BJS PUBLIC SCHOOL

SUMMER HOLIDAY HOMEWORK

CLASS X

2026 – 27

ENGLISH HOLIDAYS HOMEWORK

CLASS X

1. Watch and listen English news daily in order to equip yourself with the information and facts to be used as content writing skills.

2. Prepare a project report on the life and history of any one of these writers **William Shakespeare**, **Jane Austen**, **Ruskin Bond** or **Anita Desai** with two examples of their work and what impact they have created in lives of people

3. Creation with proverb. Describe the following **PROVERBS** in your own words. You should also add pictures to make it creative.

- A stitch in time saves nine (Write a short story based on this proverb)
- As you sow, so shall you reap.
- The axe forgets, but the tree remembers
- Empty vessel make the most noise.

4. Take any story from your First flight or Footprints textbook and do it as a comic strip.(A4 size sheet)

5. You are provided with a list of idioms. For each of the following idioms complete the following:-

A. Meaning: Explain the idiom

B. Sentence: Use the idiom correctly in a sentence

C. Equivalent Expression: Think of a similar expression in Hindi or Punjabi

- To put in a nutshell
- The lion's share
- The early bird catches the worm
- To be in a fix
- Keep an ear to the ground. • In the pink
- Forty-winks
- draw a line
- Couch potato
- Bite the bullet

Kindly do the following assignment on A-4 size ruled sheets.

ग्रीष्मकालीन अवकाश – 2026

कक्षा : 10 | विषय : हिंदी (कोर्स -ब)

खंड: अ – गद्य

पाठ: बड़े भाई साहब

1. बड़े भाई साहब छोटे भाई को क्या सीख देना चाहते थे?

2. बड़े भाई साहब के स्वभाव की तीन विशेषताएँ लिखिए।

3. लेखक ने पढ़ाई के बारे में क्या संदेश दिया है?

रचनात्मक कार्य: "अगर आप छोटे भाई की जगह होते तो क्या करते?" (80-100 शब्द)

पाठ: डायरी का एक पन्ना

1. डायरी लिखने का क्या महत्व है?

2. लेखक ने किन भावनाओं को व्यक्त किया है?

3. इस पाठ से आपको क्या प्रेरणा मिलती है?

गतिविधि: अपनी एक दिन की डायरी लिखिए (कम से कम 120 शब्द)

खंड -ब – पद्य

कबीर की साखी

1. कबीर के दोहों का मुख्य संदेश क्या है?

2. "बुरा जो देखन मैं चला..." का अर्थ लिखिए।

3. कबीर ने अहंकार के बारे में क्या कहा है?

मीरा के पद

1. मीरा का कृष्ण के प्रति प्रेम कैसा था?

2. मीरा के पदों की भाषा-शैली कैसी है?

3. भक्ति भावना का वर्णन कीजिए।

खंड-स – व्याकरण

मुहावरे

आँख का तारा, दाँत खट्टे करना, नाक कटना, हाथ-पाँव फूलना (अर्थ और वाक्य बनाइए)

समास

1. समास की परिभाषा लिखिए।

2. राजपुत्र, जलपान, देवालय, गृहकार्य (समास-विग्रह)

3. माता-पिता, दिन-रात, त्रिलोकी (भेद बताइए)

खंड-घ – लेखन कौशल

अनुच्छेद लेखन

- ग्रीष्मकालीन अवकाश का महत्व / मेरा प्रिय लेखक (120 शब्द)

पत्र लेखन

- मित्र को ग्रीष्मकालीन अवकाश के बारे में पत्र लिखिए।

Class 10 Mathematics

Chapter 1: Real Numbers

LEVEL 1 — EASY (1 Mark MCQ / Direct Questions)

Q1. [2025] *(1 Mark)*

If $(-1)^n + (-1)^8 = 0$, then n is:

(a) any positive integer

(b) any negative integer

(c) any odd number

(d) any even number

Topic: Properties of integers

Q2. [2025] *(1 Mark)*

Which of the following cannot be the unit digit of 8^n, where n is a natural number?

(a) 4 (b) 2 (c) 0 (d) 6

Topic: Unit digit & prime factorisation

Q3. [2025] *(1 Mark)*

If x is the LCM of 4, 6, 8 and y is the LCM of 3, 5, 7 and p is the LCM of x and y, which of the following is true?

(a) p = 35x (b) p = 4y (c) p = 8x (d) p = 16y

Topic: LCM properties

Q4. [2025] *(1 Mark)*

If HCF(98, 28) = m and LCM(98, 28) = n, then the value of n − 7m is:

(a) 0 (b) 28 (c) 98 (d) 198

Topic: HCF & LCM relation

Q5. [2025] *(1 Mark)*

The greatest number which divides 70 and 125, leaving remainders 5 and 8 respectively, is:

(a) 13 (b) 65 (c) 875 (d) 1750

Topic: HCF with remainder

Q6. [2025] *(1 Mark)*

Assertion (A): For any two prime numbers p and q, their HCF is 1 and LCM is p + q.

Reason (R): For any two natural numbers, HCF × LCM = product of numbers.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true, but R is not the correct explanation of A.

(c) A is true, but R is false.

(d) A is false, but R is true.

Topic: Assertion-Reason: HCF & LCM

Q7. [2024] *(1 Mark)*

The smallest irrational number by which √20 should be multiplied so as to get a rational number is:

(a) √20 (b) √2 (c) 5 (d) √5

Topic: Irrational numbers

Q8. [2024] *(1 Mark)*

The LCM of two prime numbers p and q (p > q) is 221. Then the value of 3p − q is:

(a) 4 (b) 28 (c) 38 (d) 48

Topic: LCM of primes

Q9. **[2024]** *(1 Mark)*

A pair of irrational numbers whose product is a rational number is:

(a) $(\sqrt{16}, \sqrt{4})$ (b) $(\sqrt{5}, \sqrt{2})$ (c) $(\sqrt{3}, \sqrt{27})$ (d) $(\sqrt{36}, \sqrt{2})$

Topic: Product of irrational numbers

Q10. **[2024]** *(1 Mark)*

Given HCF(2520, 6600) = 40 and LCM(2520, 6600) = 252 × k, then the value of k is:

(a) 1650 (b) 1600 (c) 165 (d) 1625

Topic: HCF & LCM calculation

Q11. **[2023]** *(1 Mark)*

$(2 + \sqrt{3}) \times (2 - \sqrt{3})$ is:

(a) a natural number (b) an integer

(c) a rational number (d) an irrational number

Topic: Irrational number identification

Q12. **[2023]** *(1 Mark)*

Which of the following is a rational number between $\sqrt{3}$ and $\sqrt{5}$?

(a) 1.4142387… (b) π (c) 1.857142 (d) $\sqrt{8}$

Topic: Rational number between surds

Q13. **[2022]** *(1 Mark)*

If the HCF of 65 and 117 is of the form 65m − 117, then the value of m is:

(a) 1 (b) 2 (c) 3 (d) 4

Topic: HCF from prime factorisation

Q14. **[2020]** *(1 Mark)*

The HCF of two numbers is 18 and their LCM is 378. If one number is 54, find the other.

Topic: HCF & LCM product

LEVEL 2 — MEDIUM (2 – 3 Marks)

Q15. **[2025]** *(2 Marks)*

Find the smallest number that is divisible by both 644 and 462.

Topic: LCM application

Q16. **[2025]** *(2 Marks)*

Two numbers are in the ratio 4 : 5 and their HCF is 11. Find their LCM.

