

PM SHRI KV NO.2 KHARAGPUR

Summer Holiday Homework – English (Class 10, NCERT)

- 1.Prepare a portfolio of your own.**
- 2.Prepare one worksheets of the following grammar topics:**
 - a) Subject-verb agreement**
 - b) Reported speech**
 - c)Modals**
 - d)Tenses**
 - e) Determiners**
- 3.Write four following formal letters :**
 - a) Letter to Editor**
 - b) Letter of Complaint**
 - c) Letter to place order**
 - d) Letter of enquiry**
- 4. Write any five Analytical paragraphs.**

पीएम श्री केन्द्रीय विद्यालय क्रमांक-2 खड़गपुर

कक्षा 10 विषय- हिंदी

ग्रीष्मकालीन अवकाश गृहकार्य | सत्र 2026-27

निर्देश: (प्रिय विद्यार्थियों, खंड- क एक अलग फाइल में करना है, और पोर्ट फोलियो वाली फाइल में खंड-ख भी करना है। दो अलग-अलग फाइल बनानी है)*

1. सभी कार्य A4 साइज शीट पर करें व फाइल बनाकर जमा करें.
2. लेखन स्वच्छ, शुद्ध व आकर्षक हो. चित्र/बोर्डर से सजावट करें

खंड-क: रचनात्मक लेखन

1. अनुच्छेद लेखन –| 100-120 शब्द

निम्नलिखित में से किसी एक विषय पर अनुच्छेद लिखिए:

क. कृत्रिम बुद्धिमत्ता: वरदान या अभिशाप

ख. मेरी प्रिय पुस्तक जिसने मेरी सोच बदल दी

ग. “एक पेड़ माँ के नाम” – अभियान की सार्थकता

2. पत्र लेखन

क. आपके क्षेत्र में बढ़ते साइबर फ्रॉड की रोकथाम हेतु पुलिस अधीक्षक को पत्र लिखिए.

अथवा

ख. छोटे भाई को मोबाइल का सीमित व सार्थक उपयोग बताते हुए पत्र लिखिए.

3. संदेश लेखन

क. आपकी माताजी बाजार गई हैं. बिजली विभाग से फोन आया कि कल 8 से 2 बजे तक बिजली नहीं रहेगी. पिताजी के लिए संदेश लिखिए.

अथवा

ख. आपके मित्र ने बोर्ड परीक्षा में जिले में प्रथम स्थान प्राप्त किया है. उसे बधाई संदेश लिखिए.

4. विज्ञापन लेखन

क. “मधु-हर्बल शहद” के लिए आकर्षक विज्ञापन तैयार कीजिए.

अथवा

ख. आपके विद्यालय द्वारा आयोजित “ग्रीष्मकालीन हिंदी लेखन कार्यशाला” का विज्ञापन लिखिए.

5. ई-मेल लेखन –

क. प्रधानाचार्य को ई-मेल लिखकर विद्यालय में “साहित्य क्लब” शुरू करने का सुझाव दीजिए.

अथवा

ख. अपने मित्र को ई-मेल लिखकर ग्रीष्मावकाश में किए गए सामाजिक कार्य का अनुभव साझा कीजिए.

6. पद परिचय की परिभाषा उदाहरण सहित लिखिए।

(वाक्य में प्रयुक्त शब्दों (संज्ञा, सर्वनाम, विशेषण, क्रिया, क्रिया विशेषण, अव्यय) का व्याकरणिक विवरण देना है। इसमें पद का भेद, लिंग, वचन, कारक और अन्य शब्दों से संबंध बताया जाता है। मुख्य रूप से संज्ञा, सर्वनाम, विशेषण, क्रिया और अव्यय के भेदों की पहचान करके उनका लिंग, वचन और कारक बताना ही पद परिचय कहलाता है।)

खंड-ख: प्रोजेक्ट कार्य |

पाठ: राम-लक्ष्मण-परशुराम संवाद | क्षितिज भाग-2

कार्य:

