

KENDRIYA VIDYALAYA, GUNUPUR, GUNUPUR-765022

HOLIDAY HOMEWORK 2026 (Summer Vacation)

CLASS-X

SUBJECT: Social SC.

1. Explain the concept of power sharing. Why is it important for democracy?
2. Describe the different forms of power sharing with suitable example.
3. Explain the Cause of Belgium and how it accommodates different social groups?
4. Describe the ethnic composition of Sri Lanka?
5. Why power sharing is desirable?
6. Explain both prudential and moral reasons about power sharing?
7. Describe the roll of political parties, pressure groups.

-----XXXXXXXX-----

2026

Holiday Home work
Class-X Subject- Sanskrit

(1) इवम् सन्धिः

(1) वृद्धि सन्धिः - 5 उदाहरणः

(2) यण् सन्धिः - 5 उदाहरणः

(3) अयादि सन्धिः - 5 उदाहरणः

(4) पूर्वस्वपम् सन्धि - 5 उदाहरणः

* कृत् पुन्यप - गण्यत्, अनार्यत्

* संस्कृत वर्णमाला

* वर्णानाम् उच्चारणस्थानानि

* पत्रमैश्वर्यम्

KENDRIYA VIDYALAYA GUNUPUR
SUMMER VACATION HOLIDAY HOMEWORK
SESSION -2026-27
CLASS -X (SCIENCE)

Q1 . Read the life history of any five famous Indian Scientists and write about them and their discovery. (A report in about 200 words)

Q.2. Write all the equations of Chapter 1 (Chemical reactions and equations).

Q.3. Draw well labelled diagrams of all the diagrams present in Chapter – “Life Processes.”

Q4 . State reasons for the following:

- (i) Herbivores need a longer small intestine while carnivores have shorter small intestine.
- (ii) The lungs are designed in human beings to maximise the area for exchange of gases.
- (iii) The rate of breathing in aquatic organisms is much faster than that seen in terrestrial organisms.
- (iv) Blood circulation in human heart is called double circulation.

Q5 .During science class, the teacher explains haemodialysis as a lifesaving procedure for patients with kidney failure.

She mentions that it involves a semi permeable membrane and dialysis fluid.

- a) What is the role of the semi permeable membrane in haemodialysis?
- b) Why is dialysis fluid used?
- c) What type of waste products are removed from patient blood during haemodialysis?
- d) How is dialysis different from the function of natural kidney?

Q6. There are various muscles present in the Human digestive system known as Sphincters. Two examples of those are

- a) Pyloric sphincter – at the junction of stomach and small intestine
- b) Anal sphincter – at the anus

Write one most likely consequence of malfunctioning of each of these sphincters.

Q7. Differentiate between

- a) Displacement reaction & double displacement reaction
- b) Corrosion & rancidity
- c) Aerobic respiration & anaerobic respiration
- d) Respiration & Photosynthesis
- e) Combination & decomposition reaction
- f) Oxidation reaction & reduction reaction
- g) Blood & Lymph

KENDRIYA VIDYALAYA GUNUPUR

SUBJECT: MATHEMATICS

CLASS: X

SUMMER HOLIDAY HOME WORK

SESSION: 2026-27

“Do the home work in your home work copy only”

- 1) Prove that $2-\sqrt{3}$ is an irrational number given that $\sqrt{3}$ is an irrational number. (2)
- 2) If $\text{LCM}(p, q) = 123$, find $\text{HCM}(p, q)$. (2)
- 3) Show that 8^n can not end with the digit zero for any natural number n . (3)
- 4) Prove that $8\sqrt{5}$ is an irrational number given that $\sqrt{5}$ is an irrational number. (2)
- 5) Give examples to show that the product of two irrational numbers is an irrational number and again it is a rational number. (2)
- 6) If α and $\frac{1}{\alpha}$ are the zeroes of the quadratic polynomial $2x^2 - x + 8k$. Solve and find the value of k . (2)
- 7) If the sum of zeroes of the quadratic polynomial $3x^2 - kx + 6$ is 3, then find the value of k . (2)
- 8) Form a quadratic polynomial whose zeroes are $3 + \sqrt{2}$ and $3 - \sqrt{2}$. (2)
- 9) Find the quadratic polynomial whose zeroes are -2 and -5. Verify the relationship between zeroes and coefficients of the polynomial. (4)
- 10) Find the zeroes of $p(x) = 2x^2 - x - 6$ and verify the relationship between zeroes and co-efficients. (3)
- 11) The lines representing the given pair of linear equations are nonintersecting. Which of the following statements is true? (1)