Topic: HCF & LCM from ratio

Q17. **[2024]** *(3 Marks)*

Teaching Mathematics through activities, Ms. Mukta started a prime number game. She announced the number 2 and asked each student to multiply it by a prime number before passing it on. The last student got 173250.

(A) What is the least prime number used by students?

(B) How many students are in the class? OR What is the highest prime number used?

(C) Which prime number was used the maximum number of times?

Topic: Prime factorisation — case study

Q18. **[2024]** *(2 Marks)*

Write the denominator of the rational number 257/5000 in the form $2^n \times 5^m$. Hence write its decimal expansion without actual division.

Topic: Decimal expansion

Q19. [2023] *(3 Marks)*

Three sets of Physics, Chemistry, and Mathematics books are to be stacked subject-wise with each stack at the same height. The number of books are: Physics – 144, Chemistry – 180, Mathematics – 192.

Assuming all books are of the same thickness, determine the number of stacks of each subject.

Topic: HCF of three numbers

Q20. [2020] *(2 Marks)*

Check whether 6^n can end with the digit 0 for any natural number n.

Topic: Ending digit proof

Q21. [2020] *(2 Marks)*

Find the HCF and LCM of 6, 72, and 120 using the prime factorisation method.

Topic: HCF & LCM — prime factorisation

Q22. [2022] *(3 Marks)*

Explain why $7 \times 11 \times 13 + 13$ and $7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 + 5$ are composite numbers.

Topic: Composite number reasoning

Q23. [2021] *(2 Marks)*

Find the LCM and HCF of 26 and 91 and verify that LCM × HCF = product of the two numbers.

Topic: HCF & LCM verification

LEVEL 3 — HARD (3 – 4 Marks)

Q24. [2025] *(3 Marks)*

Prove that $(4 - 3\sqrt{3})$ is an irrational number, given that $\sqrt{3}$ is irrational.

Topic: Irrationality proof

Q25. [2025] *(3 Marks)*

Let p, q, and r be three distinct prime numbers. Check whether $p \cdot q \cdot r + q$ is a composite number or not.

Further, give an example for 3 distinct primes p, q, r such that:

(i) $p \cdot q \cdot r + 1$ is a composite number.

(ii) $p \cdot q \cdot r + 1$ is a prime number.

Topic: Composite number — prime reasoning

Q26. [2024] *(3 Marks)*

Prove that $(5 + 3\sqrt{2})$ is an irrational number, given that $\sqrt{2}$ is irrational.

Topic: Irrationality proof

Q27. [2023] *(3 Marks)*

Prove that $(2\sqrt{3} - 1)$ is an irrational number, given that $\sqrt{3}$ is irrational.

Topic: Irrationality proof

Q28. [2022] *(3 Marks)*

Prove that $\sqrt{5}$ is an irrational number.

Topic: Irrationality proof

Q29. [2021] *(3 Marks)*

Prove that $\sqrt{3}$ is irrational. Hence show that $(5 - 2\sqrt{3})$ is also irrational.

Topic: Two-part irrationality proof

Q30. [2020] *(4 Marks)*

Prove that $\sqrt{p} + \sqrt{q}$ is irrational, where p and q are distinct prime numbers.

Topic: Irrationality — distinct primes

Chapter 2: Polynomials

LEVEL 1 — EASY (1 Mark MCQ)

Q1. [2020] *(1 Mark)*
The degree of a polynomial having zeroes −3 and 4 only is:
(a) 2 (b) 1 (c) more than 3 (d) 3
Topic: Degree of a polynomial

Q2. [2020] *(1 Mark)*
If one of the zeroes of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is:
(a) 10 (b) −10 (c) −7 (d) −2
Topic: Finding k from a zero

Q3. [2020] *(1 Mark)*
The quadratic polynomial, the sum of whose zeroes is −5 and their product is 6, is:
(a) $x^2 + 5x + 6$ (b) $x^2 - 5x + 6$
(c) $x^2 - 5x - 6$ (d) $-x^2 + 5x + 6$
Topic: Form polynomial from zeroes

Q4. [2020] *(1 Mark)*
The zeroes of the polynomial $x^2 - 3x - m(m + 3)$ are:
(a) m, m+3 (b) −m, m+3 (c) m, −(m+3) (d) −m, −(m+3)
Topic: Zeroes of a polynomial

Q5. [2022] *(1 Mark)*
If one of the zeroes of the quadratic polynomial $(k - 1)x^2 + kx + 1$ is −3, then the value of k is:
(a) 4/3 (b) −4/3 (c) 2/3 (d) −2/3
Topic: Finding k from a zero

Q6. [2022] *(1 Mark)*
The quadratic polynomial, the sum of whose zeroes is −5 and their product is 6, is:
(a) $x^2 + 5x + 6$ (b) $x^2 - 5x + 6$
(c) $x^2 - 5x - 6$ (d) $-x^2 + 5x + 6$
Topic: Form polynomial from zeroes

Q7. [2022] *(1 Mark)*
The number of zeroes of the polynomial representing the whole curve (graph cutting x-axis at four distinct points) is:
(a) 4 (b) 3 (c) 2 (d) 1
Topic: Zeroes from graph

Q8. [2023] *(1 Mark)*
The graph of $y = p(x)$ touches the x-axis at exactly one point. The number of zeroes of p(x) is:
(a) 3 (b) 1 (c) 2 (d) 0
Topic: Zeroes from graph

Q9. [2023] *(1 Mark)*
If α, β are the zeroes of $p(x) = x^2 - 1$, then the value of (α + β) is:
(a) 1 (b) 2 (c) −1 (d) 0
Topic: Sum & product of zeroes

Q10. [2023] *(1 Mark)*
If α, β are the zeroes of $p(x) = 4x^2 - 3x - 7$, then $(1/\alpha + 1/\beta)$ is equal to:
(a) 7/3 (b) −7/3 (c) 3/7 (d) −3/7

Q11. [2023] *(1 Mark)*

If α, β are the zeroes of $p(x) = x^2 + x - 1$, then $(1/\alpha + 1/\beta)$ equals:

(a) 1 (b) 2 (c) −1 (d) −1/2

Topic: Sum & product of zeroes

Q12. [2024] *(1 Mark)*

What should be added to the polynomial $x^2 - 5x + 4$ so that 3 is a zero of the resulting polynomial?

(a) 1 (b) 2 (c) 4 (d) 5

Topic: Finding what to add

Q13. [2025] *(1 Mark)*

Zeroes of the polynomial $p(x) = x^2 - 3\sqrt{2}\,x + 4$ are:

(a) $2, \sqrt{2}$ (b) $2\sqrt{2}, \sqrt{2}$ (c) $4\sqrt{2}, -\sqrt{2}$ (d) $\sqrt{2}, 2$

Topic: Zeroes of polynomial

Q14. [2025] *(1 Mark)*

If α and β are the zeroes of $p(x) = x^2 - ax - b$, then $(\alpha + \beta + \alpha\beta)$ is equal to:

(a) a + b (b) −a − b (c) a − b (d) −a + b

Topic: Sum & product of zeroes

Q15. [2025] *(1 Mark)*

If α and β are zeroes of $p(x) = kx^2 - 30x + 45k$ and $\alpha + \beta = \alpha\beta$, then k is:

(a) $\pm 3/\sqrt{5}$ (b) $\pm\sqrt{5}/3$ (c) 3/2 (d) 2/3

Topic: Finding k using zeroes condition

Q16. [2025] *(1 Mark)*

If α and β are the zeroes of $3x^2 + 6x + k$ such that $(\alpha^2 + \beta^2 + \alpha\beta) = 10/3$, then k is:

(a) −8 (b) 8 (c) −4 (d) 4

Topic: Finding k using symmetric expression

Q17. [2025] *(1 Mark)*

If the zeroes of the polynomial $2x^2 - bx + 8b$ are reciprocals of each other, then the value of b is:

(a) 2 (b) 1/2 (c) −2 (d) −1/2

Topic: Reciprocal zeroes

Q18. [2025] *(1 Mark)*

Two polynomials are shown in a graph. Both polynomial graphs intersect the x-axis at the same two points. The number of distinct zeroes of both polynomials combined is:

(a) 3 (b) 5 (c) 2 (d) 4

Topic: Zeroes from graph

LEVEL 2 — MEDIUM (2 Marks)

Q19. [2020] *(2 Marks)*

Form a quadratic polynomial whose sum and product of zeroes are −3 and 2 respectively.