1. लेखन – पाठ को सरल हिंदी में संवाद-शैली में लिखें. हर पात्र की 8-10 पंक्तियाँ हों.
2. चरित्र चित्रण – राम, लक्ष्मण व परशुराम – तीनों के 5-5 चरित्रिक गुण उदाहरण सहित A- 4 पर लिखें. चित्र भी चिपकाएँ.
3. मूल्य-आधारित विश्लेषण – इस संवाद से आपको कौन-से 3 जीवन-मूल्य मिलते हैं? 100 शब्दों में लिखें. जैसे: धैर्य, विनम्रता, क्रोध पर नियंत्रण.
4. रचनात्मक प्रस्तुति – 5 अंक: * कोई एक विकल्प चुनें:

क. संवाद का रोल-प्ले करके 2 मिनट का वीडियो बनाएँ व QR कोड फाइल में लगाएँ.

ग. “यदि परशुराम आज के युग में होते तो?” विषय पर 150 शब्द का काल्पनिक संवाद लिखें।

खंड-ग: अपठित बोध अभ्यास।

1. समाचार-पत्र से पर्यावरण/शिक्षा संबंधी एक गद्यांश काटकर चिपकाएँ व उस पर 5 प्रश्न स्वयं बनाकर उत्तर लिखें.

REAL NUMBER

Choose the correct answer from the given four options in the following questions:

1. For some integer m , every even integer is of the form
(A) $2m+1$ (B) $m+1$
(C) $2m$ (D) $2m+3$
2. For some integer q , every odd integer is of the form
(A) $2q$ (B) $q+1$
(C) $2q+3$ (D) $2q+1$
3. $n^2 - 1$ is divisible by 8, if n is
(A) an integer (B) a natural number
(C) an odd integer (D) an even integer
4. If the HCF of 65 and 117 is expressible in the form $65m - 117$, then the value of m is
5. The largest number which divides 70 and 125, leaving remainders 5 and 8, respectively, is
(A) 13 (B) 65
(C) 875 (D) 1750
6. If two positive integers a and b are written as $a = x^3y^2$ and $b = xy^3$; x, y are prime numbers, then HCF (a, b) is
(A) xy (B) xy^2 (C) x^3y^3 (D) x^2y^2

7. If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; a, b being prime numbers, then LCM (p, q) is (A) ab (B) a^2b^2 (C) a^3b^2
8. The product of a non-zero rational and an irrational number is
(A) always irrational (B) always rational
(C) rational or irrational (D) one
9. The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is
(A) 10 (B) 100 (C) 504 (D) 2520

10. The decimal expansion of the rational number $\frac{5}{4}$ will terminate after:

- (A) one decimal place
(C) three decimal places (B) two decimal places
(D) four decimal places

Short answer type questions :

1. Show that the square of any positive integer is either of the form $4q$ or $4q + 1$ for some integer q .
2. Show that cube of any positive integer is of the form $4m$, $4m + 1$ or $4m + 3$, for some integer m .
3. Show that the square of any positive integer cannot be of the form $5q + 2$ or $5q + 3$ for any integer q .
4. Show that the square of any positive integer cannot be of the form $6m + 2$ or $6m + 5$ for any integer m .
5. Show that the square of any odd integer is of the form $4q + 1$, for some integer q .
6. If n is an odd integer, then show that $n^2 - 1$ is divisible by 8.
7. Prove that if x and y are both odd positive integers, then $x^2 + y^2$ is even but not divisible by 4.
8. Find the HCF of 441, 567, 693.
9. Find the largest number that divides 1251, 9377 and 15628 leaving remainders 1, 2 and 3, respectively.
10. Prove that $\sqrt{5} + 5$ is irrational.
11. Show that 12^n cannot end with the digit 0 or 5 for any natural number n .
12. On a morning walk, three persons step off together and their steps measure 40 cm, 42 cm and 45 cm, respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps?