(A) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$

(C) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2} = \frac{c_1}{c_2}$

(B) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$

(D) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$

- 12) Find the value of C for which the pair of equations $Cx - y = 2$ and $6x - 2y = 3$ will have infinitely many solutions. (2)
- 13) Solve: $2x+3y=7$ and $5x-9y=18$ by substitution. (3)
- 14) Find the greatest number which divides 70 and 95 leaving remainders 5 and 4 respectively. (3)
- 15) If A and B are zeros of $p(x) = x^2 + 2x - 8$, then find a polynomial whose zeros are 4A and 4B. (3)
- 16) Solve: $7x-9y=18$ and $2x+5y=11$ by elimination. (3)
- 17) If the HCF of 408 and 1032 is expressible in the form of $1032 \times 2 + 408 \times p$, then find the value of p . (3)
- 18) Floor of a room is to be fitted with square marble tiles of the largest possible size. The size of the room is 10 m $\times$ 7 m. What should be the size of tiles that are required to cut and how many such tiles are required? (4)
- 19) If p and q are the zeroes of the polynomial $x^2 - x - 4$, then find the value of $\frac{p}{q} + \frac{q}{p}$. (3)
- 20) If a and b are the zeroes of the polynomial $x^2 - px + q$, prove that $\frac{a^2}{b^2} + \frac{b^2}{a^2} = \frac{p^4}{q^2} - \frac{4p^2}{q} + 2$. (4)
- 21) Solve: $\frac{x}{7} + \frac{y}{3} = 5$ and $\frac{x}{2} - \frac{y}{9} = 6$. (3)
- 22) Explain why $7 \times 17 \times 19 + 17$ and $5 \times 11 \times 7 \times 23 + 23$ are composite numbers. (4)
- 23) A circular field has a circumference of 360 km. Three cyclists start together and can cycle 48, 60 and 72 km a day, round the field. When will they meet again? (3)
- 24) The sum of the ages of father and his son is 65 years. After 5 years, the father's age will be twice the age of his son. Express this age as a pair of linear equations in two variables and hence find the present ages of the father and his son. (4)
- 25) A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Akash paid Rs 27 for a book kept for seven days, while Sumit paid Rs 21 for the book he kept for five days. Find the fixed charge and the charge for each extra day. (4)
- 26) Short 1st three chapter and solve the questions of PYQS for year 2025.

अल्टीमेट ग्रीष्मकालीन गृहकार्य (Summer Homework) - 2026

लक्ष्य: कक्षा 10 बोर्ड परीक्षा में 95% + अंक प्राप्त करना |

“यह छुट्टियाँ केवल आराम के लिए नहीं, बल्कि बोर्ड परीक्षा की नींव रखने के लिए हैं।”

खंड 1: गहन व्याकरण अभ्यास (Intensive Grammar)

1. वाक्य और वाच्य (Sentence & Voice)

- वाक्य भेद:** रचना के आधार पर वाक्य के भेदों की परिभाषा लिखें। 30 कठिन मिश्र वाक्यों को सरल वाक्यों में बदलें।
- वाच्य परिवर्तन:** कर्तृवाच्य से कर्मवाच्य और भाववाच्य में बदलने के लिए कम से कम 50 वाक्यों का अभ्यास करें।

2. पद परिचय और समास (Parsing & Compounds)

- पद परिचय:** संज्ञा, सर्वनाम, विशेषण, क्रिया और अव्यय के भेदों का एक चार्ट बनाएँ। प्रतिदिन 5 वाक्यों के रेखांकित पदों का परिचय दें।
- समास:** समस्त 6 समासों (तत्पुरुष, कर्मधारय, आदि) के 15-15 उदाहरण विग्रह सहित अपनी कॉपी में लिखें।

