

## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### HINDI

प्रश्न 1-आपकी माता जी क्या काम करती हैं और कौन-कौन से कामों में आप मदद करवाते हों?

प्रश्न 3-विज्ञापन से लाभ होता है, हानि भी होती है या दोनों? परीक्षा पाठ के आधार पर लगभग

10 बिन्दु लिखिए।

प्रश्न 4 - यदि आपको कक्षा मौनीटर का चुनाव करना हो तो उसमें किन-किन गुणों की परख करेंगे?

प्रश्न 5 - निम्नलिखित विषयों पर एक अनुच्छेद लिखिए -

क- क्रीड़ा दिवस पर

ख- पृष्ठकालय का लाभ

ग- पैड़-पौधों का महत्व

प्रश्न 6 -(क) अपने विद्यालय के प्रधानाचार्य को अपना सेक्शन बदलवाने के लिए प्रार्थना पत्र लिखिए।

(ख) अपने विद्यालय के स्थापना दिवस कार्यक्रम को साझा करते हुए अपने मित्र को पत्र लिखिए।

### CLASS VI

### ENGLISH WINTER BREAK HOMEWORK

#### CLASS 6

1. Prepare a Scrap Book depicting the Region you belong to.

Map, Location, Cultural, heritage, Dress, Famous festivals, Food etc.

2. Make a painting by using Madhubani art or Mandala art presenting Lord Krishna as Flute Player.

### MATHS

1. Name the three sided regular polygon.

2. Name the four sided regular polygon.

3. Name the five sided regular polygon.

4. Perimeter of an equilateral triangle = .... × length of a side.

5. Perimeter of a five sided regular polygon = .... × length of a side.

6. Perimeter of a six sided regular polygon = .... × length of a side.

7. The sum of the lengths of all sides of a closed plane figure is called

8. A rectangle ABCD has length and breadth 12 cm and 8 cm, respectively. What is its perimeter?

9. Perimeter of a rectangle = .....

10. Debojeet wants to put coloured tape all around a square photo frame of side 1m. What will be the length of the coloured tape he requires?

11. Perimeter of a square = .... × length of a side.

12. A triangle is having three sides of lengths 4 cm, 5 cm and 7 cm. Find its perimeter.

13. Perimeter of a triangle = sum of the lengths of its .....sides.

14. Akshi wants to put lace all around a rectangular tablecloth that is 3 m long and 2 m wide. Find the length of the lace required.

15. There is a large box of 36 small square boxes. (a) of it is \_\_\_\_\_. (b) of it is \_\_\_\_\_. (c) If I make a bench of 20 small boxes, the fraction becomes \_\_\_\_\_. (d) \_\_\_\_ boxes are required if fraction is 56.

16. Find the equivalent fraction of having (i) denominator 30 (ii) numerator 24.

17. Identify the like fractions from the following: , , ,

18. State true or false: (a) In , 3 is the part of whole. (b) On a number line, is to the right of zero. (c) is smaller than . (d) and represent equivalent fractions.

SCIENCE

**Note : All work to be done in cw copy.**

1. Write the characteristics of living organism.
2. Draw life cycle of mosquitoes and frog .
3. A bowl of milk in your home has gone sour. Discuss with your parents how you can use it in another way. Also which method of separation will you use in the process.
4. \_\_\_\_\_ is separated from \_\_\_\_\_ in threshing process.
5. \_\_\_\_\_ is separated from \_\_\_\_\_ in winnowing of grains.
6. Would the environment affect the life cycle of insects? Explore and list the factors that affect the life cycles of insects.
7. What is water cycle? Draw and label all parts in water cycle.
8. Why in summer a surahi is used to keep the water cold.?
9. Various planets in our solar system are at different distances from the sun. search the internet and find a table with the planets, their distances from the sun in increasing order and their temperature. Does the average temperature of the planets decrease as their distance from the sun increases? If it is not true for any planet find out for which planet and why?

10..Already assigned in class - subject enrichment activity. Take some bean seed / gram seed allow them to germinate in moist cloth. Develop into seedling. Observe the growth of root and shoot of seedling under different conditions. Write your observations and Fill the table 10.3 given in your book.

SST

Project on:-

History

Life of Early Humans

– Hunter-gatherers vs early farmers

The Indus Valley Civilization

– Town planning, houses, drainage system

Harappa and Mohenjo-Daro

– Comparison chart with pictures

Geography

On the Political Map of India, label:

States and Union Territories

Capital of India – New Delhi

On the Physical Map of India, show:

Himalayan Mountain Range

Northern Plains  
Thar Desert  
Peninsular Plateau  
Coastal Plains  
Indian Ocean, Arabian Sea, Bay of Bengal

 Mountains – Brown  
 Plains – Light Green  
 Plateaus – Yellow  
 Rivers & Seas – Blue

#### Civics

What is Urban Local Government?  
Municipal Corporation: Structure and Functions  
Role of Mayor in City Administration  
How Does a City Get Clean Water?  
Garbage Collection and Waste Management in Cities  
Importance of Urban Local Government in Democracy  
How Are Wards Formed in a City?  
Role of Citizens in Urban Governance  
Smart Cities and Urban Local Government  
Clean City Campaigns (Swachh Bharat in Urban Areas)

#### Economy

Make a Chart Showing Three Sectors  
Paste Pictures of Different Economic Activities

#### SANSKRIT

पठ धातरूप (चारो लकार) शब्द रूप- (बालक, बालिका)  
किम् शब्द रूप ( तीनो रूप) तथा संपूर्ण अभ्यास कार्य लिखो व याद करो।

#### ARTIFICIAL INTELLIGENCE

Q1. Domains of Artificial Intelligence

- What are the three domains of Artificial Intelligence (AI)?
- Write a short note on each AI domain.
- Write two applications of each AI domain used in everyday life.

#### Q2. Computer Vision

- What is Computer Vision?
- How does Computer Vision help computers understand images and videos?
- Write four examples where Computer Vision is used in everyday life.

#### Q3. Activity-Based Question

Draw and label any one application of Computer Vision used in daily life  
(for example: face recognition, traffic signal camera, mobile camera).

Write 2–3 lines explaining your drawing.

#### Instructions for Students

Write all answers neatly in your notebook / portfolio file.

Draw neat diagrams wherever required.

Homework will be submitted after the school reopens.



## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### CLASS VII

HINDI

Version:1.0 StartHTML:0000000156 EndHTML:0000058502 StartFragment:0000000469  
EndFragment:0000058494

### शीतकालीन गृहकार्य (विषय-हिंदी)

### केंद्रीय विद्यालय

### कक्षा-7

दिनांक-20 दिसम्बर 2025

नोट - सभी प्रश्नों के उत्तर संक्षिप्त रूप में अपनी हिन्दी नोटबुक में लिखो-

प्रश्न 1- प्रतिदिन एक पेज सुलेख कार्य कीजिए ?