POLYNOMIALS

Choose the correct answer from the given four options in the following questions:

1. If one of the zeroes of the quadratic polynomial $(k-1)x^2 + kx + 1$ is -3 , then find the value of k .
2. Form a quadratic polynomial, whose zeroes are -3 and 4 .
3. If the zeroes of the quadratic polynomial $x^2 + (a+1)x + b$ are 2 and -3 , then
 - (A) $a = -7, b = -1$
 - (B) $a = 5, b = -1$
 - (C) $a = 2, b = -6$
 - (D) $a = 0, b = -6$
4. If one of the zeroes of the cubic polynomial $x^3 + ax^2 + bx + c$ is -1 , then the product of the other two zeroes is...?
5. The zeroes of the quadratic polynomial $x^2 + 99x + 127$ are
 - (A) both positive
 - (B) both negative
 - (C) one positive and one negative
 - (D) both equal
6. The zeroes of the quadratic polynomial $x^2 + 10x + k, k > 0$,
 - (A) cannot both be positive
 - (B) cannot both be negative
 - (C) are always unequal
 - (D) are always equal
7. If the zeroes of the quadratic polynomial $ax^2 + bx + c$ are equal, then
 - (A) c and a have opposite signs
 - (B) c and b have opposite signs
 - (C) c and a have the same sign
 - (D) c and b have the same sign
8. If one of the zeroes of a quadratic polynomial of the form $x^2 + ax + b$ is the negative of the other, then it
 - (A) has no linear term and the constant term is negative.
 - (B) has no linear term and the constant term is positive.
 - (C) can have a linear term but the constant term is negative.
 - (D) can have a linear term but the constant term is positive.
9. For each of the following, find a quadratic polynomial whose sum and product respectively of the zeroes are as given. Also find the zeroes of these polynomials by factorisation.
 - (i) 3 and 5 .
 - (ii) $2/3$ and 8
10. Given that the zeroes of the cubic polynomial $6x^3 + 3x^2 + 10$ are of the form $a + b, a + 2b$ for some real numbers a and b , find the values of a and b as well as the zeroes of the given polynomial.

11. Given that $x - 1$ is a factor of the cubic polynomial $x^3 - 3x^2 + 13x - 3$, find all the zeroes of the polynomial.

LINEAR EQUATIONS

1. Graphically, the pair of equations

$$2x - y + 9 = 0 \quad 6x + 3y + 10 = 0$$

represents two lines which are

- (A) intersecting at exactly one point. (B) intersecting at exactly two points.
(C) coincident. (D) parallel.
2. The pair of equations $x + 2y + 5 = 0$ and $-3x - 6y + 1 = 0$ have
(A) a unique solution (B) exactly two solutions
(C) infinitely many solutions (D) no solution
3. If a pair of linear equations is consistent, then the lines will be (A) parallel (B) always coincident
(C) intersecting or coincident (D) always intersecting
4. The pair of equations $y = 0$ and $y = -7$ has
(A) one solution (B) two solutions
(C) infinitely many solutions (D) no solution
5. The pair of equations $x = a$ and $y = b$ graphically represents lines which are
(A) parallel (B) intersecting at (b, a)
(C) coincident (D) intersecting at (a, b)
6. For what value of k , do the equations $3x - y + 8 = 0$ and $6x - ky = -16$ represent coincident lines?
7. If the lines given by $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are parallel, then the value of k is what?
8. The value of c for which the pair of equations $cx - y = 2$ and $6x - 2y = 3$ will have infinitely many solutions is what?
9. One equation of a pair of dependent linear equations is $-5x + 7y = 2$. The second equation can be
(A) $10x + 4y = 0$ (B) $-10x - 14y + 4 = 0$
(C) $-10x + 14y + 4 = 0$ (D) NOT
10. A pair of linear equations which has a unique solution $x = 2, y = -3$ is
(A) $x + y = -1$ (B) $2x + 5y =$
 $2x - 3y = -5$ (C) $4x + 10y = -22$
(D) $x - 4y - 14 = 0$
11. For which value(s) of K , do the pair of linear equations
 $x + 2y = 1$ and $x + Ky = 1$ have
(i) no solution?
(ii) infinitely many solutions?
(iii) a unique solution?