Topic: Form polynomial from zeroes

Q20. [2021] *(2 Marks)*

If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, find the value of k.

Topic: Finding k from a zero

Q21. [2023] *(2 Marks)*

Find the zeroes of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between the zeroes and coefficients.

Topic: Zeroes — verify relationship

Q22. [2024] *(2 Marks)*

Find the zeroes of the quadratic polynomial $x^2 - 15$ and verify the relationship between the zeroes and coefficients.

Topic: Zeroes — verify relationship

Q23. [2025] *(2 Marks)*

If the sum of the zeroes of $p(x) = (p + 1)x^2 + (2p + 3)x + (3p + 4)$ is -1, find the value of p.

Topic: Sum of zeroes condition

Q24. [2025] *(2 Marks)*

If α and β are zeroes of $p(x) = x^2 - 2x - 1$, find the value of $(\alpha/\beta + \beta/\alpha)$.

Topic: Symmetric expression of zeroes

Q25. [2025] *(2 Marks)*

If α and β are the zeroes of $p(y) = y^2 - 5y + 3$, find the value of $\alpha^4\beta^3 + \alpha^3\beta^4$.

Topic: Higher powers of zeroes

Q26. [2025] *(2 Marks)*

If the zeroes of the polynomial $x^2 + ax + b$ are in the ratio 3 : 4, prove that $12a^2 = 49b$.

Topic: Zeroes in ratio — proof

LEVEL 3 — HARD (3 – 5 Marks)

Q27. [2023] *(3 Marks)*

If one zero of the polynomial $p(x) = 6x^2 + 37x - (k - 2)$ is the reciprocal of the other, find the value of k.

Topic: Reciprocal zeroes — find k

Q28. [2022] *(3 Marks)*

If α and β are the zeroes of the polynomial $f(x) = x^2 - 5x + k$ such that $\alpha - \beta = 1$, find the value of k.

Topic: Form polynomial and division algorithm

Q29. [2024] *(3 Marks)*

Obtain all zeroes of the polynomial $p(x) = 2x^4 - 2x^3 - 7x^2 + 3x + 6$ if two of its zeroes are $\pm\sqrt{(3/2)}$.

Topic: All zeroes of a biquadratic

Q30. [2023] *(3 Marks)*

Find all the zeroes of $2x^3 + x^2 - 6x - 3$, if two of its zeroes are $-\sqrt{3}$ and $\sqrt{3}$.

Topic: All zeroes of a cubic

Q31. [2022] *(3 Marks)*

On dividing $3x^3 + x^2 + 2x + 5$ by a polynomial g(x), the quotient and remainder are $(3x - 5)$ and $(9x + 10)$ respectively. Find g(x).

Topic: Division algorithm — find g(x)

Q32. [2021] *(3 Marks)*

Find all zeroes of $p(x) = x^4 - 5x^3 + 2x^2 + 10x - 8$ if it is given that two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.

Topic: All zeroes of a biquadratic

Q33. [2020] *(3 Marks)*

Divide the polynomial $p(x) = x^4 - 3x^2 + 4x + 5$ by the polynomial $g(x) = x^2 - x + 1$ and find the quotient and remainder. Verify using the division algorithm.

Topic: Division algorithm — verify

Q34. [2025] *(3 Marks)*

Find all zeroes of $2x^3 - 3x^2 - 3x + 2$, given that one of its zeroes is $-1/2$ (or equivalently -1 if the variant uses that). Show all steps.

Q35. **[2025]** *(5 Marks)*

Find the zeroes of $p(x) = 3x^2 - 4x - 4$. Hence, write a polynomial whose each zero is 2 more than the corresponding zeroes of $p(x)$.

Topic: Zeroes + form new polynomial

Q36. **[2024]** *(3 Marks)*

A teacher starts a polynomial-roots game. Students receive $p(x) = x^4 - 5x^3 + 20x - 16$.

(A) How many zeroes can this polynomial have at most?

(B) Verify whether $x = 1$ is a zero of $p(x)$.

(C) If $(x - 4)$ and $(x + 1)$ are factors of $p(x)$, find all the zeroes.

Topic: Case study — prime number game

Chapter 3: Linear equation in two variables

SECTION A — MULTIPLE CHOICE QUESTIONS (MCQs)

Each question carries 1 mark. Choose the correct option.

Concept-Based MCQs

Q1. The pair of equations $y = 0$ and $y = -7$ has

(a) One solution (b) Two solutions (c) Infinitely many solutions (d) No solution

Q2. If the lines given by $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are parallel, the value of k is

(a) 5/4 (b) 2/5 (c) 15/4 (d) 3/2

Q3. The value of k for which the system $2x + 3y = 5$ and $4x + ky = 10$ has infinitely many solutions is

(a) $k = 3$ (b) $k = 6$ (c) $k = 1$ (d) $k = 2$

Q4. Graphically, the pair of equations $6x - 3y + 10 = 0$ and $2x - y + 9 = 0$ represents two lines which are

(a) Intersecting at exactly one point (b) Coincident (c) Parallel (d) Intersecting at two points

Q5. If $am \neq bl$, the pair of equations $ax + by = c$ and $lx + my = n$:

(a) Has a unique solution (b) Has no solution (c) Has infinitely many solutions (d) May or may not have a solution

Previous Year MCQs (2020–2025)

Q6. The pair of linear equations $x + 2y = 5$ and $7x + 3y = 13$ have: **[Board 2020]**

(a) A unique solution (b) No solution (c) Infinitely many solutions (d) Two solutions

Q7. One equation of a pair of dependent linear equations is $-5x + 7y = 2$. The second equation can be: **[Board 2021]**

(a) $10x + 14y + 4 = 0$ (b) $-10x - 14y + 4 = 0$ (c) $-10x + 14y + 4 = 0$ (d) $10x - 14y = -4$

Q8. For what value of k do the equations $3x - y + 8 = 0$ and $6x - ky = -16$ represent coincident lines? **[Board 2022]**

(a) 1/2 (b) −1/2 (c) 2 (d) −2

Q9. The sum of the digits of a two-digit number is 9. If 27 is added to it, the digits of the number get reversed. The number is: **[Board 2023]**

(a) 27 (b) 36 (c) 45 (d) 54

Q10. If a pair of linear equations is consistent, then the lines will be: **[Board 2024]**

(a) Parallel (b) Always coincident (c) Intersecting or coincident (d) Always intersecting

Q11. Aruna has only ₹1 and ₹2 coins with her. If the total number of coins that she has is 50 and the amount of money with her is ₹75, then the number of ₹1 and ₹2 coins are, respectively: **[Board 2025]**

(a) 35 and 15 (b) 15 and 35 (c) 25 and 25 (d) 20 and 30

SECTION B — ASSERTION & REASON QUESTIONS

Mark (a) if both A and R are true and R is the correct explanation of A. Mark (b) if both A and R are true but R is not the correct explanation. Mark (c) if A is true but R is false. Mark (d) if A is false but R is true.