प्रश्न 2- भारतीय लोकनृत्यों की सूची बनाइए और उनके विषय में पाँच-पाँच बिन्दु लिखिए ।

प्रश्न 3- वर्षा ऋतु पर आधारित एक कविता की रचना कीजिए ?

प्रश्न 4- किसी व्यक्ति का कौन सा गुण आपको सबसे अधिक आकर्षित करता है ? अपने जीवन से जुड़े किसी व्यक्ति के उदाहरण से बताइए ।

प्रश्न 5- दस ऐसे शब्दों को लिखिए जिनके एक से अधिक अर्थ निकलते हैं?

प्रश्न 6- निम्नलिखित विषयों पर अनुच्छेद लिखिए -

क- क्रीड़ा दिवस पर

ख- पुस्तकालय का लाभ

ग- शीतकालीन अवकाश

प्रश्न 7-(क) अपने विद्यालय के प्रधानाचार्य को अपना सेक्शन बदलवाने के लिए प्रार्थना पत्र लिखिए।

(ख) अपने विद्यालय के स्थापना दिवस कार्यक्रम को साझा करते हुए अपने मित्र को पत्र लिखिए।

Class 7th English Winter Break homework  
Write a poem and draw pictures.Using calligram.

Make a comic on the story 'The Golden Axe'.

Observe minutely warriors wall in your school paste, pictures of any 4 and write about their life history.

Prepare an informative booklet using A4 sheets of 5 Indian Mountaineers include the following information name, photograph place of birth profession, accomplishment, awards, training received, sports known for.

## MATHS

### **Instructions:**

- 1.) All questions are compulsory.
- 2.) Complete in a separate notebook.
- 3.) Write neat and clean.

### **Section A: Multiple Choice Questions (MCQs)**

1. The solution of the equation  $x+7=1$  is:

a) 6   b) 7   c) 8   d) 9

2. Which of the following is an equation?

a)  $5 + 3$   
b)  $x + 5$   
c)  $x + 5 = 10$   
d)  $10 - 3$

3. The smallest 3-digit number formed using digits 3, 5 and 7 (without repetition) is:

a) 357   b) 375   c) 537   d) 573

4. A line which intersects two or more lines at different points is called:

a) Ray

b) Line segment

c) Transversal

d) Angle

5. Two angles whose sum is  $180^\circ$  are called:

a) Complementary

b) Adjacent

c) Supplementary

d) Vertically opposite

### **Section B: Very Short Answer Questions**

6.) Find the value of x in:

(i)  $x+9=18$

(ii)  $3p-10= -22$

(iii)  $5(a+8)= 100$

7.) How many lines can pass through two given points?

8.) Name the angle formed between two intersecting lines that are opposite to each other.

9.) Write the predecessor of the smallest 4-digit number.

### **Section C: Short Answer Questions:**

10.) Solve the equation:  $3x=27$

11.) The expression  $4n + 3$  generates numbers for different values of n. What is the parity of  $4n + 3$  when  $n = 3$ ?

12.) Identify the type of angle:

a)  $45^\circ$

b)  $90^\circ$

c)  $120^\circ$

13.) If two angles are supplementary and one angle is  $65^\circ$ , find the other angle.

14.) Two consecutive numbers in the Virahanka sequence are 377 and 610. What is the next number in the sequence?

#### **Section D: Long Answer Questions**

15.) Solve the equation:  $5x-10=25$

16.) Using the digits 1, 3, 5 and 7:

a) Form the greatest 4-digit number

b) Form the smallest 4-digit number

c) Find the difference between them

17.) Draw a neat diagram and explain:

a) Intersecting lines

b) Parallel lines

c) Transversal

18.) The measure of an angle is three times another angle. If their sum is  $180^\circ$ , find both angles.

#### **Section E: Case Study Based Questions**

##### **Case Study 1: Simple Equations**

19.) Riya had some marbles. Her friend gave her 8 more marbles. Now she has 20 marbles.

1. Let the number of marbles Riya had initially be . Write an equation.

2. Solve the equation to find the value of ?

3. How many marbles did Riya have initially?

##### **Case Study 2: Lines and Angles**

20.) In a figure, two parallel lines are cut by a transversal. One of the angles formed is  $110^\circ$ .

1. Name the angle corresponding to  $110^\circ$ .
2. Find the measure of its corresponding angle.
3. Find the measure of the interior angle on the same side of the transversal.

**SCIENCE**  
**WINTER BREAK HOMEWORK**  
**CLASS: VII SESSION: 2025-26**

Write the answers in your Science Notebook.

- 1.i) What is photosynthesis? Draw a schematic diagram representing the process of photosynthesis. Write balanced equation for this.  
ii) Which gas is utilized for the process of Photosynthesis?  
iii) Which gas is released during the process of photosynthesis?  
iv) Name the food factory of plant.  
v) Name the pigment that makes leaves green. Mention the role of chlorophyll in the process of photosynthesis.
2. A goat eats away all the leaves of a small plant. In a few days, new leaves could be seen in the plant again. How did the plant survive without the leaves?
3. Write the activity to show the presence of starch in leaves?
4. Reena took two plants: Plant A having all green leaves and another plant B having variegated leaves. Both the plants were kept sunlight for some time. After few hours, when she tested the leaf of Plant A for the presence of starch, the leaf turned blue black. But, when she tested the variegated leaf of plant B, only the green patches of the leaf turned blue black.  
a) What do you think why the non-green patches in the variegated leaf of plant B did not show blue black colour when tested with starch?  
b) Do the colourful leaves have chlorophyll? Why are we not able to see the chlorophyll pigment in these leaves? Why do the leaves of some plants appear red, violet or yellow instead of green?
- 5.a) A student places a plant in red coloured water and notices red colour in the stem after some time. What does this observation most accurately indicate?  
b) If the stem had been placed upside down, how would the movement of coloured water change?

**SOCIAL SCIENCE**  
**SESSION 2025-26**

1. Write and learn Preamble of Indian constitution.
2. Make list of 20 constitution makers and collect their photos
3. Make a list of south Indian temples
4. Make a list of currency of 20 countries

5. Learn the name of Indian states and their capitals

6. Locate them on Indian map

Do everything in note books

### SANSKRIT

पठ धातरूप ( चारो लकार), शब्दरूप- बालक, बालिका व किम्( तीनों रूप)

संपूर्ण अभ्यास कार्य लिखो व याद करो।

### ARTIFICIAL INTELLIGENCE

Q1. Sustainability

- a) What do you mean by sustainability?
- b) Why is sustainability important for the future of the Earth?
- c) Write any four examples of sustainable practices.

Q2. Importance of Sustainability for Society

- a) Explain the importance of sustainability for society.
- b) How does sustainability help in conserving:

Natural resources

Environment

Human health

- c) Give two examples showing the role of sustainability in daily life.