3. अलंकार और मुहावरे

- अलंकार:** अनुप्रास, यमक, उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति और मानवीकरण के 5-5 काव्य उदाहरण ढूँढकर लिखें।
- मुहावरे:** बोर्ड परीक्षा में पिछले 10 वर्षों में आए 100 मुहावरों की सूची अर्थ और वाक्य प्रयोग सहित तैयार करें।

खंड 2: साहित्य पूर्व-अध्ययन (Literature Prep)

4. गद्य और पद्य खंड (Kshitij & Kritika)

- **पाठ अध्ययन:** 'नेताजी का चश्मा', 'बालगोबिन भगत', 'लखनवी अंदाज़' और 'मानवीय करुणा की दिव्य चमक' पाठों को 3-3 बार पढ़ें।
- **चरित्र चित्रण:** चश्मेवाला (कैप्टन), बालगोबिन भगत और नवाब साहब की चारित्रिक विशेषताओं पर 150 शब्दों के नोट्स बनाएँ।
- **कविता विश्लेषण:** सूरदास के पदों और 'राम-लक्ष्मण-परशुराम संवाद' का शब्दशः अर्थ और काव्य-सौंदर्य लिखें।

5. कृतिका (पूरक पाठ्यपुस्तक)

- 'माता का अँचल' और 'जॉर्ज पंचम की नाक' पाठ पढ़ें। इन पाठों के आधार पर 'ग्रामीण जीवन' और 'सरकारी तंत्र' पर अपने विचार व्यक्त करें।

खंड 3: रचनात्मक लेखन 'प्रो' (Writing Mastery)

6. उन्नत लेखन विधाएँ

- **अनुच्छेद लेखन:** निम्नलिखित 5 विषयों पर 150 शब्दों में अनुच्छेद लिखें:
1. आत्मनिर्भर भारत 2. सोशल मीडिया का छात्र जीवन पर प्रभाव 3. पर्यावरण संरक्षण 4. बढ़ती जनसंख्या 5. नारी शक्ति।
- **पत्र लेखन:** 5 औपचारिक (शिकायती/संपादकीय) और 5 अनौपचारिक पत्र लिखें।
- **आधुनिक विधाएँ:** स्ववृत्त लेखन (CV), ई-मेल लेखन और विज्ञापन लेखन (कम से कम 3-3 अभ्यास)।

खंड 4: मेगा प्रोजेक्ट और बोर्ड अभ्यास

7. मुख्य प्रोजेक्ट कार्य

विषय: "साहित्यिक यात्रा"

- अपनी पसंद के 5 कवियों और 5 लेखकों का रंगीन चित्रों के साथ जीवन परिचय तैयार करें। उनकी प्रसिद्ध पंक्तियों को सुलेख में लिखें।
- स्व-मूल्यांकन:** पिछले साल का बोर्ड प्रश्न पत्र (Solved Paper) लेकर 3 घंटे बैठकर हल करने का प्रयास करें।

मास्टर शेड्यूल

सप्ताह	फोकस	मुख्य कार्य
सप्ताह 1-3	व्याकरण (Grammar)	वाक्य, वाच्य, समास, पद परिचय और मुहावरे।
सप्ताह 4-6	साहित्य (Literature)	क्षितिज और कृतिका के महत्वपूर्ण पाठों का विश्लेषण।
सप्ताह 7-8	लेखन (Writing)	पत्र, अनुच्छेद, विज्ञापन, ई-मेल और स्ववृत्त अभ्यास।
सप्ताह 9	प्रोजेक्ट और टेस्ट	साहित्यिक स्कैपबुक और बोर्ड मॉडल पेपर प्रैक्टिस।

"सफलता का कोई छोटा रास्ता नहीं होता, मेहनत ही एकमात्र सीढ़ी है।"

- ग्रीष्मकालीन अवकाश की शुभकामनाएँ! -

ENGLISH LANGUAGE AND LITERATURE - Code No. 184
HOLIDAY HOMEWORK
CLASS-X

SECTION A – READING SKILLS

(20 Marks)

- 1. Read the following passage carefully.**
(10 marks)

The Impact of Social Media on Youth

In the modern era, social media has become an inseparable part of young people's lives. Platforms such as Instagram, YouTube, and X (formerly twitter) connect individuals globally, allowing them to share experiences, opinions, and creativity in real time. While social media offers several benefits, it has also sparked debate about its influence on the behaviour, relationships, and mental health of today's youth.

