

(17) Find the value of 'K' for which the system of equations $x-3y=5$; $5x+ky=10$ has unique soln.

(18) Find the value of 'K' for which the equations $3x-y-5=0$ and $6x-2y+k=0$ has no solution.

(19) Find the value of 'K' for which the equations $2x+(k-2)y=k$; $6x+(2k-1)y=2(k-1)$, have infinite many solutions.

(20) Solve the following system of equations -

$$(i) \begin{cases} 8x+5y=11 \\ x+y=4 \end{cases} \quad [x=-3, y=7]$$

$$(ii) \begin{cases} 0.4x+0.3y=1.7 \\ 0.7x-0.2y=0.8 \end{cases} \quad [Ans: x=2, y=3]$$

$$(iii) \begin{cases} \frac{3x}{2} - \frac{5y}{3} = -2 \\ \frac{x}{3} + \frac{y}{2} = \frac{13}{6} \end{cases} \quad [Ans: x=2, y=3]$$

$$(iv) \begin{cases} \frac{3}{x} - \frac{1}{y} + 9 = 0 \\ \frac{2}{x} + \frac{3}{y} = 5 \end{cases} \quad [Ans: x = -\frac{1}{2}, y = \frac{1}{3}]$$

$$(v) \begin{cases} \frac{x}{a} + \frac{y}{b} = 2 \\ ax - by = a^2 - b^2 \end{cases} \quad [x=a, y=b]$$

$$(vi) \begin{cases} 23x - 29y = 98 \\ 29x - 23y = 110 \end{cases} \quad [Ans: x=3, y=-1]$$

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(2)

(10) Without actually performing the long division, state whether the following rational numbers are terminating or non terminating repeating?

(i) $\frac{3}{40}$

(ii) $\frac{51}{1500}$

(iii) $\frac{125}{343}$

(iv) $\frac{7}{140}$

(11) If 2 is a zero of the polynomial ~~ax² + 3x - 2ax +~~ $3x^2 - 2ax +$ then find the value of a. [Ans: $a = \frac{17}{4}$]

(12) Find the zeros of the polynomials and verify the relationship between zeros and the coefficients.

(i) $5x^2 - 8x - 4$

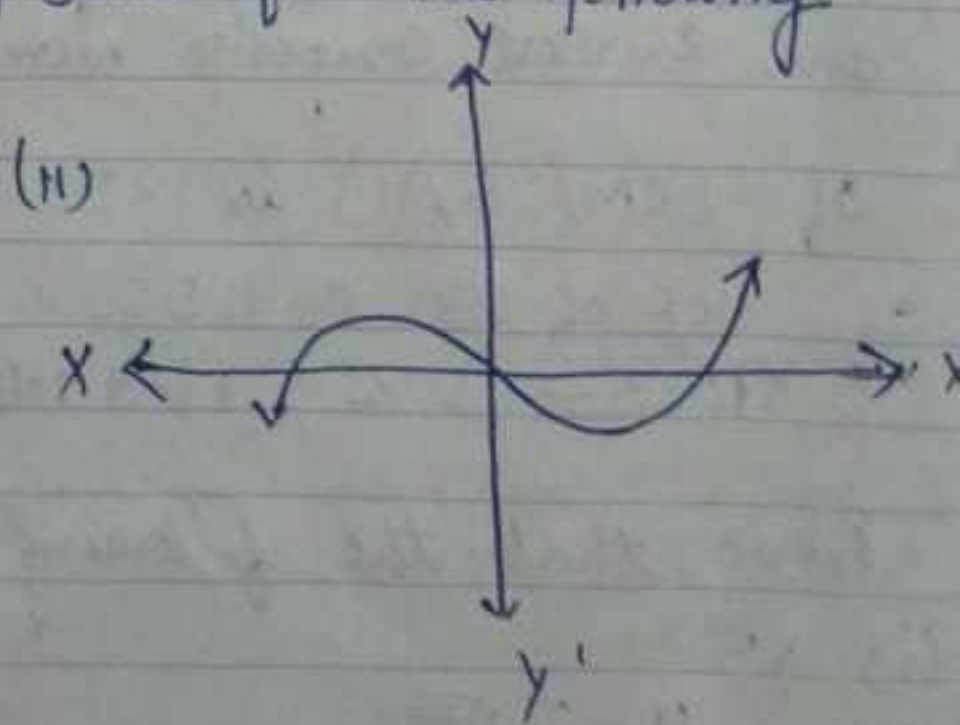
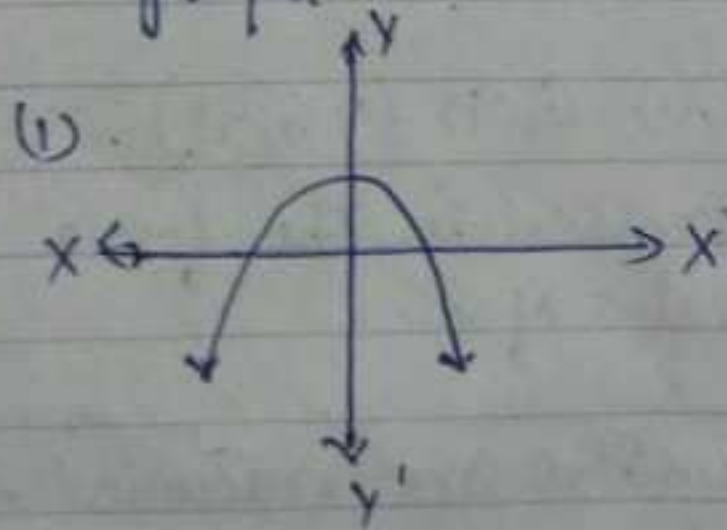
(ii) $x^2 - 15$