Q3. Sustainable Development Goals (SDGs)

- a) What are the Sustainable Development Goals (SDGs)?
- b) Who introduced the SDGs and in which year?
- c) How many SDGs are there?
- d) Write the names of any five SDGs.
- e) Choose one SDG and explain how students can help achieve it.

Q4. System Thinking

- a) What is system thinking?
- b) Why is system thinking important in solving real-life problems?
- c) Give one example of system thinking related to school, home, or environment.

Q5. System Maps

- a) What is a system map?
- b) Write the main components of a system map.
- c) Draw a simple system map for water usage at home.

Q6. Purpose of System Maps

- a) What is the purpose of system maps?
- b) How do system maps help in:

Understanding complex problems

Identifying cause-and-effect relationships

Finding better solutions

- c) Mention one situation where system maps can be useful.

**Q7. Activity-Based Question**

Prepare a system map for any one of the following:

Waste management in school

Saving electricity at home

Traffic problems in your area

Explain your system map in a few lines.

**Instructions for Students**

Write all answers neatly in your notebook / portfolio file.

Use diagrams and flowcharts wherever required.

Homework will be submitted after the school reopens.

## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### HINDI

शीतकालीन अवकाश गृहकार्य  
विषय हिंदी। कक्षा आठवीं

1. 'सच्ची मित्रता' विषय पर चित्र सहित 100 शब्दों में कहानी लिखिए।
2. छट्टियों में घमने की योजना बनाते हुए अपने मित्र के साथ हर्ड बातचीत को संवाद के रूप में लिखिए।
3. नववर्ष की शुभकामना देते हुए अपने नाना जी / दादा जी को शुभकामना संदेश लिखिए।

## CLASS VIII

### ENGLISH

KENDRIYA VIDYALAYA AGCR

Winter Holiday Homework – English (Class VIII) Session: 2025–26

#### Objectives

To strengthen reading comprehension

To improve writing skills (creative, descriptive, and functional)

To enhance vocabulary and grammar in context

To develop critical thinking and expression

#### SECTION A: READING COMPETENCY (20 Marks)

##### Task 1: Newspaper Reading Log

Read one English newspaper article daily for 10 days (from The Hindu / Indian Express / Times of India – Editorial / Features section).

Maintain a Reading Log in a separate notebook

##### Task 2: Book Review

Read any one story book / novel (age-appropriate).

##### Suggested books:

The Blue Umbrella – Ruskin Bond

The Adventures of Tom Sawyer – Mark Twain

Harry Potter (any one part)

Malgudi Days – R.K. Narayan

Write a Book Review (150–200 words) covering:

Title and author

Main characters

Summary of the story

Message / moral

What you liked most and why

#### SECTION B: WRITING COMPETENCY

##### Task 3: Diary Writing (10 Marks)

Write any 3 diary entries (80–100 words each) on the following themes:

A memorable winter morning

Helping someone in need

My winter holiday routine

##### Task 4: Paragraph Writing

Write any one paragraphs (120 words each):

Importance of Reading Books

How I can be a Responsible Citizen

Winter Season in My City  
Importance of Time Management

 **SECTION C: VOCABULARY & LANGUAGE USE (10 Marks)**

Task 5: Vocabulary Builder

Write 20 new words related to winter season

Use any 10 words in meaningful sentences

 **SECTION D: SPEAKING-READING INTEGRATION**

Task 6: Read Aloud Practice (To be assessed after holidays)

Practise reading any one lesson/poem from the textbook aloud

Focus on pronunciation, pause, stress, and expression

 Instructions for Students

Write neatly in a separate English Holiday Homework notebook

Follow word limits

Original work only (no copying)

Decorate the first page creatively

**MATHS**

**SCIENCE (DO ALL THE HHW IN FAIR COPY ONLY)**

1. Complete the book work of chapter 9; Amazing world of Solutes, solvents and solutions along with the class notes and numericals.
2. Read the next chapter and prepare yourselves for the after class by making the brief notes of chapter 10; Light; mirrors and lenses. (bullet points only)
3. Complete the MDP on the allotted topic.
4. Complete the learner's diary of chapters from 5 to 9.
5. Read activity 10.1 10.4 and 10.5, write these with all figures.

**SST**

## **HOLIDAY HOMEWORK CLASS -8**

**Subject: Social Science (History)**

**Topic: Indian Resistance to British Rule (Till 1857)**

**Instructions:**

- Do the work neatly in your social science notebook.
- Use headings, pictures, maps, and timelines.
- Write answers in your own words.
- Minimum 6–8 pages (handwritten).

### **Section A: Very Short Answer Questions**

(Answer in 2–3 sentences)

1. Who were the Europeans who came to India for trade?
2. What was the East India Company?
3. Name any two Indian rulers who resisted British expansion before 1857.
4. What is meant by ‘Doctrine of Lapse’?
5. Who was Tipu Sultan?

## Section B: Short Answer Questions

(Answer in 60–80 words)

1. How did the British establish their political power in India?
2. Explain the causes of peasant revolts before 1857.
3. What was the impact of British revenue policies on Indian farmers?
4. Describe the role of tribal revolts against the British.
5. Why did Indians resent British rule before 1857?

## Section C: Long Answer Questions

(Answer in 120–150 words)

1. Explain the economic exploitation of India by the British till 1857.
2. Describe the resistance of Indian rulers against British expansion.
3. Discuss the causes of the Revolt of 1857.

## Section D: Timeline Activity

Prepare a timeline (1600–1857) including at least 8 important events, such as:

- 1600 – East India Company established
- 1757 – Battle of Plassey
- 1764 – Battle of Buxar
- 1799 – Death of Tipu Sultan
- 1848 – Doctrine of Lapse
- 1857 – Revolt of 1857

## Section E: Map Work

On an outline map of India:

- Mark Plassey, Buxar, Mysore, Jhansi, Awadh
- Shade important British-controlled areas before 1857

## Section F: Case Study / Biography

Write a short note on ANY ONE:

- Rani Laxmi Bai
- Begum Hazrat Mahal

## Section G: Role Play / Monologue

Write a short monologue (8–10 lines) as:

- Rani laxmi Bai (Present it in class after holidays)

## Section H: Newspaper Report (Imaginative)

Write a front-page newspaper report dated 1857 on:

- Outbreak of the Revolt of 1857

Include:

- Headline
- Place & date
- Short report (80–100 words)

### SANSKRIT

पठ् धातरूप ( चारो लकार)  
शब्दरूपे “ बालक, बालिका व किम् ( तीनों रूप)  
संपूर्ण अङ्ग्यास कार्य लिखो व याद करो।

### ARTIFICIAL INTELLIGENCE

Q1. Mapping an AI Solution to the Three Domains of AI

a) What are the three domains of Artificial Intelligence? Name and explain each domain briefly.

b) Choose any one real-life AI application (such as face recognition, voice assistant, recommendation system, or self-driving car).

c) Identify and explain which AI domain(s) your chosen application belongs to.

d) Justify your answer by explaining how the application works in that domain.