Q12. (A): The system of equations $x + y = 14$ and $x - y = 4$ is consistent.

(R): A system of linear equations is consistent if it has at least one solution. **[Board 2022]**

Q13. (A): For $k = 2$, the pair of equations $2x + ky = 1$ and $3x - 5y = 7$ has a unique solution.

(R): The pair $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ has a unique solution if $a_1/a_2 \neq b_1/b_2$. **[Board 2023]**

Q14. (A): The lines $2x + 5y = 15$ and $6x + 15y = 45$ are coincident.

(R): Coincident lines have infinitely many solutions. **[Board 2024]**

Q15. (A): If a pair of linear equations has no solution, the lines are parallel.

(R): Parallel lines never intersect, so there is no common point satisfying both equations. **[Board 2025]**

SECTION C — SHORT ANSWER TYPE I (2 Marks Each)

Checking Nature of Solutions

Q16. Without solving, find whether the following pair of equations is consistent or inconsistent: $3x + 2y = 11$ and $9x + 6y = 7$.

Q17. Find the value(s) of k so that the pair of equations $kx + 3y = k - 3$ and $12x + ky = k$ has no solution. **[Board 2020]**

Q18. For what value of p will the following pair of linear equations have infinitely many solutions?

$(p - 3)x + 3y = p$ and $px + py = 12$ **[Board 2021]**

Q19. Find the value of k for which the system $4x + ky + 8 = 0$ and $2x + 2y + 2 = 0$ has a unique solution. **[Board 2022]**

Graphical Understanding

Q20. On comparing the ratios a_1/a_2, b_1/b_2, and c_1/c_2, find out whether the pair $x - 2y = 0$ and $3x + 4y - 20 = 0$ is consistent or inconsistent.

Q21. Two lines are given as $3x + 2y = 8$ and $6x + 4y = 16$. State the type of solution and justify your answer. **[Board 2023]**

Previous Year 2-Mark Questions

Q22. Find the solution of the pair of equations: $x/10 + y/5 - 1 = 0$ and $x/8 + y/6 = 15$. **[Board 2020]**

Q23. Solve for x and y: $2x + 3y = 11$ and $2x - 4y = -24$, and hence find the value of 'm' for which $y = mx + 3$. **[Board 2021]**

Q24. Solve the pair of equations by the substitution method: $0.2x + 0.3y = 1.3$ and $0.4x + 0.5y = 2.3$. **[Board 2022]**

Q25. Solve by cross-multiplication: $2x + y = 6$ and $2x - y + 2 = 0$. **[Board 2023]**

Q26. The difference of two numbers is 5 and the difference of their reciprocals is 1/10. Find the numbers. **[Board 2024]**

Q27. Half the perimeter of a rectangle is 36. If the length is 4 more than the width, find its dimensions. **[Board 2025]**

SECTION D — SHORT ANSWER TYPE II (3 Marks Each)

Algebraic Methods

Q28. Solve graphically: $2x + 3y = 12$ and $x - y = 1$. Shade the region bounded by these lines and the x-axis. **[Board 2020]**

Q29. Solve for x and y: $(a - b)x + (a + b)y = a^2 - 2ab - b^2$ and $(a + b)(x + y) = a^2 + b^2$.

Q30. Solve: $37x + 43y = 123$ and $43x + 37y = 117$. **[Board 2022]**

Word Problems — 3 Marks

Q31. A fraction becomes 1/3 when 1 is subtracted from the numerator and it becomes 1/4 when 8 is added to its denominator. Find the fraction. **[Board 2020]**

Q32. The age of the father is twice the sum of the ages of his two children. After 20 years, his age will be equal to the sum of the ages of his children. Find the age of the father. **[Board 2022]**

Q33. A person rowing at the rate of 5 km/h in still water takes thrice as much time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream. **[Board 2023]**

Q34. A train covered a certain distance at a uniform speed. If the train would have been 6 km/h faster, it would have taken 4 hours less than the scheduled time. If the train were slower by 6 km/h, it would have taken 6 more hours. Find the original speed and distance. **[Board 2024]**

Q35. Places A and B are 80 km apart. Two persons start simultaneously from A and B towards each other. If they walk in the same direction, they meet in 8 hours. If they walk towards each other, they meet in 80/9 hours. Find their speeds. **[Board 2025]**

SECTION E — LONG ANSWER TYPE (5 Marks Each)

Show all steps clearly. Marks are awarded for method.

Q36. Draw the graphs of $x - y + 1 = 0$ and $3x + 2y - 12 = 0$. Determine the vertices of the triangle formed by these lines and the x-axis, and shade the triangular region. **[Board 2020]**

Q37. Solve the following pair of equations graphically: $2x - y = 4$ and $x + y = -1$. Shade the triangular region formed by these two lines and the y-axis. **[Board 2021]**

Q38. Meena went to a bank to withdraw ₹2000. She asked the cashier to give her ₹50 and ₹100 notes only. Meena got 25 notes in all. Find how many notes of ₹50 and ₹100 she received. **[Board 2022]**

Q39. A two-digit number is obtained by either multiplying the sum of the digits by 8 and then subtracting 5, or by multiplying the difference of the digits by 16 and then adding 3. Find the number. **[Board 2023]**

Q40. Students of a class are made to stand in rows. If 3 students are extra in each row, there would be 1 row less. If 3 students are less in each row, there would be 2 more rows. Find the number of students in the class. **[Board 2024]**

Q41. An airplane travels 3000 km at a uniform speed. If the speed had been 100 km/h more, it would have taken 1 hour less for the journey. Find the speed of the plane. **[Board 2025]**

Q42. The ratio of incomes of two persons is 9:7 and the ratio of their expenditures is 4:3. If each of them manages to save ₹2000 per month, find their monthly incomes. **[Board 2021]**

SECTION F — CASE STUDY BASED QUESTIONS (4 Marks Each)

Read each case carefully and answer all sub-parts.

Case Study 1 — Sports Day Planning [Board 2022]

A school conducted a sports day. Students were asked to participate in a 400 m race either in group A or group B. Group A had a certain number of students and group B had 10 more than group A. Together they had 100 students. Let students in group A = x and group B = y.

Q43.(i) Form a pair of linear equations from the above situation.

Q44.(ii) Find the number of students in each group.

Q45.(iii) If 10 more students from group A join group B, what is the new ratio of group A to group B?

Case Study 2 — Taxi Fares [Board 2023]

A taxi company charges a fixed fare plus a per-km rate. Anita pays ₹350 for 4 km and Geeta pays ₹500 for 7 km in the same city. Let the fixed charge be ₹x and per-km charge be ₹y.

Q46.(i) Write the linear equations for Anita's and Geeta's rides. **[1 Mark]**

Q47.(ii) Find the fixed charge and per-km charge. **[2 Marks]**

Q48.(iii) How much will Rahul pay for a 10 km ride? **[1 Mark]**

Case Study 3 — Water Tank Pipes [Board 2024]

A tank can be filled by pipe A alone in x hours and by pipe B alone in y hours. Both pipes together take 6 hours to fill the tank. If pipe A alone takes 5 hours more than pipe B alone, find the time for each pipe.