On one hand, social media serves as a powerful tool for communication and self-expression. It enables young users to stay informed about world events, showcase their talents, and even build careers through online platforms. Many students use social media for educational purposes—joining study groups, watching tutorials, and engaging with global learning communities. Campaigns promoting social causes, such as environmental protection or gender equality, often gain momentum through youth participation on these platforms. Clearly, when used wisely, social media can empower young people to make a positive difference.

However, the negative effects of excessive use cannot be ignored. Constant exposure to idealized images and lifestyles can create feelings of inadequacy and low self-esteem. Many young people fall into the trap of comparing themselves with others, which often leads to anxiety, depression, and a sense of isolation. Moreover, the addictive nature of social media can distract students from studies, reduce productivity, and disturb sleep patterns. Cyber bullying and online harassment have also become major concerns, sometimes leading to severe psychological consequences.

Another growing issue is the spread of misinformation. Fake news, manipulated images, and misleading posts can easily influence young minds. Without proper media literacy, users may believe and share unverified content, contributing to confusion and panic. Thus, it is crucial to teach digital responsibility and critical thinking skills from an early age.

Parents and educators play a significant role in guiding teenagers toward a balanced use of social media. Setting time limits, promoting offline hobbies, and encouraging open communication can help maintain emotional well-being. Governments and tech companies must also ensure stricter privacy controls and measures to curb online abuse.

In conclusion, social media is neither entirely good nor entirely bad—it is a tool whose impact depends on how it is used. When approached with awareness and discipline, it can be a source of learning, connection, and empowerment. But without restraint, it can easily turn into a source of stress and distraction. The key lies in achieving balance and using social media to enhance, rather than harm, one's life.

Answer the following questions:

I. How does misinformation spread on social media?

(1)

II. What is one negative emotional impact of excessive social media use?

(1)

III. Complete the sentence:

(1)

Without proper _____, users may believe and share unverified content on social media.

IV. Choose the correct option:

(1)

The author's view of social media can best be described as—

A. Completely critical

B. Balanced and thoughtful

C. Overly positive

D. Ignorant

V. Explain how social media can be both beneficial and harmful for students.

(2)

VI. Mention one way parents can help children use social media responsibly.

(1)

VII. Find a word from the passage that means “impetus” or “driving force.”

(1)

VIII. What measures can society take to ensure safe and healthy use of social media among youth? (2)

2. Read the following passage carefully.
marks)

(10

Teen Sleep and Screen Time

A 2024 report by the National Health Survey of India explored the impact of screen exposure on teenagers' sleep, health, and focus. The survey covered 3,000 students aged 13–18 years from 10 major Indian cities. Results revealed a sharp rise in daily screen time — from 3.1 hours in 2019 to 6.3 hours in 2024, with smartphones being the most used devices.

The study found that students using screens for more than six hours daily slept only 5.8 hours per night, while those with less than three hours of screen use enjoyed 7.4 hours of sleep. Nearly 65% of participants experienced daytime fatigue, 58% suffered from eye strain, and 48% reported difficulty concentrating during studies. Doctors warn that late-night screen exposure suppresses melatonin, the hormone responsible for regulating sleep cycles.

Experts suggest following the 20-20-20 rule—after every 20 minutes of screen use, look 20 feet away for 20 seconds—reducing eye strain. They also advise switching off devices an hour

before bedtime and engaging in physical activities. Several schools have introduced “Digital Detox Days” to help students build healthier technology habits.

The report concludes that managing screen time is essential to ensure better sleep, stronger concentration, and improved wellbeing among youth.