Q2. Mapping an AI Use Case to the AI Project Cycle

- a) What is an AI use case? Explain with an example.
- b) Write the names of the different stages of the AI Project Cycle.
- c) Choose one AI use case (for example: smart attendance system, chatbot for school, weather prediction, or traffic control).
- d) Map your chosen use case to each stage of the AI Project Cycle by explaining:

Problem Scoping

Data Acquisition

Data Exploration

Modelling

Evaluation

#### Q3. Application-Based Question

Select an AI system used in daily life or school and answer the following:

- a) Identify the AI domain(s) involved.
- b) Identify the AI Project Cycle stages used in developing that system.
- c) Explain why AI is better than traditional methods for this

## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### CLASS IX

#### HINDI

सभी प्रश्नों के उत्तर संक्षिप्त में हिन्दी नोट बुक में लिखो-

1. निम्नलिखित तीन विषयों पर लगभग 120 शब्दों में अनुच्छेद लिखें -

\* (क) जीवन में खेल-कूद का स्थान

\*भूमिका

\*विभिन्न प्रकार के खेल

\*खेलों का महत्व

\*विद्यार्थी जीवन में खेल-कूद का महत्व

\*उपसंहार

\* (ख) रंग-बिरंगी अद्भुत प्यारी, विज्ञापन की दुनिया न्यारी -

\*वर्तमान युग

\*विज्ञापन का युग

\*विज्ञापन के ढंग तथा महत्व

\*हानियां

\*उपसंहार

\* (ग) युवावर्ग पर सोसाल मीडिया का प्रभाव

\*भूमिका

\*सोसाल मीडिया की उपयोगिता

\*दुष्प्रभाव

\*उपसंहार

2. एस.बी.आई. बैंक के प्रबंधक को नई चेकबुक मंगवाने के लिए 80 शब्दों में ई मेल लिखिए।

3. निकट के प्रार्थना स्थलों और पूजा घरों में लाउडस्पीकर के मनमाने प्रयोग से होने वाली परेशानियां का उल्लेख करते हुए संपादक को पत्र लिखिए।

4. व्याकरण पुस्तक की सहायता से 10 सामासिक पद लिखिए और विग्रह के साथ समाप्त बताएं।

#### ENGLISH

KENDRIYA VIDYALAYA AGCR COLONY SHIFT II

Winter Holiday Homework – English (Language & Literature)

Class: IX Session: 2025–26

 SECTION A: READING COMPETENCY (20 Marks)

Task 1: Newspaper / Magazine Reading Log

Read any 8 English articles during the winter holidays from:

The Hindu / Indian Express / Times of India

Magazines like Frontline / Readers' Digest (Student edition)

Maintain a Reading Log with:

Date

Heading of the article

Source

5 new words (with meanings)

Task 2: Literature-Based Reading :Read any one from the following:

The Diary of Anne Frank (unabridged / student edition)

Animal Farm – George Orwell

The Story of My Life – Helen Keller

Write :One character you found inspiring and why (80 words)

SECTION B: WRITING COMPETENCY

Task 3: Diary Writing u

Write any 2 diary entries (100–120 words each) on:

A day that changed my way of thinking

A winter morning that I will never forget

Learning something valuable during holidays

My feelings after helping someone

Task 4: Paragraph / Short Composition

Write any two (120–150 words each):

Importance of Reading in Student Life

Role of Youth in Nation Building

How Holidays Help in Self-Improvement

Impact of Technology on Teenagers

SECTION C: VOCABULARY & LANGUAGE USE

Task 5: Vocabulary Enrichment

Pick 15 unfamiliar words from your reading tasks

Write meanings and use any 8 words in original sentences

SECTION D: SPEAKING–READING INTEGRATION (For Post-Holiday Assessment)

Task 6: Reading Aloud Practice

Prepare one prose lesson or poem from the textbook

Focus on pronunciation, pause, stress, and expression

Students may be assessed orally in class

 Instructions

Do the work in a separate English holiday homework notebook

Maintain neatness and originality

Follow word limits strictly

Attach reading logs neatly

## Class 9 – Mathematics Holiday Homework

### Chapters:

Surface Areas & Volumes

Circles

Heron's Formula

## WORKSHEET 1: SURFACE AREAS & VOLUMES

Find the curved surface area of a cube of side 7 cm.

Write the formula for the total surface area of a right circular cone.

Find the volume of a sphere of radius 7 cm.

Find the curved surface area of a cylinder of radius 7 cm and height 10 cm.

Find the total surface area of a cone of radius 3.5 cm and slant height 7 cm.

Find the volume of a cone of height 14 cm and radius 7 cm.

A metallic sphere of radius 6 cm is melted and recast into a cone of height 24 cm. Find the radius of the cone.

## WORKSHEET 2: CIRCLES

Write the formula for circumference of a circle.

Find the circumference of a circle of radius 14 cm.

Find the area of a circle whose diameter is 28 cm.

Find the area of a ring formed between two concentric circles of radii 7 cm and 14 cm.

The circumference of a circle is 44 cm. Find its area.

## WORKSHEET 3: HERON'S FORMULA

Write Heron's formula.

Find the area of a triangle with sides 7 cm, 8 cm, and 9 cm.

Find the area of a triangle whose sides are 13 cm, 14 cm, and 15 cm.

The sides of a triangular field are 50 m, 60 m, and 70 m. Find the cost of leveling the field at \$5 per  $m^2$ .

### Instructions:

Use  $\pi = 22/7$  unless stated otherwise.

Show all steps clearly.

Draw neat diagrams wherever required.

SCIENCE

### **Winter break holiday home-work**

#### **Worksheet on sound**

1. What is the difference between note and tone?
2. When we change feeble sound to loud sound what do we increase ?
3. Sound produced by a thunderstorm is heard 10 s after the lightning is seen. Calculate the approximate distance of the thunder cloud. (Given speed of sound = 340 m/s.)
4. What is relation between time period and frequency?
5. Name the principle on which a stethoscope works. Draw a diagram only to explain its working.
6. Which wave characteristics determine the loudness and pitch of sound?
7. The speed of sound \_\_\_\_\_ on a hotter day. Give reason for the statement.
8. Represent graphically by two separate diagrams in each case
  - (i) Two sound waves having the same amplitude but different frequencies.
  - (ii) Two sound waves having the same frequency but different amplitudes.
  - (iii) Two sound waves having different amplitudes and also different wave lengths.
9. If velocity of sound in air is 340 m/s, calculate
  - (i) wavelength when frequency is 256 Hz.
  - (ii) frequency when wavelength is 0.85 m
10. A child hears an echo from a cliff 4 seconds after the sound from a powerful cracker is produced. How far away is the cliff from the child? (Take velocity of sound in air as 340 ms<sup>-1</sup> )

Prepare for group presentation on the topics assigned to your group on the chapter **Improvement in food resources**

**Group 1: Improvement in crop yield** (introduction, crops, types of crops, need and importance)

**Group 2: Crop variety improvement**

**Group 3: Crop production management**

**Group 4: Crop protection management**

**Group 5: Animal husbandry and bee keeping**

**Group 6: Cattle farming**

**Group 7: Poultry farming**

**Group 8: Fish Production**

**Group 9: Assessment of the chapter**

All the members will individually give presentation on the subtopics. Charts, PPT, photos, etc can be used to make the group presentation effective and creative.