Q49.(i) Write the equation when both pipes fill the tank together in 6 hours. **[1 Mark]**

Q50.(ii) Using the condition that pipe A takes 5 hours more than pipe B, find the time each pipe takes. **[2 Marks]**

Q51.(iii) Check: does your answer satisfy the original condition? **[1 Mark]**

Case Study 4 — Linear Equations in Geometry [Board 2025]

The path of two friends walking from points A and B can be represented by linear equations: Friend 1: $2x - 3y + 4 = 0$ and Friend 2: $4x - 6y + 8 = 0$. A third friend follows the path: $3x + 4y - 12 = 0$.

Q52.(i) Find the relationship between the paths of Friend 1 and Friend 2. **[1 Mark]**

Q53.(ii) Find the point where the third friend's path meets the x-axis and y-axis. **[2 Marks]**

Q54.(iii) Do Friend 1 and the third friend ever meet? If yes, find the meeting point. **[1 Mark]**

SUMMER HOLIDAYS HOME ASSIGNMENT (2026-27) CLASS-X
SUBJECT– SCIENCE
PART-A BIOLOGY

Part 1: Home Activities (Observation & Experimentation)

1. The Transpiration "Sweat" Test

Activity: Take a healthy potted plant at home. Tie a clear plastic bag around one leafy branch and secure it tightly with a thread. Leave it in the sun for 3–4 hours.

Observation Task: Note the droplets formed inside the bag.

Analysis: Write a short paragraph explaining the process of transpiration and why it is considered a "necessary evil" for plants.

2. The Resting vs. Active Pulse Rate Tracker

Activity: Measure your pulse rate (beats per minute) in three different states:

Immediately after waking up (Resting).

After 5 minutes of brisk walking.

After 2 minutes of intense jumping jacks or running.

Data Collection: Create a bar graph comparing these three states.

Analysis: Explain the relationship between physical activity, oxygen demand, and heart rate based on your findings.

3. Kitchen Chemistry: Salivary Amylase Action

Activity: Take two small bowls with a teaspoon of cooked (plain) rice or a piece of bread mashed with water.

Bowl A: Leave as is.

Bowl B: Add a bit of your saliva and mix well. Let both sit for 20 minutes.

Observation: If you have iodine solution (from a first-aid kit), add a drop to both.

Analysis: Explain why Bowl B shows a different result (or would taste sweeter if chewed for a long time) by discussing the role of enzymes in digestion.

Part 2: Creative Tasks (Research & Documentation)

1. "A Day in the Life of a Glucose Molecule" (Comic Strip)

Task: Create a 6–8 panel comic strip or a creative story tracing the journey of a glucose molecule.

Requirements: Your story must include its entry via the villi, transport through the bloodstream, and its final "breakdown" in the mitochondria (Respiration).

2. Comparative Anatomy Table: Transport Systems

Task: Create a detailed comparison table between the Transport System in Plants and the Transport System in Humans.

Key Comparison Points: * Medium of transport (Blood vs. Water/Sucrose).
Organs/Tissue involved (Heart/Vessels vs. Xylem/Phloem).
Driving force (Pumping heart vs. Transpiration pull/Pressure flow)

3. The "Healthy Kidney" Awareness Poster

Task: Design an A4 size digital or hand-drawn poster on the Excretory System.

Focus: Include a labeled diagram of a Nephron and list 5 daily habits that help maintain healthy

kidney function (e.g., hydration levels, reducing salt intake).

Part 3: Worksheet
Chapter- Life Processes

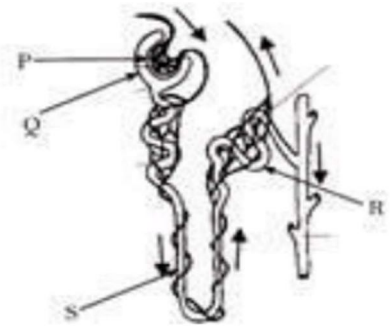
I. MULTIPLE CHOICE QUESTIONS:

1. One-cell-thick blood vessels are known as:
   A. Alveoli B. Capillaries C. Arteries D. Veins

2. Select TRUE statements about lymph from the following:
   a) Lymph vessels carry lymph through the body and finally open into large arteries.
   b) Lymph contains some amount of plasma, proteins, and blood cells.
   c) Lymph contains some amount of plasma, proteins, and red blood cells.
   d) Lymph vessels carry lymph through the body and finally open into larger veins.
   A. (a) and (b) B. (b) and (d)
   C. (a) and (c) D. (c) and (d)

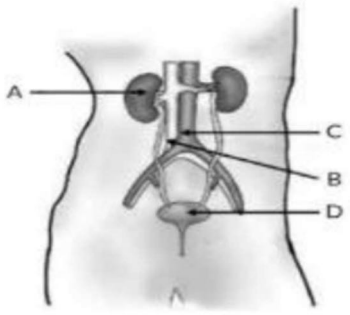
3. Select the correct option from the following statements about the functioning of the human heart:
   A. Right atrium receives deoxygenated blood from different parts of the body and sends it to pulmonary veins.
   B. Left atrium sends oxygenated blood to right ventricle which pumps it to different parts of the body.
   C. Right atrium receives deoxygenated blood from the body and sends it to the right ventricle.
   D. Left atrium receives oxygenated from the pulmonary arteries and sends it to the left ventricle.

4. Which one of the following letters represents a glomerulus?



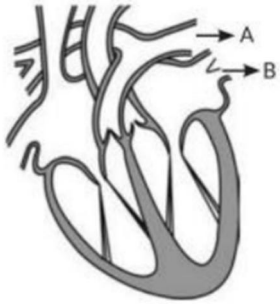
   A. Q B. P C. R D. S

5. In the given diagram, A, B, C, and D respectively are:



A. A - Left kidney; B - Aorta; C - Vena cava; D – Urethra
B. A - Left kidney; B - Vena cava; C - Aorta; D - Urinary bladder
C. A - Right kidney; B - Aorta; C - Ureter; D – Urethra
D. A - Right kidney; B - Vena cava; C - Aorta; D - Urinary bladder

6. Consider the following statements in connection with the functions of the blood vessels marked A and B in the diagram of a human heart as shown.
i) Blood vessel A - It carries carbon dioxide rich blood to the lungs.
ii) Blood vessel B - It carries oxygen rich blood from the lungs.
iii) Blood vessel B - Left atrium relaxes as it receives blood from this blood vessel.
iv) Blood vessel A - Right atrium has thick muscular wall as it must pump blood to this blood vessel.



The correct statements are:
A. (i) and (ii) only
B. (ii) and (iii) only
C. (ii), (iii) and (iv)
D. (i), (ii) and (iii)

7. The image shows the circulation of blood in fish and humans. How is the circulation of blood in fish different from that in humans?
A. The flow of blood in fish is bidirectional.
B. The heart of a fish has more chambers compared to that of a human.
C. The blood goes through the heart only once in fish.
D. The heart in fish is bigger in size.

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii), and (iv) as given below.
i) Both A and R are true, and R is the correct explanation of the assertion.
ii) Both A and R are true, but R is not the correct explanation of the assertion.
iii) A is true, but R is false.
iv) A is false, but R is true

8. A: Green plants are autotrophs.
R: They prepare their own food using sunlight.
9. A: Bile contains digestive enzymes.
R: It helps in the emulsification of fats.
10. A: HCl is secreted in the stomach.
R: It creates an acidic medium for trypsin to act.
11. A: Aerobic respiration produces more energy than anaerobic respiration.
R: Glucose is completely broken down in aerobic respiration.
12. A: At night, O2 elimination is the major exchange activity.
R: At night, there is no photosynthesis occurring in plants.
13. A: Lactic acid accumulates in muscles during vigorous exercise.

