 :} The dimensions of a room are 6 m 75 cm, 4 m 50 cm and 2 m 25 cm. Find the length of the largest measuring rod which can measure the dimensions in exact number of times.

Q03 :} The HCF of 2 numbers is 75 and their LCM is 1500. If one of the numbers is 300, find the other.

Q04 :} Prove that $\sqrt{2}$ is irrational.

Q05 :} Can 72 and 20 respectively be the LCM and HCF of two numbers. Write down the reason.

Q06 :} If a and b are two prime numbers, write their HCF and LCM.

Q07 :} If p and q are two coprime numbers, write their HCF and LCM.

Q08 :} Without actual division, state whether the decimal form of $\frac{1}{3}$ is terminating OR recurring.

Q09 :} Find the HCF and LCM of 350 and 400 and verify that $\text{HCF} \times \text{LCM} = \text{Product of the numbers}$.

Q10 :} Simplify:

Q11 :} Write down 5 irrational numbers in radical form which are lying between 4 and 5.

Q12 :} Write down 2 rational numbers lying between $\frac{1}{2}$ and $\frac{1}{3}$.

Q13 :} Complete the missing entries in the following factor tree.

Q14 :} Prove that $\sqrt{p}$ is irrational if p and q are prime numbers.

Q15 :} Find the largest number which divides 245 and 1205 leaving the remainder 5 in each case.

Q16 :} Find the largest number which divides 303, 455 and 757 leaving the remainder 3, 5 and 7 respectively.

Q17 :} Prove that $\sqrt{3}$ is irrational.

Q18 :} Prove that $\sqrt{5}$ is irrational.

Q19 :} Find the HCF and the LCM of the following by prime factorization. a) 360 , 756 b) $2x^4y^3z$, $32x^3y^4p^2$

Q20 :} Find the HCF by Euclid's Division Algorithm.

a) 256 , 352 b) 450 , 500 , 625

Q21 :} Explain why $7 \times 11 \times 13 + 13$ is a composite number.

Q22 :} Show that any positive odd number is of the form $6q + 1$, $6q + 3$ or $6q + 5$, where q is an integer.

Q23 :} Show that the square of any positive integer is of the form $3m$ or $3m + 1$, where m is an integer.

Q24 :} Use Euclid's division lemma to show that the cube of any positive integer is of the form $9m$, $9m + 1$, $9m + 8$, where m is an integer.

Q25 :} There are 3 consecutive traffic lights which turn "green" after every 36, 42 and 72 seconds. They all were at "green" at 9:00 AM. At what time will they all turn "green" simultaneously

ASSIGNMENT 2: Chapter: PAIR OF LINEAR EQUATIONS IN 2 VARIABLES

1. Solve graphically the following pairs of linear equations:

(i) $2x - y = 4$ $3y - x = 3$ Also, find the coordinates of the points where these lines intersect the 2 axes.

(ii) $2x + 3y = 12$ $x - y = 1$ Shade the region (area) between the 2 lines and x axis.

2. Find graphically the coordinates of the vertices of a triangle whose sides have the equations:

(i) $y = x$, $y = 0$ and $2x + 3y = 30$ (iii) $y = x$, $3y = x$ and $x + y = 8$

(ii) $2y - x = 8$, $5y - x = 14$ and $y - 2x = 1$

3. Plot a graph for each of the following pairs of equations and shade the region bounded by the 2 lines and the x-axis.

(i) $x - y + 1 = 0$ (ii) $4x - 3y + 4 = 0$ (iii) $2x + y = 6$

(iv) $x + y = 5$ $2x + y - 10 = 0$ $4x + 3y - 20 = 0$ $2x - y + 2 = 0$ $2x - y + 2 = 0$

4. Solve the following pair of linear equations graphically: $3x + y - 11 = 0$; $x - y - 1 = 0$ Shade the region bound by these lines and the axis of y .

5. Solve each of the following pairs of linear equations graphically:

(i) $5x - 6y + 30 = 0$ (ii) $3x - 4y + 6 = 0$ $5x + 4y - 20 = 0$ $3x + y - 9 = 0$

6. Solve the following pairs of equations:

(i) $5m - 5n = 12$; $2m + 9n = 20$

(ii) $x + 4 = 5y = 7$

(iii) $x - y = 0.9$

(iv) $8x - 3y = 5xy$; $6x - 5y = -2xy$

(v) $99x + 101y = 499$; $101x + 99y = 501$

(vi) $39x + 41y = 76$; $41x + 39y = 84$

(vii) $+by = a + b$ $x^3 + 4y = 5$ $2ax + 2by = 2$

(viii) $a(x + y) + b(x - y) = a^2 + b^2 - ab$ $yx + 11 = 2$

$$a(x + y) - b(x - y) = a^2 + b^2 + ab$$

(ix) $ax - by = a - b$; $2ax - 2by = 0$ ($a \neq b$)

7. If $2x + y = 35$ and $3x + 4y = 65$, find the value of yx

8. Find the value of c for which the pair of equations : $2x + cy = 1$; $3x + 5y = 7$ will have

(i) a unique solution;

(ii) no solution. Is there a value of c for which the system has infinite number of solutions?