SST

## **CLASS IX – SOCIAL SCIENCE**

### **Holiday Homework (2025-2026)**

#### **HISTORY**

#### **1. Nazism and the Rise of Hitler**

##### **A. MCQs**

1. Hitler became the Chancellor of Germany in:
  - a) 1923
  - b) 1933
  - c) 1945
  - d) 1919
2. The German Parliament was known as:
  - a) Duma
  - b) Reichstag
  - c) Congress
  - d) Assembly
3. The propaganda department of Nazi Germany was headed by:
  - a) Goebbels
  - b) Hindenburg
  - c) Stalin
  - d) Chamberlain

##### **B. Very Short Answers (1-2 lines)**

4. What was the **Weimar Republic**?
5. Define **Aryan race theory**.

### C. Short Answers (30–40 words)

5. Explain the provisions of treaty of versailles
6. Write short note on Nazi influence on the following
7. A) Youth
8. B) Women
9. C) Disabled people

### D. Source-Based Question

*“The economic crisis created deep fear and suspicion in German society. Workers lost jobs, businesses collapsed, and middle-class savings disappeared.”*

- State **two effects** of the Great Depression on Germany.



## HISTORY

### 2. Pastoralists in the Modern World

#### A. MCQs

1. Pastoralists of Maharashtra and Karnataka are called:  
a) Gaddis b) Banjaras c) Dhangars d) Gujjars
2. Maasai pastoralists live mainly in:  
a) India b) South Africa c) Tanzania & Kenya d) Sudan

#### B. Very Short Answers

3. Who are **pastoralists**?
4. What is **grazing tax**?

#### C. Long Answers

5. Mention **problems faced by Indian pastoralists under British rule**.
6. Write **two changes in Maasai society in modern times**.
7. Draw a comparison table of all the pastoralists communities of India and Africa (Massai)



## GEOGRAPHY

## 1. Climate

### A. MCQs

1. The average weather condition for a long period is called:  
a) Weather b) Climate c) Season d) Monsoon
2. The monsoon enters India first in:  
a) Kerala b) Gujarat c) Rajasthan d) Punjab

### B. Short Answers

3. What is **monsoon**?
4. Explain **the factors that affect the climate of India**.

### C. Short Answers

5. Explain the role of **Himalayas in influencing India's climate**.
6. Differentiate between **weather & climate**

### D. Analytical Question

7. Why do coastal areas have **moderate climate**, while interiors have **extreme climate**? (40 words)



## GEOGRAPHY

### 2. Natural Vegetation – Only Map Work (India Map)

**On a political map of India-Do both the maps given in your textbook**



## ECONOMICS

### 1. Poverty as a Challenge

### A. MCQs

1. Poverty line in India is measured on the basis of:  
a) Income  
b) Nutrition requirement  
c) Personal choice

d) Property

2. **Swarnajayanti Gram Swarozgar Yojana (SGSY)** aims at:

- a) Self-help groups
- b) Mid-day meals
- c) Old-age pension
- d) Road construction

## **B. Very Short Answers**

3. Define **poverty line**.

4. Give **one reason for rural poverty**.

## **C. Long Answers**

5. Mention **groups vulnerable to poverty in India**.

6. Write **anti-poverty measures taken by the Government**.

## **D. Application Question**

7. Why do you think **poverty has declined in India after the 1990s?** (40–50 words)

8. Explain the causes of poverty in India.



# **POLITICAL SCIENCE**

## **1. Working of Institutions**

### **A. MCQs**

1. The final interpreter of the Constitution is:

- a) Prime Minister
- b) President
- c) Supreme Court
- d) Speaker

2. The President appoints the Prime Minister who:

- a) Has majority support in Lok Sabha

- b) Belongs to the largest party in Rajya Sabha
- c) is chosen by Governors
- d) is directly elected by people

## **B. Very Short Answers**

- 3. What is **Lok Sabha**?
- 4. Who heads the **Union Council of Ministers**?

## **C. Long Answers**

- 5. Explain **judicial review**.
- 6. State **two powers of the Prime Minister**.

## **D. Case-Based Question**

- 7. A bill is passed by Lok Sabha but rejected by Rajya Sabha. What happens next? Explain.

### **★ Extra Challenge (Optional)**

- Write **5 similarities and 5 differences** between  
**Nazi Germany & a democratic country like India.**

### **SUBJECT: ARTIFICIAL INTELLIGENCE**

#### **Instructions for Students**

All work must be done neatly in the Practical File.

Each program/question should be written with a proper heading, date, and output.

The completed file must be submitted after the school reopens.

The file will be assessed on the basis of neatness, correctness, and completeness.

#### **PRACTICAL WORK**

#### **UNIT-5 : INTRODUCTION TO PYTHON**

##### **A. PRINT (Without Using Input)**

Write a Python program to print your personal information such as:

Name

Father's Name

Class

School Name

Write a Python program to print the following pattern using multiple print statements:

```
*  
**  
***  
****  
*****
```

Write a Python program to find and print the square of the number 7.

Write a Python program to find the sum of two numbers 15 and 20.

Write a Python program to convert length given in kilometers into meters.

Write a Python program to print the table of 5 up to five terms.

Write a Python program to calculate Simple Interest where:

Principal Amount = 2000

Rate of Interest = 4.5

Time = 10 years

#### B. INPUT

Write a Python program to calculate the Area and Perimeter of a rectangle by taking input from the user.

Write a Python program to calculate the Area of a triangle by taking Base and Height as input.

Write a Python program to calculate the average marks of three subjects entered by the user.

Write a Python program to calculate the discounted amount when the amount and discount percentage are given by the user.

Write a Python program to calculate the Surface Area and Volume of a Cuboid by taking length, breadth, and height as input.

#### C. LIST

Create a list in Python of children selected for a science quiz with the following names:  
Arjun, Sonakshi, Vikram, Sandhya, Sonal, Isha, Kartik

Perform the following operations in sequence:

Print the complete list

Delete the name "Vikram" from the list

Add the name "Jay" at the end of the list

Remove the item present at the second position

Create a list num = [23, 12, 5, 9, 65, 44] and:

Print the length of the list

Print elements from the second to fourth position using positive indexing

Print elements from the third to fifth position using negative indexing

Write a Python program to create a list of the first 10 even numbers, add 1 to each element, and print the final list.