(13) If α and β are the zeros of the polynomial $5x^2 - 7x + 1$. Find the value of $(\frac{1}{\alpha} + \frac{1}{\beta})$. [Ans = 7]

(14) Find all the zeros of the polynomial $3x^4 - 11x^3 - x^2 + 33x - 24$, if its two zeros are $\sqrt{3}$ and $(-\sqrt{3})$. [Ans = $\sqrt{3}, -\sqrt{3}, \frac{8}{3}$ and 1]

(15) Find a quad. polynomial whose sum and product of zeros are $-\frac{2}{3}$ and $\frac{1}{3}$.

(16) Write the number of zeros from the following graph.



Holiday Homework
Class - X
Subject - Maths

(1) In Euclid's division lemma, $a = bq + r$.
What is the condition for the remainder r ?

(2) A number when divided by 53 gives 34 as quotient and 21 as remainder. Find the number.

(3) Find HCF of the following using Euclid's division algorithm

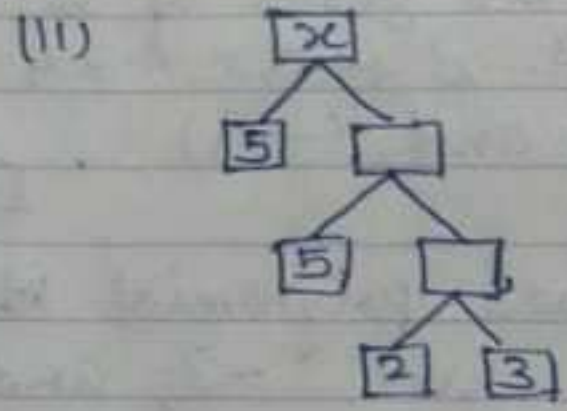
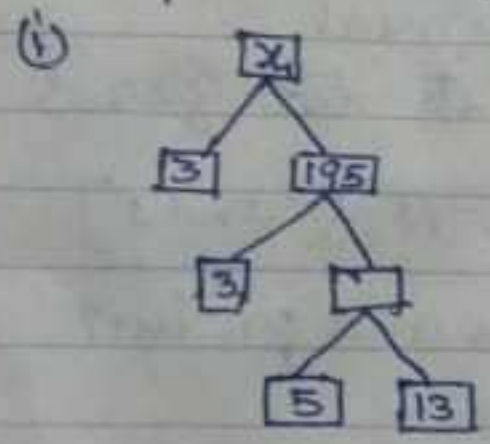
(i) 650 and 1170

(ii) 272 and 1032

(iii) 152, 208 and 260

(4) Show that every positive odd integer is of the form $(6m+1)$ or $(6m+3)$ or $(6m+5)$ for some integer m

(5) Complete the following factor tree -



(6) Find LCM and HCF of the smallest prime number and smallest composite number.

(7) If $LCM(26, 91)$ is 182. Find $GCD(26, 91)$.

(8) If HCF of 210 and 55 is expressed in the form $210x - 55y$. Find the value of x .