R: This is due to a lack of carbon dioxide in the muscles.

14. A: Blood plasma transports carbon dioxide in dissolved form, while oxygen is transported by respiratory pigments.
    R: Carbon dioxide is more soluble in water than oxygen.
15. A: Hemodialysis can save the life of patients with kidney failure.
    R: Waste products like urea can be removed from the blood by hemodialysis.
16. A: The human heart is four-chambered.
    R: Vena Cava is the only artery that supplies deoxygenated blood to the heart.

II. TWO MARK QUESTIONS:

17. Besides minimising the loss of blood, why is it essential to plug any leak in a blood vessel? Name the component of blood which helps in this process and state how this component performs this function.

18. i) The transport system in plants is relatively slower than in animals. Give reasons.
    ii) State the role of phloem in the transport of materials in plants.

19. Write one specific function of each of the following organs in relation with excretion in human beings:
    (i) Renal Artery (ii) Urethra
    (iii) Glomerulus (iv) Tubular part of nephron.

20. Name the structural and functional unit of the kidney? Name any two parts of it.

21. What are capillaries? State the function performed by them.
    (a) Draw a neat diagram of the human respiratory system and label its lungs, trachea, bronchi and alveoli.
    (b) State the roles of the following in the process of respiration:
    (i) Alveoli (ii) Respiratory pigments

III. THREE MARK QUESTIONS:

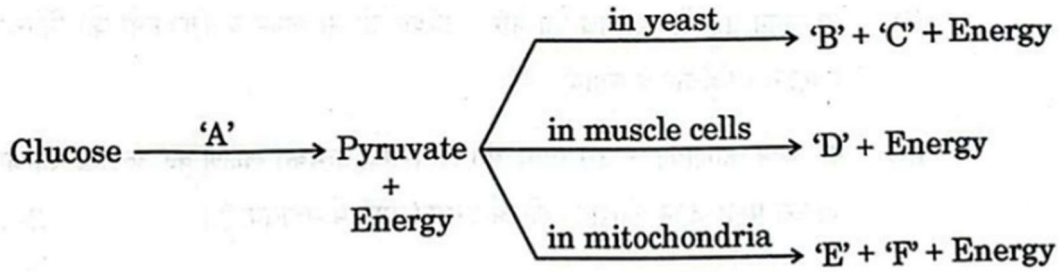
22. a) Enlist any two nitrogenous waste products removed from the blood of human kidney.
    b) Name the capillary cluster formed by the branch of renal artery in the Bowman's capsule.
    c) Depict in the form of a flow chart the path of the urine formed in each kidney until it is finally passed out through the urethra.

23. Why is blood circulation in vertebrates known as "double circulation"? Trace its path in the form of a flow chart.

24. What are nephrons? How is nephron involved in the filtration of blood and formation of urine?

25. a) "Transport of food in plants requires living tissues and energy". Justify this statement.
    b) Name the components of food that are transported by living tissue.

24. Complete the pathways given below, showing the breakdown of glucose.



Identify 'A', 'B', 'C', 'D', 'E' and 'F'.

IV. CASE-BASED/SOURCE-BASED QUESTIONS.

25. Ananya observed that green plants prepare their own food during daytime. Carbon dioxide enters the leaf through small pores. Chlorophyll helps trap sunlight and convert it into chemical energy.
Attempt either subpart A or B.
A. Name the process by which plants prepare food. Write the chemical equation of this process.

OR

B. Which cell organelle is responsible for this process? Name the pigment involved.
C. Name the pores present on the leaf surface. How do they open?
D. Which gas is released during this process?

26. Meera studied that air enters through the nostrils and reaches the lungs through the trachea. Lungs contain alveoli which help in the exchange of gases.
Attempt either subpart A or B.
A. Name the site of gaseous exchange in the lungs. Mention two structural features that help in this function.

OR

B. How is oxygen transported in human body?
C. Which muscle helps in breathing? What happens to it during inhalation?
D. What happens to carbon dioxide formed in cells?

27. Our body needs to remove the wastes that is built up from cell activities and from digestion. If these wastes are not removed, then our cells can stop working and we can get very sick. The organs of excretory system consist of a pair of kidneys, a pair of ureters, a urinary bladder, and a urethra. Each kidney is made up of nearly one million complex tubular structures called nephrons. The formation of urine involves various processes that take place in the different parts of the nephrons. Each nephron consists of a cup- shaped upper end called Bowman's capsule containing a bunch of capillaries called glomerulus. Bowman's capsule leads to tubular structure, proximal convoluted tubule, loop of Henle and distal convoluted tubule which ultimately join the collecting tubule.
A. What are nephrons? Name their parts.
B. Name the main nitrogenous waste product in human beings. In what form is it excreted out of the body?
C. Name the substances which are selectively reabsorbed as the urine flows along the tube.

OR

D. Why is it important for the body to remove wastes?

Chapter-4

Worksheet-2

Q.1. Pentane has the molecular formula C_3H_{12}. It has

(a) 5 covalent bonds

(b) 12 covalent bonds

(c) 16 covalent bonds

(d) 17 covalent bonds

Q.2. Carbon forms four covalent bonds by sharing its four valence electrons with four univalent atoms, e.g., hydrogen. After the formation of four bonds, carbo attains the electronic configuration of

(a) helium

(b) neon

(c) argon

(d) krypton

Q.3. The name of the compound $CH_3 - CH_2 - CHO$ is

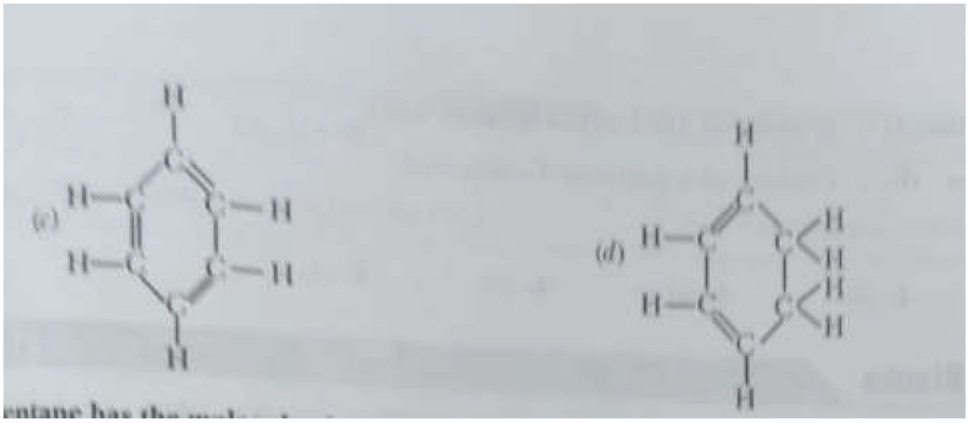
(a) Propanal

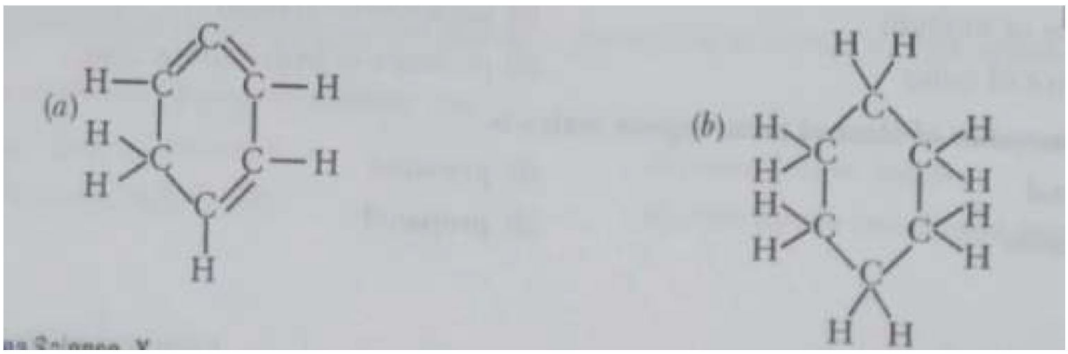
(b) Propanone

(c) Ethanol

(d) Ethanal

Q.4. Structural formula of benzene is





Q.5. The hetero present in $CH_3 - CH_2 - O - CH_2 - CH_2 - Cl$ are

(i) Oxygen

(ii) Carbon

(iii) Hydrogen

(iv) Chlorine

(a) (i) and (ii)