Create a list List\_1 = [10, 20, 30, 40].

Add elements [14, 15, 12] using the extend() function.

Then sort the list in ascending order and print it

## **WINTER BREAK HOLIDAY HOMEWORK- (2025-26)**

### CLASS X

#### **HINDI**

Pre board 1 और 2 के प्रश्न पत्र हिंदी की कॉपी में हल करें  
CBSE सेंपल पेपर से सभी अभ्यास करें  
व्याकरण का अभ्यास सेंपल पेपर से करें

#### **ENGLISH**

Class 10 – English Winter break Homework

1) Portfolio Submission:

Submit your English portfolio if it has not been submitted yet. Ensure it is complete and well-maintained.

2) Reading Section Practice:

Practice four unseen passages (two factual and two discursive) in the notebook.

3) Pre-Board Question paper I, II

Do Pre-Board Paper 1 and Paper 2 in the notebook.

4) Practice 5 sample papers in notebook

#### **MATHS**

Solve 5 sample papers (2 standard and 3 Basic) provided by the subject teacher

Complete and submit your activity file, notebook and portfolio.

Solve Question paper of first preboard and second preboard in your notebook.

#### **SST**

1. Solve half yearly question paper .
2. Solve pre board shift 1-2 question paper.
3. Solve CBSE sample paper .
4. Solve 2 more sample papers in class work note book.

#### **ARTIFICIAL INTELLIGENCE**

Complete portfolio

Revise all syllabus

Practice papers shared in group

## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### CLASS XI

#### HINDI

1 परियोजना कार्य

11 E

[https://docs.google.com/document/d/1k70HRwrKumL4\\_y2LCee9XYavD6PtWQOO/edit?usp=drivesdk&ouid=102708806953088225469&rtpof=true&sd=true](https://docs.google.com/document/d/1k70HRwrKumL4_y2LCee9XYavD6PtWQOO/edit?usp=drivesdk&ouid=102708806953088225469&rtpof=true&sd=true)

11 F

<https://docs.google.com/document/d/1pNVCeKKhMptQKu348f6ob9a56n5o8fQU/edit?usp=drivesdk&ouid=102708806953088225469&rtpof=true&sd=true>

11 G

<https://docs.google.com/document/d/1F3curTZUBMI9BNEkp5e9C5O-p5gMLmWV/edit?usp=drivesdk&ouid=102708806953088225469&rtpof=true&sd=true>

दिए गए लिंक पर जाकर सभी बच्चे अपने नाम के आगे लिखे परियोजना कार्य को निर्धारित समय पर पूर्ण करके जमा करना है।

2- अपने पसंदीदा साहित्यकार की पाँच रचनाओं का अध्ययन करके उसका सारांश 50 शब्दों में लिखना है ।

3- बिजली विभाग में 'डाटा आपरेटर' पद के लिए एक आवेदन पत्र के साथ स्ववृत्त(बायोडाटा) लिखो।

4- विद्यालय में नववर्ष पर हुए कार्यक्रम का एक प्रेस विज्ञप्ति तैयार करें।

#### ENGLISH

Dear students

As you are going to have PT 2 after the vacation so do the following assignments as revision for it.

1. Speech Writing

Topic: "The Role of Technology in Modern Education"

• Instructions:

- Write a speech of approximately 300-350 words.
- Ensure the speech has a clear introduction, body, and conclusion.
- Highlight both the positive and negative impacts of technology in education.
- Use relevant examples, statistics, and quotations where necessary.

2. Debate

Topic: "Should Social Media be Regulated?"

• Instructions:

- Write a debate script for both - (for regulation) and (against regulation) in (300-350 words for each side).
- Use logical arguments, facts, and examples to support both perspectives.
- Include rebuttals and counterarguments to strengthen each side's position.

3. Poster Making

Topic: "Save the Environment"

• Instructions:

- Design a creative poster that highlights the importance of environmental conservation.
- Include a relevant slogan or message related to saving the environment.
- Use symbols, and visuals effectively to convey the message.

- The poster can be made on A5 size sheet

#### 4. Advertisement Writing

Topic: "Advertisement for a Travel Agency Promoting a Silk Road Tour"

- Instructions:

- Use persuasive Write an advertisement for a travel agency that promotes a tour along the Silk Road.

- language to attract tourists

#### 5. Literature: Poetry and Prose Analysis

- Silk Road (by Nick Middleton)

1. Read and analyze the prose "Silk Road" from the Hornbill book.

2. Learn its short and Long Answer questions.

- Adventure (by Jayant Narlikar)

1. Write a summary (150-200 words) of the chapter "Adventure"

from Hornbill '

2. Learn its short and Long Answer questions.

- Childhood (Poem by Markus Natten):

1. Read and analyze the poem "Childhood."

2. Write an essay (200-250 words) discussing the contrast between childhood innocence and the growing complexities of life as depicted in the poem.

3. Learn its short and Long Answer questions.

- Father to Son (Poem by Elizabeth Jennings)

1. Read and analyze the poem "Father to Son."

2. Write a character sketch (150-200 words) of the father and the son, focusing on their relationship, emotional conflict, and generational differences.

3. Learn its short and Long Answer questions.

- Birth (Short Story by A. J. Cronin):

1. Summarize the story "Birth" (150-200 words).

2. Learn its short and Long Answer questions.

- Consult the 2 study material shared in the group for thorough revision

Submission Guidelines:

- Complete all assignments on separate sheets.

- Ensure that the assignments are neatly presented with proper formatting.

- Make sure to use good handwriting and proper language in written assignments.

Deadline:

Submit all homework on the first day back to school after the winter vacation

#### MATHS

▣ 2025-26 Winter break Holidays

Complete your practical file

#### POL SCIENCE

Note:- All these questions should be done in class notebook

6marker questions

- 1.Judicial activism has strengthened democracy in India but has also raised concerns about judicial overreach.

Hint- Analyse this statement with suitable examples.

- 2.“Public Interest Litigation (PIL) transformed the Indian judiciary from a passive institution to an active protector of rights.”

Hint-Examine the role of PIL in the growth of judicial activism in India.

3.How has judicial review enhanced the power of the Indian judiciary?

Hint-Discuss its significance in protecting Fundamental Rights and the federal structure.

4.Evaluate the role of the Supreme Court as the guardian of the Constitution.

Hint-How do writ jurisdiction and judicial review support this role?

5.The Emergency (1975–77) was a turning point in the evolution of judicial activism in India.

Analyse this statement.

6.Judicial activism has expanded the scope of Fundamental Rights in India.

Hint-Critically examine this with reference to PILs.

7.Do you think judicial activism has disturbed the balance among the three organs of government?

Analyse with arguments.

8.“Judicial review is implicit in the Constitution of India.”

Hint-Examine this statement and explain how courts exercise this power.