(9) Prove that the following numbers are irrational -

(i) $\sqrt{5}$

(ii) $4 - 2\sqrt{5}$

(iii) $\frac{2\sqrt{3}}{5}$

HISTORY: - 1. On the basis of reading Chapter-3 of History i.e. "The Nationalism in India", make at least 20 additional questions covering the whole chapter and solve them in the fair notebook of History. (10 Very Short Answers, 6 Short Answers and 4 Long Answers).

2. On an outline Political Map of India, locate and label / Identify the following:-

A. Indian National Congress Sessions:-

- Calcutta (Sep. 1920)
- Nagpur (Dec. 1920)
- Madras (1927)
- Lahore (1929)

B. Important Centres of Indian National Movement

(Non-cooperation and Civil Disobedience Movement)

- Champaran (Bihar) Movement of Indigo Planters
- Kheda (Gujarat) Peasant Satyagrah
- Ahmedabad (Gujarat) Cotton Mill Workers Satyagraha
- Amritsar (Punjab) JallianwalaBagh Incident.
- ChauriChaura (U.P.) calling off the NCM.
- Bardoli (Gujarat) no tax campaign
- Dandi (Gujarat) Civil Disobedience Movement

POLITICAL SCIENCE: - 1. On the basis of reading Chapter-2 of Political Science i.e. "Federalism", make at least 20 additional questions covering the whole chapter and solve them in the fair notebook of Political Science. (10 Very Short Answers, 6 Short Answers and 4 Long Answers).

GEOGRAPHY

2. Mark and label the following on the political map of India:-

- | | |
|--|---|
| (a) Technology parks in India | (b) Sea ports and air ports in India |
| (c) Dams in India | (d) Power plants in India |
| (e) Iron and steel industries in India | (f) Cotton textiles industries in India |

3. Learn all the questions and answers of the completed chapters.

SCIENCE

1. Differentiate between exothermic and endothermic reactions. Give examples from nature.
2. Name the five types of chemical reactions. Give two examples of each by writing balanced chemical equations.
3. Role play of four "ORGANS". Imagine that you are any one organ from EACH of the following Organ Systems in humans:

(i) Digestive system

(ii) Respiratory system

(iii) Circulatory system

(iv) Excretory system

Write about yourself eg I am-----and am a part of the-----system. I am located-----
-----I look like-----The functions I perform are-----
-----.

4. Collect some variegated leaves. Dry, press and paste in your homework notebook.
5. Revise lesson 1 and 6.
6. Complete work related to lesson 1 and 6 in your Practical notebook.

कक्षा -10
विषय - हिंदी
ग्रीष्मकालीन अवकाश गृहकार्य
केंद्रीय विद्यालय आरडीएसओ लखनऊ

पत्र लेखन

1. परिवहन निगम के प्रबंधक को अपनी कॉलोनी तक बस चलाने के लिए अनुरोध करते हुए एक पत्र लिखिए।
2. ऑनलाइन कक्षाओं को सुचारू रूप से चलाने का सुझाव देते हुए अपने विद्यालय के प्राचार्य को एक पत्र लिखिए।
3. अपने बड़े भाई की शादी में अपने मित्र को आमंत्रित करते हुए एक पत्र लिखिए। (कम से कम 120 शब्द)
4. समय का महत्व बताते हुए अपने मित्र को पत्र लिखिए।

निबंध लेखन

प्रश्न 5: निम्नलिखित विषयों पर निबंध (शब्द सीमा: 200 शब्द)

- (क) कोरोना: एक वैश्विक – प्रस्तावना, कोरोना क्या है, प्रभाव, बचाव के उपाय, उपसंहार।
- (ख) विज्ञापन कला – अर्थ, विज्ञान के युग में आए परिवर्तन, महत्व, गलत उपयोग व प्रदर्शन।
- (ग) जीवन में त्योहारों का महत्व - त्योहार की श्रेणियाँ, धरोहर के प्रतीक, सामूहिक आनंद की अनुभूति, परंपराओं का संदेश, देश प्रेम व आपसी सहयोग की भावना।

पाठ्यपुस्तक

प्रश्न 6: नेताजी का चश्मा पाठ का सारांश 120 शब्दों में लिखिए

प्रश्न 7: सूरदास के चार पद आप की पाठ्यपुस्तक में हैं, इन चारों पदों का भावार्थ लिखिए।

प्रश्न 8: अब तक पढ़ाए गए पाठों के सभी प्रश्न उत्तर तैयार करें और उसे समझकर कंठस्थ करें।