9. Find the value of k for which the following pairs of equations have unique solutions:

(i) $7x - 2y = 3$; $22x - ky = 8$

(ii) $2x + ky = 1$; $3x - 5y = 7$

(iii) $2x + 3y - 5 = 0$; $kx - 6y - 8 = 0$

10. For what value(s) of k will the pair of linear equations: $kx + 3y = k - 3$; $12x + ky = k$ have a unique solution?

11. Last year 1 kg of tea and 3 kg of sugar together cost Rs 96. This year, the rates of tea increased by 15% and that of sugar by 10%. So the amount of tea and sugar now cost Rs. 108.60. Find the per kg rates of tea & sugar last year.

12. A boat goes 24 km upstream & 28 km downstream in 6 hours. In 6.5 hours, it can go 30 km upstream & 21 km downstream. Find the speed of stream and the speed of boat in still water. ax8 7

13. A person invests some amount @ 12% S.I. and some other amount @ 10% S.I..He receives an annual interest of Rs.1300. But if he interchanges the amounts invested, he shall receive Rs.40 more as interest. How much has he invested at each rate?

14. If 1 is added to both the numerator and the denominator of a fraction, it becomes equal to $\frac{7}{6}$. If, however, 1 is subtracted from both the numerator & denominator of the same fraction, it becomes equal to the fraction. Find
15. The age of a father 8 yrs back was 5 times that of his son. After 8 yrs, his age will be 8 yrs more than double the age of his son. Find their present ages.
16. There are some lotus flowers in a lake. If 1 butterfly sits on each flower, one butterfly is left behind. If 2 butterflies sit on each flower, 1 flower is left behind. What is the no. of flowers? What is the no. of butterflies?

SCIENCE

Assignment- 1

- 1." No precipitation reaction can occur without exchange of ions between the two reactants".Justify this statement giving a balanced chemical equation for the reaction.
- 2.(i)Define decomposition reaction. Write equation for the reaction that occurs when Lead Nitrate is heated strongly in a boiling tube.
- (ii) In electrolytic decomposition of Water, two gases are liberated at the electrodes. Give the mass ratio of the gas liberated at cathode and the anode.
3. Silver chloride kept in a China dish turns grey in sunlight.
- (i) Write the colour of Silver chloride when it was kept in the China dish.
- (ii) Name the type of chemical reaction taking place and write the chemical equation for the reaction.
- (iii) State one use of the reaction. Name one more chemical which can be used for the same purpose.
4. Write the balance chemical equation for the following reaction and identify the type of reaction in each case
- (i) Nitrogen gas is treated with the hydrogen gas in the presence of a catalyst at 773 Kelvin to form Ammonia gas
- (ii) sodium hydroxide solution is treated with Acetic Acid to form Sodium Acetate and water.
- (iii) Ethanol is warmed with ethanoic acid to form Ethyl Acetate in the presence of concentrated H_2SO_4 .
- (iv) Ethene is burnt in the presence of oxygen to form carbon dioxide water and release heat and light.

- (v) hydrogen sulphide gas burns in the air to give water and sulphur dioxide.
- (vi) Silver Bromide on exposure to sunlight decomposes into silver and bromine.
5. While burning a magnesium ribbon in air, list two safety measures which should be followed. Also state two observation of this activity.
6. What is the other name of precipitation reaction? Why is it called so?
7. Name the type of chemical reaction in which calcium oxide reacts with water. Justify your answer by giving balance chemical equation for the chemical reaction.
8. Write balanced chemical equation for the reaction that occurs when
- (i) Steam is passed over the red hot iron.
 - (ii) Natural gas is burnt in air.
 - (iii) glucose react with oxygen in the cells of our body and provide energy.
9. What happens when a piece of
- (i) zinc metal is added to copper sulphate solution
 - (ii) aluminium metal is added to dilute hydrochloric acid
 - (iii) silver metal is added to copper sulphate solution?
- Also write the balance chemical equation if the reaction occurs.
10. A compound X is used in the manufacture of cement. When dissolved in water, it forms a compound Y. Solution of compound Y is used in white washing.
- (i) Identify compound X and Y .Write down the chemical equation for the reaction.
 - (ii) What type of chemical reaction is it? Is this reaction also an exothermic reaction?