9.Analyse the contribution of landmark cases such as Hussainara Khatoon and Sunil Batra in strengthening judicial activism.

10.Explain how judicial activism has helped in enforcing social justice while also creating challenges for democratic governance.

11. “Independence of the judiciary is the cornerstone of democracy.”

Analyse this statement with reference to the role of the judiciary in protecting the rule of law.

12.Examine how an independent judiciary prevents misuse of power by the executive and legislature in a democratic system.

13.Analyse the constitutional measures adopted in India to ensure the independence of the judiciary.

14.Rule of law cannot exist without an independent judiciary.

Discuss with suitable arguments.

15.Explain how security of tenure and difficult removal procedure strengthen the independence of judges in India.

16.“Judicial independence does not mean lack of accountability.”

Analyse this statement in the Indian constitutional context.

17.How does the financial independence of the judiciary contribute to its autonomy? Analyse.

18.Analyse the role of the judiciary in protecting fundamental rights and ensuring equality before law.

19.Examine the significance of the power of contempt of court in maintaining judicial independence.

20.“Democracy can turn into dictatorship without an independent judiciary.”

Analyse this statement with examples.

21.India follows a single integrated judicial system rather than a dual system.”

Analyse how this structure ensures unity and uniformity in the administration of justice.

22.Examine the significance of the pyramidal structure of the Indian judiciary.

How does it help in effective judicial administration?

23.Analyse how the superintendence of higher courts over lower courts strengthens the judicial system in India.

24.Do you think an integrated judiciary is essential for a federal country like India?

Analyze with reasons.

25.Explain how the division of powers between the Centre and the States is carried out in India.

26.Why is India called a Union of States and not a federation?

27.Distinguish between unitary and federal features of the Indian Constitution.

28.Discuss the financial relationship between the Centre and the States in India.

29. Analyse the factors responsible for conflicts between the Centre and the States.

30. Examine the role of political parties in shaping Centre–State relations in India.

31. What are the consequences of centralisation of power in a federal system? Explain with reference to India.

32. Explain the impact of coalition politics on the federal structure of India.

33. Discuss the controversial role of Governors in the Indian federal system.

34. "The use of Article 356 has often led to conflicts between the Centre and the States." Comment with examples.

35. Explain the demands for greater autonomy by States in India.

36. Describe the process of linguistic reorganisation of States in India.

37. Discuss the Kashmir under Article 370 and the changes after 2019.

#### HISTORY

#### GEOGRAPHY

Make a list of national parks wild life bio reserve in India  
 Locate them on map of India  
 Make a list of state birds animals,trees,flowers  
 Make a list of flora and fauna of your native state  
 Make a list of fauna whom you like most  
 Learn Indian States and their caps  
 Learn world countries and their capitals  
 Complete practical file.

#### ECONOMICS

#### ACCOUNTANCY

Comprehensive project work in accountancy.  
 Complete all practical questions of the chapters covered.  
 Complete short questions of all chapters covered in the textbook.  
 Solve paper- [https://edustud.nic.in/edu/practicepaper\\_2022/11/11Accountancy\\_2022.pdf](https://edustud.nic.in/edu/practicepaper_2022/11/11Accountancy_2022.pdf)

#### BUSINESS STUDIES

Project work on new product development  
 Completion of NCERT questions of chapters covered.  
 Solve paper- [https://edustud.nic.in/edu/practicepaper\\_2022/11/11businessstudy\\_2022.pdf](https://edustud.nic.in/edu/practicepaper_2022/11/11businessstudy_2022.pdf)

#### CHEMISTRY

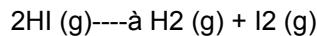
1. For an isolated system,  $\Delta U = 0$ , what will be  $\Delta S$  ?
2. For the reaction at 298 K,  $2A + B \rightarrow C$   $\Delta H = 400 \text{ kJ mol}^{-1}$  and  $\Delta S = 0.2 \text{ kJ K}^{-1} \text{ mol}^{-1}$  At what temperature will the reaction become spontaneous considering  $\Delta H$  and  $\Delta S$  to be constant over the

temperature range.

3. For the reaction,  $2 \text{Cl(g)} \rightarrow \text{Cl}_2 \text{(g)}$ , what are the signs of  $\Delta H$  and  $\Delta S$ ? 6.19 For the reaction  $2 \text{A(g)} + \text{B(g)} \rightarrow 2\text{D(g)}$   $\Delta U_0 = -10.5 \text{ kJ}$  and  $\Delta S_0 = -44.1 \text{ JK}^{-1}$ . Calculate  $\Delta G_0$  for the reaction, and predict whether the reaction may occur spontaneously.

4. At 450K,  $K_p = 2.0 \times 10^{10} \text{ bar}$  for the given reaction at equilibrium.  $2\text{SO}_2 \text{(g)} + \text{O}_2 \text{(g)} \rightarrow 2\text{SO}_3 \text{(g)}$  What is  $K_c$  at this temperature?

5. A sample of  $\text{HI(g)}$  is placed in flask at a pressure of 0.2 atm. At equilibrium the partial pressure of  $\text{HI(g)}$  is 0.04 atm. What is  $K_p$  for the given equilibrium?



6. A mixture of 1.57 mol of  $\text{N}_2$ , 1.92 mol of  $\text{H}_2$  and 8.13 mol of  $\text{NH}_3$  is introduced into a 20 L reaction vessel at 500 K. At this temperature, the equilibrium constant,  $K_c$  for the reaction  $\text{N}_2 \text{(g)} + 3\text{H}_2 \text{(g)} \rightarrow 2\text{NH}_3 \text{(g)}$  is  $1.7 \times 10^2$ . Is the reaction mixture at equilibrium? If not, what is the direction of the net reaction?

7. One mole of  $\text{H}_2\text{O}$  and one mole of  $\text{CO}$  are taken in 10 L vessel and heated to 725 K. At equilibrium 40% of water (by mass) reacts with  $\text{CO}$  according to the equation,  $\text{H}_2\text{O(g)} + \text{CO(g)} \rightleftharpoons \text{H}_2 \text{(g)} + \text{CO}_2 \text{(g)}$  Calculate the equilibrium constant for the reaction.

8. Describe the effect of : a) addition of  $\text{H}_2$  b) addition of  $\text{CH}_3\text{OH}$  c) removal of  $\text{CO}$  d) removal of  $\text{CH}_3\text{OH}$  on the equilibrium of the reaction:  $2\text{H}_2 \text{(g)} + \text{CO(g)} \rightleftharpoons \text{CH}_3\text{OH(g)}$

9. At 473 K, equilibrium constant  $K_c$  for decomposition of phosphorus pentachloride,  $\text{PCl}_5$  is  $8.3 \times 10^{-3}$ . If decomposition is depicted as,  $\text{PCl}_5 \text{(g)} \rightleftharpoons \text{PCl}_3 \text{(g)} + \text{Cl}_2 \text{(g)}$   $\Delta r H^0 = 124.0 \text{ kJ mol}^{-1}$

a) write an expression for  $K_c$  for the reaction.

b) what is the value of  $K_c$  for the reverse reaction at the same temperature ?

c) what would be the effect on  $K_c$  if (i) more  $\text{PCl}_5$  is added (ii) pressure is increased (iii) the temperature is increased ?