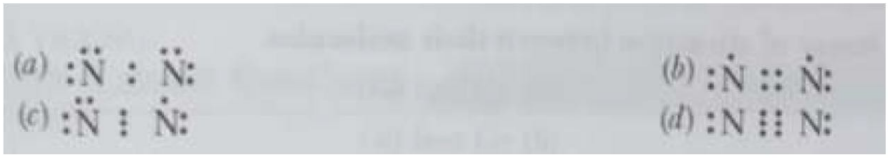
(b) (ii) and (iii)

(c) (iii) and (iv)

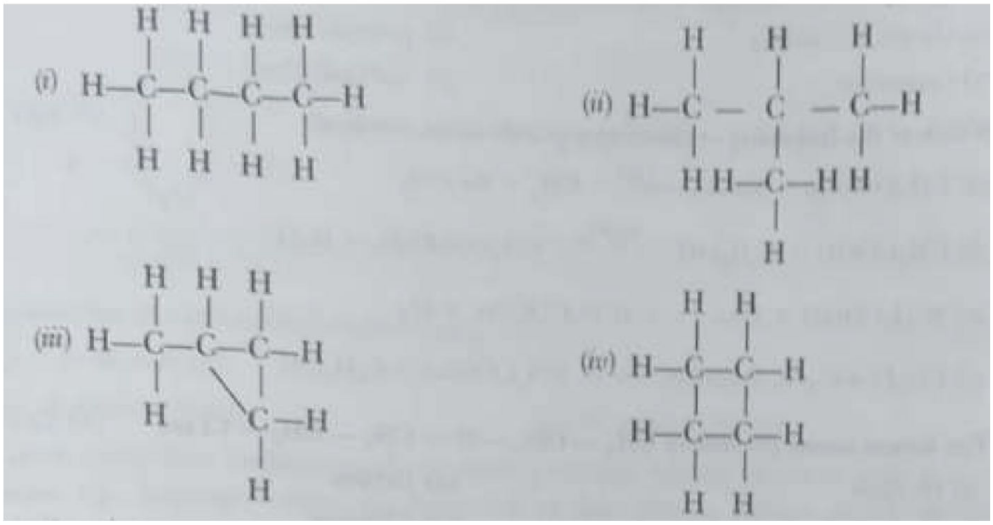
(d) (i) and (iv)

Q.6. Structural formula of ethyne is

Q.7. Which of the following is the correct representation of electron dot structure of nitrogen?



Q.8.Which of the following are correct structural isomers of butane?



(a) (i) and (iii)
(b) (ii) and (iv)
(c) (i) and (ii)
(d) (iii) and (iv)

Q.9. Fill in the Blanks

Complete the following statements with appropriate word(s) in the blank space(s).

a. Hydrogenation of vegetable oil is_____ reaction.
b. _____ hydrocarbons decolourise brown colour of bromine water.
c. _____ and_____ are the two allotropes of carbon.
d. Vinegar is_____ % solution of ethanoic acid in water.

e. Soaps react with hard water to form_____.

Q.10. True/False

Read each of the following statements and write if it is true or false.

1. The functional group of chloro alkane is —Cl.
2. The first member of alkyne homologous series is ethyne.
3. Heating ethanol at 443K with excess of conc. H_2SO_4 results in the dehydration of ethanol to give cycloethane.
4. Carbon has the unique ability to form bonds with other atoms of carbon, giving rise to large molecules.
5. The next higher homologue of ethanol is pentanol.

Q.11. Define allotropy.

Q.12. Which two of the following organic compounds belong to the same homologous series?

$C_2H_6, C_2H_6\,O,\ C_2H_6\,O_2\,, CH_4O$

Q.13. Name the following compounds:

(a) $CH_3 - CH_3 - OH$

(b) $CH_3 - \overset{\overset{H}{|}}{C} - O$

Q.14. What is a covalent bond? What type of bond exists in (i) CCl_4 (ii) $CaCl_2$?

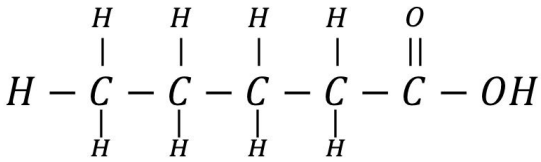
Q.15. Catenation is the ability of an atom to form bonds with other atoms of the same element. It is exhibited by both carbon and silicon. Compare the ability of catenation of the two elements.

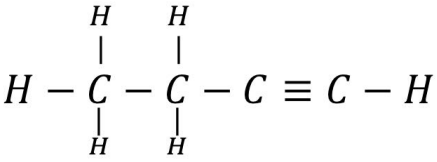
Give reasons.

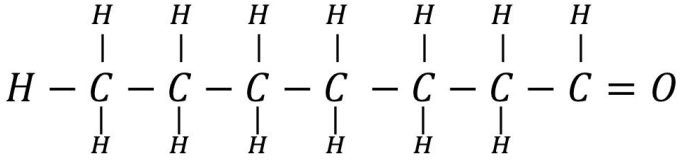
Q.16. Select the hydrocarbons which are members of the same homologous series. Give the name of each series.

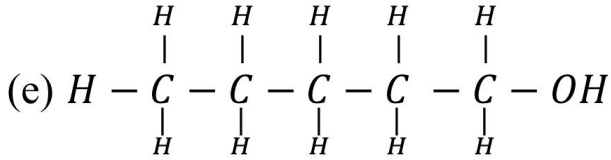
$C_3H_8,\ C_4H_{10}, C_5H_{10}, C_6H_{10}, C_7H_{12}\ and\ C_8H_{16}.$

Q.17. Write the names of the following compounds.

(a) 

(b) 

(c) 

(e) 

Q.18. Why are unsaturated hydrocarbons more reactive than saturated hydrocarbons?

Q.19. Write the name and molecular formula of an organic compound having its name suffixed with '$-ol$' and having two carbon atoms in the molecule. With the help of a balanced equation indicate what happens when it is heated with excess of cone. H_2SO_4.

Q.20. Name the gas evolved when ethanoic acid reacts with sodium carbonate. How would you identify this gas?