12. For which value(s) of k will the pair of equations

$$kx + 3y = k - 3$$

$$12x + ky = k \text{ have no}$$

solution?

13. For which values of a and b , will the following pair of linear equations have infinitely many solutions?

$$x + 2y = 1$$

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

4. Find the value(s) of p in (i) to (iv) and p and q in (v) for the following pair of equations:

- (i) $3x - y - 5 = 0$ and $6x - 2y - p = 0$, if the lines represented by these equations are parallel.

- (ii) $-x + 2y = 1$ and $px - y = 1$, if the pair of equations has no solution.

- (iii) $-3x + 5y = 7$ and $2px - 3y = 1$,

if the lines represented by these equations are intersecting at a unique point.

- (iv) $2x + 3y - 5 = 0$ and $px - 6y - 8 = 0$, if the pair of equations has a unique solution.

- (v) $2x + 3y = 7$ and $2px + py = 28 - qy$, if the pair of equations have infinitely many solutions.

15. Two straight paths are represented by the equations $x - 3y = 2$ and $-2x + 6y = 5$. Check whether the paths cross each other or not.

Q16. Write a pair of linear equations which has the unique solution $x = -1$, $y = 3$. How many such pairs can you write?

Q17 If $2x + y = 23$ and $4x - y = 19$, find the values of $5y - 2x$ and $\frac{x}{y} - 2$.

QUADRATIC EQUATIONS

Choose the correct answer from the given four options in the following questions:

1. Which of the following is a quadratic equation?

(A) $x^2 + 2x + 1 = (4 - x)^2 + 3$ (B) $-2x^2 = (5 - x) \left(2x - \frac{2}{5} \right)$

(C) $(k + 1)x^2 + \frac{3}{2}x = 7$, where $k = -1$ (D) $x^3 - x^2 = (x - 1)^3$

2. Which of the following is not a quadratic equation?

(A) $2(x - 1)^2 = 4x^2 - 2x + 1$

(B) $2x - x^2 = x^2 + 5$

(C) $(\sqrt{2}x + \sqrt{3})^2 + x^2 = 3x^2 - 5x$

(D) $(x^2 + 2x)^2 = x^4 + 3 + 4x^3$

3. Which of the following equations has 2 as a root?

(A) $x^2 - 4x + 5 = 0$

(B) $12 = 0$

(C) $2x^2 - 7x + 6 = 0$

(D) $3x^2 - 6x - 2 = 0$

4 Which of the following equations has the sum of its roots as 3?

(A) $2x^2 - 3x + 6 = 0$

(C) $\sqrt{2}x^2 - \frac{3}{\sqrt{2}}x + 1 = 0$ (D) $3x^2 - 3x + 3 = 0$

(D) $-x^2 + 3x - 3 = 0$

5 Find the values of k for which the quadratic equation $2x^2 - kx + k = 0$ has equal roots

6 Find whether the following equations have real roots. If real roots exist, find them.

(i) $8.1^2 + 2x$

(ii) $-2x^2 + 3x + 2 = 0$

(iii) $5x^2 - 2x + 7 = 10$

(iv) $\frac{1}{2x-3} + \frac{1}{x-5} = 1, x \neq \frac{3}{2}, 5$

7 Find a natural number whose square diminished by 84 is equal to thrice of 8 more than the given number.

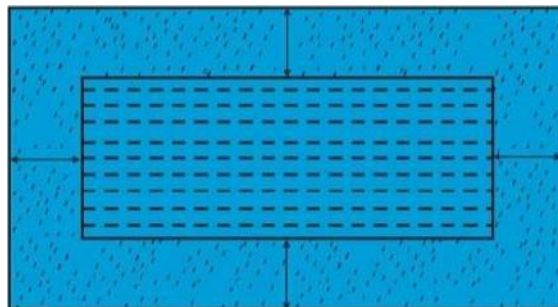
8 A natural number, when increased by 12, equals 160 times its reciprocal. Find the number.