Chart: Teen Screen Time and Health Effects (2024 Survey)				
Screen Time (per day)	Avg. Sleep (hours)	% with Eye Strain	% with Daytime Fatigue	% with Focus Issues
Less than 3 hours	7.4	15%	25%	18%
3–5 hours	6.6	32%	42%	35%
More than 6 hours	5.8	58%	65%	48%

Answer the following questions:

I. How many students participated in the National Health Survey of India?

(1)

II. What hormone is affected by late-night screen exposure?

(1)

III. Complete the sentence:

Students using screens for over six hours sleep for an average of ____ hours per night.

(1)

IV. Choose the correct statement based on the above passage:

(1)

What initiative have schools started to reduce screen time?

A. Extra computer classes

B. Digital Detox Days

C. Longer study hours

D. Social media

campaigns

V. Imagine your school plans to reduce students’ screen use. Suggest one practical measure the school could adopt based on the findings of the passage.

(1)

VI. Explain how high screen time affects teenagers’ health and learning ability.

(2)

VII. Find a word from the passage that means “tiredness or exhaustion.”

(1)

VIII. Based on the chart, what trend can be observed between screen time and sleep duration? Explain briefly.

(2)

SECTION B – WRITING SKILLS WITH GRAMMAR

(20

Marks)

GRAMMAR

(10

Marks)

3. Complete any ten of twelve of the following tasks, as directed.

I. Fill in the blank by using the correct form of the word in the bracket for the given portion

(1)

The paintings at the exhibition were beautifully ____ (design).

II. Identify the error and correct it:

(1)

She did not knew how to operate the new printer.

III. Fill in the blank with the correct form of verb given in the brackets.

(1)

I wish I ____ (be) able to join you on the trip next week.

IV. He said to me, "Please post this letter for me."

(1)

Report it correctly by completing the following.

He requested me ____.

V. Choose the correct option:

(1)

The teacher reminded the students to be careful ____ the lab equipment.

A. for

B. with

C. at

D. on

VI. Report the following by completing the sentence correctly.

(1)

"Don't forget to call me when you arrive," she said.

She told him ____.

VII. Either of the two students ____ responsible for the delay. (is/are)

(1)

VIII. Which of the following sentences is correct?

(1)

A. The news are good.

B. The news is good.

C. The news were good.

D. The news be good.

IX. "How long have you lived here?" he asked.

(1)

Reported speech: He asked me ____.

X. I looked everywhere but there wasn't ____ water left in the jug. (many /any/little/few)

(1)

XI. Fill in the blank to complete the sentence in a teacher's diary by choosing the correct option.

(1)

_____ student in the group completed the survey form. (Each/All/Both/Some)

XII. Complete with the correct answer:

(1)

By the time we reached the station, the train ____ (leave).

WRITING

(10 Marks)

4A. You are Maya / Rohan, the Head of the Environment Club of your school. Your club plans to organize a “Plastic-Free Week” campaign in the neighbourhood. Write a letter to the Municipal Commissioner (in about 120 words) requesting cooperation, permissions, and awareness drives to make the campaign successful.

OR

4B. You are Aditi / Anish, a concerned citizen. Write a letter to the Editor of a national daily (in about 120 words) expressing your views on the increasing problem of noise pollution in cities. Suggest practical steps citizens and authorities can take to control it.

(5 marks)

5A. Two students, Kavya and Ritvik, have applied for the position of School Captain. Read their profiles and write a paragraph in about 120 words, analyzing who is the better choice.

Kavya: Excellent leadership skills, punctual, high academic achiever, but slightly introverted.

Ritvik: Friendly and confident, active in sports and cultural activities, sometimes careless about deadlines.

Justify your choice with reasons.

OR

5B. Rhea, a creative student, must choose a partner for an inter-school Science Model Competition from among the following:

Arjun: Systematic, disciplined, great with technical tools.

Sara: Imaginative and expressive but easily distracted.

Dev: Highly confident speaker, prefers solo work.

Based on the given information, analyze who would be the best partner for Rhea and why.