Class-X

Sub: Physics

1. Learn question answer of chapter reflection and refraction of light.

2. Solve 10 numerical on each mirror and lens formula and 3 numerical on power of lens.

3. Draw image formation by concave mirror, convex mirror, concave lens and convex lens on chart paper.

HOLIDAY HOMEWORK
SOCIAL SCIENCE

Project 1

Every student has to compulsory undertake any one project on the following topics:
Consumer awareness
Or
Social issues
Or
Sustainable development
Steps involved while preparing the project:

1. **It should be handwritten project.**
2. **Minimum pages- 20-25**
3. **Index**
4. **Content:- written portion, pictures ,timeline etc**
5. **Bibliography**

Project 2
Prepare a project on Andaman and nicobar island and Delhi
Steps involved while preparing the project:

1. **It should be hand written**
2. **Minimum pages 15-20**
3. **Index**
4. **Content:- written portion include sub topics (location, weather conditions, food, monuments, clothing and dance forms) paste pictures also**
5. **Bibliography**

ASSIGNMENTS

NOTE:- Assignment questions to be done on ruled sheets and bring it in a folder.

1. Choose and write the correct answer for each of the following.
() Who organised the dalits into the Depressed Classes Association?
(a) Mahatma Gandhi
(6) Subhash Chandra Bose
(c) Jawaharlal Nehru
(d) B.R. Ambedkar

(ii) What moved Abanindranath Tagore to paint the famous image of Bharat Mata?
(a) Civil Disobedience Movement
(b) Swadeshi Movement
(c) Quit India Movement
(d) All of the above

(iii) Why did the Simon Commission come to India? Identify the correct reason following options.
(a) To control the campaign against the British in cities
(b) To look into the functioning of the British.
(c) To initiate salt law in India.
(d) To suggest changes in the functioning of the constitutional system in India.

(iv) Mahatma Gandhi fought in South Africa for:
(a) Racist regime
(b) Freedom of India
(c) Freedom of South Africa

(v) The movement in Awadh was against the:
(a) Ruler
(b) British

(c) Landlord

2. Arrange the events given below in chronological order:
(i) Chauri Chaura incident
(ii) Civil disobedience Movement
(iii) Jallianwala Bagh massacre
(iv) Second Round Table Conference
Choose the correct option:

(a) (i), (iii), (iv), (ii)
(b) (ii), (i), (i), (iv)
(c) (ii), (i), (i), (iv)
(d) (iv), (ii), (ii), (1)

3. Correct the following statements and rewrite.

(i) Under the Upland Emigration Act of 1860, plantation workers were not permitted to leave the Tea Gardens without permission.
(ii) Bankim Chandra Chattopadhyay designed the Swaraj flag.

4. In the question given below, there are two statements marked as Assertion (A) and Reason ®. Read the statements and choose the correct option:
Assertion (A): Dr. B.R. Ambedkar organised Dalits into the Depressed Classes, Association in 1940.
Reason (R): He clashed with Mahatma Gandhi at the second Round Table Conference by demanding separate electorate for the dalits.

(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

Ch - Resources and development
Choose and write the correct answer for each of the following.
(i) Resources are a function of:
(a) wildlife
(b) resources
© human activities
(d)None of these

(ii) Resources obtained from biosphere and have life are called:
(a)National
(b) biotic
(c) abiotic
(d)Potential

(iii) What is required for sustained quality of life and global peace?

(a) Depletion of resources
(b) Equitable distribution of resources
(c) Accumulation of resources
(d) None of these

(iv) Which of the following is not a classification of resources on the basis of its origin?

(a) Biotic
(b) Abiotic
(c) Renewable
(d) None of these

(v) Which of the following is not an abiotic resource?
(a) Flora
(b) Rocks
© Metals
(d)None of these

(vi) Which one of the following is the main cause of land degradation in Punjab?

(a) Intensive cultivation
(b) Overgrazing
(c) Deforestation
(d) Over irrigation

(vi) Laterite soil is very useful for growing:
(a) Rice, wheat and mustard
(b)Pulses, sugarcane and resin
©Tea, coffee and cashew nut
(d)None of these

(vi) Which one of the following statements is true about the term resources?
(a) Resources are all the things that are found in nature.
(b) They are free gifts of nature.
© They are the functions of human activities.
(d)Things which cannot be used to fulfil our needs.

CHAPTER- NATIONALISM IN INDIA

1. What does idea of Satyagraha mean ?
2. What was Champaranmovement ?
3. What was Kheda movement ?
4. What was Inland Emigration act?
5. Why Awadh movement of peasants began?
6. Why did Gandhiji decide to withdraw the Non- cooperation movement in 1922 ?
7. Explain some economic effects of the Non- cooperation movement ?
8. Why did Gandhiji decide to launch a nation wide satyagraha against the proposed Rowlatt act 19191? Explain any three reasons.
9. What type of flag was designed during the 'Swadeshi movement' in Bengal? Explain its main features.
10. How did the colonial government repress the civil disobedience movement ? Explain.
11. Write a short note on Dandi march.

CHAPTER- RESOURCE AND DEVELOPMENT

1. India is rich in certain type of resources and deficient in some others. Support your answer with example.
2. Explain the process of resource planning in India.
3. Can solar energy solve the energy problem to some extent in India ? Give your opinion.
4. Mention the factors on which land use pattern of India depend upon.
5. Describe any three main features of black soil found in India.
6. What is contour ploughing and terrace farming ?
7. What is soil erosion and how can it be reduced ?
8. How is over irrigation responsible for land degradation in Punjab?
9. Explain land use pattern in India and why the land under forest not increased much since 1960-61.
10. Indiscriminate use of the resources had lead to various problems. Justify.
11. Why was Rio de janeiro summit 1992 held ?

CHAPTER- FOREST AND WILDLIFE

1. How are flora and fauna in India under great threat?
2. Name three tribes in India which have helped immensely in the conservation of plant and animal life.
3. Why do we need to conserve our forest and wildlife?
4. How is mining an important factor behind deforestation?
5. What are the provisions of the Indian Wildlife Act of 1972?
6. 'Grazing and fuel wood collection are not responsible for deforestation in India.' Support the statement with suitable reasons.
7. Explain five different categories of existing plants and animal species based on the international union for conservation of nature and natural resources with examples.
8. 'Forest and wildlife are vital to the quality of life and environment.' Justify this statement by giving three reasons.
9. 'Nature worship is an age old belief'. Explain how it has helped in the conservation of forests and wildlife.
10. What do you know about chipko movement?

CHAPTER- POWER SHARING

1. Define Liberation movement.
2. What was the problem of Belgium model ?
3. Why is power sharing desirable ?
4. What do you understand by coalition government?
5. Describe the tension that existed between the Dutch and the French speaking people in Belgium.
6. What are the advantages of Horizontal power sharing? Explain with examples.
7. What are different forms of power sharing in modern democracies? Give an examples of each.
8. What factors led to a civil war in Sri lanka?
9. Explain the two main reasons why power sharing is important in democracy.
10. What kind of power sharing problems were faced by Belgians and sri Lankans?

CHAPTER- DEVELOPMENT

1. What objectives are included in the concept of development ?
2. How some countries are generally called developed and other underdeveloped on the basis of Human development criterion?
3. Why is the issue of sustainability important for development?
4. What is sustainable economic development? Write any three measures to control environmental degradation?
5. Differentiate between (a) total income concept and per capita income concept
   (b) developed and developing countries
6. 'conflicting goals can be developmental goals'. Elaborate with examples.
7. What is the criterion used by UNDP for classifying countries?
8. 'Girls in India in the rural sector are sometimes not able to get secondary level education'. Give three reasons for the statement.
9. why do different persons have different notions of development. Explain.
10. Explain the meaning of HDI. Mention three components of measuring HDI.

Artificial Intelligence holiday homework

Make a project on CNN model on smoke and fire using teachable machine.

OR

Make a project in Orange Data Mining to predict the sentiment analysis on the given dataset attached at the link:

https://orangewebsuppot.co.in/AI/Amazon_Dataset.csv