9 A train, travelling at a uniform speed for 360 km, would have taken 48 minutes less to travel the same distance if its speed were 5 km/h more. Find the original speed of the train.

10 If Zeba were younger by 5 years than what she really is, then the square of her age (in years) would have been 11 more than five times her actual age. What is her age now

11 At present Asha's age (in years) is 2 more than the square of her daughter Nisha's age. When Nisha grows to her mother's present age, Asha's age would be one year less than 10 times the present age of Nisha. Find the present ages of both Asha and Nisha.

Q12 In the centre of a rectangular lawn of dimensions 50 m x 40 m, a rectangular pond has to be constructed so that the area of the grass surrounding the pond would be 1184 m² [see Fig. 4.1]. Find the length and breadth of the pond.



PM SHRI KENDRIYA VIDYALAYA NO-2, KHARAGPUR

ग्रीष्मावकाश हेतु गृहकार्यम्

कक्षा-दशमी

- 1.शब्दरूपाणि-बालक, बालिका,मति, मुनि,नदी,साधु,बधू फलम्,वारि,पितृ,मातृ,अस्मद् युष्मद् किम्,(पुल्लिङ्ग, स्त्रीलिङ्ग, नपुंसक लिङ्ग,) एक,द्वि,त्रि,चतुः,
- 2.धातुरूपाणि- भू,गम, स्था,वद्,हस्, क्रीडा, अस, क्री, कृ, सेव, लब्ध
- 3.1-100 संख्यावाचक शब्द
- 4.अव्यय पदानि,
- 5.समय वाचक शब्द।
- 6.पत्र लेखनम्
- 7.चित्रवर्णम्

HOLIDAY HOMEWORK (SUMMER VACATION: 2026-2007)

CLASS: X

SUBJECT: SCIENCE

1. Prepare **MULTIPLE CHOICE QUESTIONS** on the following chapters (TEN questions from each chapter). [DO IT IN SCIENCE HW COPY] Complete all text book question also in H.W. note book

- I. CHEMICAL REACTIONS AND EQUATIONS
- II. LIFE PROCESSES

2. Write the following experiments. [DO IT IN SCIENCE PRACTICAL FILE]

EXPERIMENT NO. 1: Performing and observing the following reactions and classify them into:

- A. Combination reaction
- B. Decomposition reaction
- C. Displacement reaction
- D. Double displacement reaction
 - (i) Action of water on quick lime
 - (ii) Action of heat on ferrous sulphate crystals
 - (iii) Iron nails kept in copper sulphate solution
 - (iv) Reaction between sodium sulphate and barium chloride solutions.

EXPERIMENT NO.2: Preparing a temporary mount of a leaf peel to show stomata.

EXPERIMENT NO. 3: Experimentally show that carbon dioxide is given out during respiration.

3. **ART INTEGRATED PROJECT:** [DO IT IN SCRAP BOOK]
THE FILE FORMATE –

1 Cover Page

- Title: *Art Integrated Project on Medicinal Plants*
- Student Name
- Class & Section
- Roll Number
- School Name
- Session (2025–26)
- ☑ Decorate with drawings of plants/leaf patterns

Project Guidelines:

1. Select *any 10 medicinal plants* (e.g., Tulsi, Neem, Aloe Vera, Turmeric, Ginger).
2. For each plant, include:
 - Scientific name
 - Common name
 - A neat *hand-drawn diagram/picture*
 - Parts used (leaf, root, stem, etc.)
 - Medicinal uses and benefits
3. Integrate *art creatively* by:
 - Making sketches, paintings, or collage work
 - Using natural colours or decorative borders
 - Adding folk art styles (Madhubani, Warli, etc.)
4. Prepare the project in a *file or scrapbook*.
5. Maintain *neatness, proper labeling, and creativity*.
6. Add a *cover page and acknowledgement*.