Assignment 2

1. Mention the pathway of urine in our body starting from the organ of its formation to its excretion. What will happen if that tubular part of the nephron does not work properly?
2. Why Herbivorous animals have longer small intestine than carnivorous animals?
3. Although 'pepsin' and 'trypsin' are both protein digesting enzymes yet they differ from each other. Justify this statement by giving one difference between them.
4. Sometimes while running, the athlete suffer from muscle cramps? why ?how is the respiration in this case different from aerobic respiration?

- 5.(i) Name the movement that occurs all along the gut in human digestive system.How do they help in digestion?
- (ii) Where is bile juice stored in human body? list two roles of bile juice.
6. (i) What is the internal energy reserve in plants and animals?
- (ii) How desert plants perform photosynthesis if their stomata remain closed during the day?
7. “All plants give out oxygen during day and carbon dioxide during night.” Do you agree with this statement? Give reason.
8. Name the energy currency in the living organism.When and where it is produced?
9. Leaves of a healthy potted plant were coated with Vaseline.Will this plant remain healthy for long? Give reasons for your answer.
10. Plants have low energy needs as compared to animals. Explain.
- 11.write the correct sequence of steps followed during the journey of oxygen rich blood from lungs to various organs of the human body.
12. List three differences between arteries and veins.
13. What will happen if the diaphragm of a person gets ruptured in an accident.
14. What will happen if :
- (i) Xylem tissue in a plant is removed?
- (ii) We are injured and start bleeding?
15. Name the following
- (i) the process in plants that links light energy with chemical energy .
- (ii) Organisms that can prepare their own food.
- (iii) The cell organelle where photosynthesis occurs.
- (iv) Cells that surround a stomatal pore.
- (v) Organisms that cannot prepare their own food.
- (vi) An enzyme secreted from gastric glands in stomach that acts on proteins.

Assignment 3

1. Distinguish between real image and virtual image.

2. How is the refractive index of a medium related to the speed of light ? Obtain an expression for Refractive Index of a medium with respect to another in terms of speed of light in these two media?
3. How can you distinguish between a plane mirror concave mirror and a convex mirror by looking at the image of your face in these Mirrors?
4. How will you distinguish between a convex lens and a concave lens without touching them?
5. (i) The image of an object formed by a mirror is real inverted and is of magnification -1. if the image is at the distance of 30 cm from the mirror, where is the object placed? give reason to justify your answer.
(ii) Where would the image be if the object moved 15 CM towards the mirror? Draw a ray diagram for the new position of the object to justify your answer.
6. A child is standing in front of a magic mirror. she finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. Explain the construction of the magic mirror using different types of mirrors .Also state the reason in support of your answer.
7. Explain why the refractive index of any material with respect to air is always greater than 1?
8. Refractive index of water with respect to air is 1.33 and that of diamond is 2.42.
(i) In which medium does the light move faster, water or Diamond?
(ii) What is the refractive index of Diamond with respect to water?
- 9.(i) upper half of a convex lens is covered with the black paper. Draw a ray diagram to show the formation of a image of an object placed at a distance of $2f$ from such a lens. Mention the position and nature of the image formed. State the observable difference in the image obtained if the lens is uncovered. Give the reason to justify your answer.
10. An object is placed a distance of 30 cm from the optical centre of a concave lens of focal length 15 cm. Use lens formula to determine the distance of the image from the optical centre of the lens.

Section B

1. Students are instructed to prepare a creative collage on **black chart** paper using coloured pictures, cuttings, drawings, and short captions related to **any one** of the following science themes:

1. Wonders of Science in Daily Life

2. Save Environment, Save Earth
3. Renewable and Non-renewable Sources of Energy
4. Human Body Systems
5. Scientific Inventions and Discoveries
6. Pollution and Its Control
7. Climate Change and Global Warming
8. Importance of Biodiversity

Section C

Project Work

1. Prepare a handwritten project report (7-10 pages) on “**Management of natural resources**”

Decorate the project with coloured diagrams and creative borders.

2. Prepare a working model according to your roll no.

1. Structure of Brain (Roll no. 1-5)
2. Human Respiratory system (Roll no. 6-9)
3. Hemodialysis (Roll no. 10-13)
4. Water Electric Generator (Roll no. 14-17)
5. Human digestive system (Roll no. 18-21)
6. Double Circulation (Roll no. 22-25)
7. Smart handwash by using microcontrol and sensor (Roll no 26-29)
8. Hydro power plant (Roll no 30-33)
9. Ecosystem food chain model (Roll no 34-36)
- Reflex arc (Roll no 37-41)

Submission Instructions

Complete all work neatly in new notebook.