(5 marks)



KENDRIYA VIDYALAY GUNUPUR

SESSION - 2026-27

SUMMER HOLIDAYS HOMEWORK

CLASS - VI to X

Note - Write all the answer in your HW notebook.

MUSIC / DANCE / ART

1. Write about the Devadasi and Gotipua dance traditions.
2. Design traditional dress of Maharashtra (on chart paper).
3. Describe briefly Indian and Western musical instruments.
4. Create a short musical composition using household items (record a video or audio clip).
5. Prepare a musical project of your choice (e.g., song, dance, or instrument).
6. Write the National Anthem (10 lines) neatly in a notebook.
7. Practice singing a simple song of your choice for 5–10 minutes daily.

HOLIDAY HOME WORK

SUBJECT: AI

CLASS:X

1. When a user installs an app in the smartphone, it asks for access to gallery, contacts, etc. After accepting this, it gives the user agreement which most users accept without realizing the implications. What is the concern here? 1
- a) Data Privacy c) Unemployment
b) AI bias d) No concern
2. What is the primary domain of application for Bioethics? 1
- a) Agriculture b) Healthcare and life sciences
c) Information technology d) Environmental conservation
3. The 'Rock, Paper and Scissor' game is associated with 1
- a. CV c) Data
b. NLP d) None of these
4. A leading multinational company operates on a chain of hypermarkets and grocery stores deployed an AI application to make it easier for employees to keep their stores running smoothly. They used thousands of video cameras, weighted sensors on shelves, and other technologies that can tell employees when certain products are starting to go bad. One of the tasks of the application is to identify bananas that had started to turn brown, eliminating the need for employees to manually inspect fruit. Which of the following domains is used to achieve this? 1
- a) Data sciences c) Computer vision
b) Natural Language Processing d) Fuzzy logic
5. _____ is the last step in AI project cycle. 1
- a) Problem definition c) Data gathering
b) Deployment d) Evaluation
6. In the AI project cycle, which of the following represents the correct order of steps? 1
- a) Data Exploration, Problem Scoping, Modelling, Evaluation, Data Acquisition.
b) Problem Scoping, Data Acquisition, Data Exploration, Modelling, Evaluation.
c) Problem Scoping, Modelling, Evaluation, Data Acquisition, Data Exploration.
d) Evaluation, Data Acquisition, Data Exploration, Problem Scoping, Modelling.
7. Which of the following is not a part of 4W's problem canvas? 1
- a) Who? c) Why?
b) What? d) Which?
8. With more and more data, an Algorithm becomes better and more accurate. We can choose from various techniques such as Regression, Classification, Clustering, depending on the data set. Algorithms are mainly used in pattern recognition which help in deriving meaningful insights and describe the data better to the user. The above points are regarding algorithms. Which stage of AI project life cycle requires algorithms? 1
- a) Problem Scoping c) Data Acquisition
b) Modelling d) Evaluation
9. Identify the types of sentences: 1
- a) How well she paints! b) What is your age?

10. There are many reasons why interpersonal communications may fail. While communicating the message may not be received exactly the way the sender intended and therefore, it is important that the communicator seeks _____ to check that their message is clearly understood.

1

a) Description

c) Feedback

b) Channel

d) Sign

11. Which of the following types of communication takes place when one individual addresses a large gathering ?

1

a) Written communication

c) public communication

b) Small group communication

d) interpersonal communication

12. Sudhir traveled to Sweden from India to pursue her higher education. But he doesn't know how to speak Swedish (language of Sweden). Because of this, he was unable to find a part time job. This is an example of

1

a) Interpersonal barrier

c) Physical barrier

b) Organisational barrier

d) Linguistic barrier

13. Differentiate between specific and non-specific feedback.

2

14. List some barriers of communication.

2

15. What is a problem statement template and what is its significance?

2

16. What is the need of data visualization?

2

17. Write the 4 principles of Bioethics?

2

18. What are different measures that you can apply to overcome the barriers to effective communication.

4

19. What do you understand by Natural Language Processing domain of AI. Give some applications of NLP.

4

PORTFOLIO TOPIC: AI in cybersecurity threat detection and response.

Machine learning techniques for enhancing image recognition in security systems.