☐ **Learning Objective:**

To understand the role of medicinal plants in daily life and promote awareness about traditional remedies.

□ *Submission Date:* __25/06/2026_____

Make your project informative, artistic, and unique!

Regards

Science Teacher □

Class X – Social Science Holiday Homework (CBSE 2026–27)

Task 1: Chapter-Based Questions

(Attempt all questions in Social Science notebook. Use maps and diagrams where necessary.)

HISTORY

Chapter 1: The Rise of Nationalism in Europe

1. Define nationalism. How did the French Revolution contribute to the rise of nationalism in Europe?
2. Create a timeline (1789–1871) highlighting 5 major events that shaped European nationalism.
3. Map Work: On an outline map of Europe, locate and label:
 - France
 - Germany (Prussia)
 - Italy
 - Austria-Hungary
4. HOTS: Explain how culture (language, poetry, and folk traditions) played a role in developing national identities.

GEOGRAPHY

Chapter 1: Resources and Development

1. Define the term 'resource'. Classify resources on different bases with examples.
2. What is sustainable development? Suggest 3 ways students can contribute to resource conservation.
3. Draw a table comparing renewable and non-renewable resources.
4. Map Work: On a political map of India, mark and label the following:
 - Major soil types (Any four)
 - Areas with black soil and red soil

POLITICAL SCIENCE

Chapter 1: Power Sharing

1. What is power sharing? Why is it important in a democracy?
2. Differentiate between horizontal and vertical distribution of power with examples.
3. Case Study: Explain the power-sharing arrangements in Belgium and Sri Lanka.
4. HOTS: "Power sharing reduces the chances of conflict in society." Justify with examples.

ECONOMICS

Chapter 1: Development

1. How is development a relative concept? Explain with examples.
2. Prepare a comparative chart of developmental goals of two different individuals (e.g., farmer vs. factory worker).
3. Explain the role of per capita income and literacy rate in measuring development.
4. Activity: Conduct a survey in your locality. Ask 5 people about their idea of a 'developed life'. Present your findings in a creative format (table/pie chart, etc.).

Task 2: Interdisciplinary Project

Topic: The Making of a Global World, Globalization and Lifelines of Economy

Topics to be covered in project file:

- Lifelines of National Economy
- The Making of a Global World
- Globalisation and the Indian Economy

Instructions:

- Combine concepts from History, Geography, and Economics.
- Emphasize the interconnectedness of transport, trade, historical events, and current economic trends.
- Include visuals, data, and case studies where applicable.
- File should be handwritten with a creative cover page and index.

Task 3- Project on Sustainable Development or Social Issues or Consumer Rights

Prepare a short project (15-20 pages) on Sustainable Development or any relevant Social Issues or Consumer Rights

Guidelines:

- Choose any topic such as climate change, gender equality, education, or clean energy.
- Explain the problem, its impact, and suggest sustainable solutions.

Meaning and importance of consumer rights

1. Real-life examples of consumer exploitation
2. Rights and responsibilities of consumers
3. Role of government agencies and laws (like COPRA)
4. Your own role as a responsible consumer

Use pictures, newspaper clippings, and self-made slogans/posters.

File should be handwritten and neatly presented.

- Include images, infographics, or local examples.
- Project should be neat, informative, and handwritten.

Task 4- Prepare a Portfolio of Social Science including your biodata

, your achievements through out the year to be added from time to time.

Submission Instructions

Homework should be written in a neat, organized notebook.

Project must be submitted as a separate file/folder.

Mention your name, roll number, and class clearly.

Due Date: First day after the summer break.