Use coloured pens and pencils for headings and diagrams.

Social Science

Project file:

Project work on consumer rights or social issues or sustainable development

Map work:

Ch 1 resources and developed (geo) Major social types

Ch 3 Water resources

Dams: 1 salal

2. Bhakra Nangal

3. Tehri

4. Hirakud

5. Rana Partap Sagar

6. Tungabhadra

Ch 2 Nationalism in India (History)

1. A place associated with peasant Satyagraha.
2. A place associated with the cotton mill workers Satyagraha.
3. Name the place where Gandhi ji broke the Salt Law.
4. Congress session- September 1920
5. Congress session- 1927
6. Congress session- December 1920
7. The place where Gandhi ji started the Dandi March.

Assignment:

1. What were the major proposals of the Vienna Congress?
2. Why did Nationalist tension emerge in the Balkans?
3. Analyse the significance of the 'Napoleonic Code' in making the administrative system rational and efficient.
4. Describe any five majors introduced by the French Revolutionaries to create a sense of collective identity amongst the French people.
5. Who was Otto von Bismarck? Explain his role in the unification of Germany.

6. "Culture played an important role in creating the idea of the nation in Europe". Support the statement with examples.
7. "Different people have different goals." support the statement with examples.
8. Explain three attributes for comparing nations' development between different countries.
9. What is meant by Sustainable Development? explain it by taking the case study of water.
10. Why is sustainable development essential for economic growth? explain
11. Explain the role of Public facilities for equality of life.
12. Explain any three measures taken by the Indian government to protect Wildlife.
13. How have human activities affected the depletion of flora and fauna?
14. What are the main objectives of JFM?
15. Describe how communities have conserved and protected forest.

Prepare a PPT on ch.3 Water Resources (Geography)

Make a model on any one of the following topics:

Prepare working models according to the allotted Roll Numbers.

1. Dandi March Model

Roll No.(1 to 8)

Make a road with Gandhi ji and followers walking.

Use cotton for salt piles.

Add mini flags and slogans.

2. Jallianwala Bagh Scene

Roll No.(9 to 17)

Create garden walls and narrow entrances.

Use paper figures for crowds and soldiers.

Add speaker audio explaining the event

3. Types of Farming in India

Roll No.(18 to 26)

Divide model into terrace farming, plantation farming, and subsistence farming.

Use real grains and miniature farmers.

4. Model on Sectors of Indian Economy

Roll No.(27 to 35)

5. "Power Distribution Tree"

Roll No.(36 to 42)

Three lists:-1.Union List

2. State List

3. Concurrent list

ARTIFICIAL INTELLIGENCE

Note:learn all question done In your notebook

Q1 Learn unit1, unit 2 & unit 3(part B)

Q2.Application Based(A4sizesheet) Read carefully and give answer:

AI Bias Another aspect to AI Ethics is bias. Everyone has a bias of their own no matter how much one tries to be unbiased, we in some way or the other have our own biases even towards smaller things. Biases are not negative all the time. Sometimes, it is required to have a bias to control a situation and keep things working.When we talk about a machine,we know that it is artificial and cannot think on its own. It can have intelligence, but we cannot expect a machine to have any biases of its own. Any bias can transfer from the developer to the machine while the algorithm is being developed.

Now Think and write the answer of the followings :

1. Majorly,all the virtual assistants have a female voice.It is only now that some companies have understood this bias and have started giving options for male voices but since the virtual assistants came into practice, female voices are always preferred for them over any other voice. Can you think / write of some reasons for this?

2. If you search on Google for salons, the first few searches are mostly for female salons.This is based on the assumption that if a person is searching for a salon, in all probability it would be a female. Do you think this is a bias? If yes, then is it a Negative bias or Positive one?

3. DIFF BETWEEN RULE BASED AND LEARNING BASED AI APPROCHES

4. DIFF BETWEEN SUPERVISED AND UNSUPERVISED AND REINFORCEMENT LEARNING MODELS

5. DIFF BETWEEN SCRIPT BOARDS AND SMARTBOARDS 6. Explain the process of AI project cycle

Project Work

1 Ai Mood Detector	(Anmol, Varindam, Vansh, Vedant, Harsh)
2 Smart Street Light	(Angel verma, Angel, Kashish, Drishti)
3 Ai Robot	(Kashish Dhiman, Muskan, Sakshi, Shagun)
4 Smart School	(Ayush, Divyansh, Gourav, Jivansh, Satyam)
5 Computer Vision	(Sanjana, Tanvi, Vaishanvi, Vanshika)

PHYSICAL ACTIVITY TRAINER

1. Prepare 5 yoga poses on chart & their benefit.
2. draw track on chart paper
3. Assignment. Role of physical education in child development