10. What is meant by the conjugate acid-base pair? Find the conjugate acid/base for the following

species:  $\text{HNO}_2$ ,  $\text{CN}^-$ ,  $\text{HClO}_4$ ,  $\text{F}^-$ ,  $\text{OH}^-$ ,  $\text{CO}_3^{2-}$ , and  $\text{S}^{2-}$

11. Which of the followings are Lewis acids?  $\text{H}_2\text{O}$ ,  $\text{BF}_3$ ,  $\text{H}^+$ , and  $\text{NH}_4^+$  ? What will be the conjugate bases for the Bronsted acids:  $\text{HF}$ ,  $\text{H}_2\text{SO}_4$  and  $\text{HCO}_3^-$  ?

12. Write the conjugate acids for the following Bronsted bases:  $\text{NH}_2^-$ ,  $\text{NH}_3$  and  $\text{HCOO}^-$ .

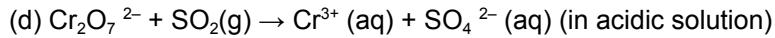
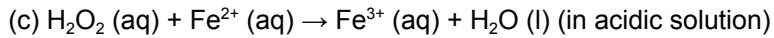
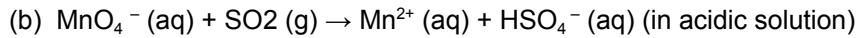
13. The species:  $\text{H}_2\text{O}$ ,  $\text{HCO}_3^-$ ,  $\text{HSO}_4^-$  and  $\text{NH}_3$  can act both as Brönsted acids and bases. For each case give the corresponding conjugate acid and base.

14. Classify the following species into Lewis acids and Lewis bases and show how these act as Lewis acid/base: (a)  $\text{OH}^-$  (b)  $\text{F}^-$  (c)  $\text{H}^+$  (d)  $\text{BCl}_3$ .

15. The concentration of hydrogen ion in a sample of soft drink is  $3.8 \times 10^{-3}$  M. what is its pH?

16. The pH of a sample of vinegar is 3.76. Calculate the concentration of hydrogen ion in it.

17. Balance the following redox reactions by ion – electron method and oxidation no method



18. What are hybridisation states of each carbon atom in the following compounds ?  $\text{CH}_2=\text{C=O}$ ,  $\text{CH}_3\text{CH}=\text{CH}_2$ ,  $(\text{CH}_3)_2\text{CO}$ ,  $\text{CH}_2=\text{CHCN}$ ,  $\text{C}_6\text{H}_6$

19. Indicate the  $\sigma$  and  $\pi$  bonds in the following molecules :  $\text{C}_6\text{H}_6$ ,  $\text{C}_6\text{H}_{12}$ ,  $\text{CH}_2\text{Cl}_2$ ,  $\text{CH}_2=\text{C=CH}_2$ ,  $\text{CH}_3\text{NO}_2$ ,  $\text{HCONHCH}_3$

20. Write bond line formulas for : Isopropyl alcohol, 2,3-Dimethylbutanal, Heptan-4-one.

21. Which of the following represents the correct IUPAC name for the compounds concerned ? (a) 2,2-Dimethylpentane or 2-Dimethylpentane (b) 2,4,7-Trimethyloctane or 2,5,7-Trimethyloctane (c) 2-Chloro-4-methylpentane or 4-Chloro-2-methylpentane (d) But-3-yn-1-ol or But-4-ol-1-yne.

22. Draw formulas for the first five members of each homologous series beginning with the following compounds. (a) H-COOH (b) CH<sub>3</sub>COCH<sub>3</sub> (c) H-CH=CH<sub>2</sub>

23. Give condensed and bond line structural formulas and identify the functional group(s) present, if any, for :

(a) 2,2,4-Trimethylpentane

(b) 2-Hydroxy-1,2,3-propanetricarboxylic acid

(c) Hexanediol

24. Write the basic principle of following methods of purification. Mention one example of each.

(a) Fractional distillation

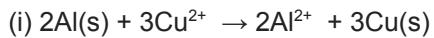
(b) Steam distillation

(c) Vacuum distillation

(d) Differential extraction

(e) Sublimation

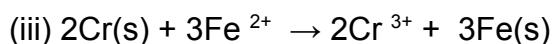
25. Represent cell and Calculate  $E^\circ_{\text{cell}}$  for the following reactions at 298 K. Predict whether given reactions are possible or not?



Given:  $E^\circ \text{ Al}^{3+} / \text{Al} = -1.66 \text{ V}$  and  $E^\circ \text{ Cu}^{2+} / \text{Cu} = 0.34 \text{ V}$



Given:  $E^\circ \text{ Sn}^{2+} / \text{Sn} = -0.136 \text{ V}$  and  $E^\circ \text{ Ag}^+ / \text{Ag} = 0.799 \text{ V}$



$E^\circ (\text{Cr}^{3+} / \text{Cr}) = -0.74 \text{ V}$   $E^\circ (\text{Fe}^{2+} / \text{Fe}) = -0.44 \text{ V}$

26. Write the chemistry of Lassaigne's test of Nitrogen, Halogen and sulphur. Why is Sodium extract prepared in above tests.

27. If 0.2g of an organic compound containing carbon, hydrogen and oxygen on combustion, yielded 0.147g carbon dioxide and 0.12g water. Calculate the percentage of carbon, hydrogen and oxygen in the substance?

28. In the Carius method of estimation of halogen, 0.15g of an organic compound gave 0.12g of AgBr. What is the percentage of bromine in the compound?

29. In Duma's method 0.52g of an organic compound on combustion gave 68.6 mL N<sub>2</sub> at 27 °C and 756 mm pressure. Calculate the percentage of nitrogen in the compound?

30. 0.4037 g of an organic substance containing sulfur was heated, producing 0.1963 g of BaSO<sub>4</sub>. Calculate the percentage of S.

## PHYSICS

Note::All work to be done in class work notebook.

1. Variation of viscosity with temperature and pressure.

2. State and derive Stokes law using dimensional analysis.

3. Define terminal velocity, find its expression. Discuss result. Draw velocity time graph.

4. Define streamline flow, turbulent flow and critical velocity.

5. What is equation of continuity?

State and prove Bernoulli's theorem. Give its 3 simple applications.

6. Define surface energy. Find its expression.

7. Define surface tension. Give applications of surface tension.

8. Discuss molecular theory of surface tension.

9. What is angle of contact?

10. Find excess pressure inside liquid drop.

11. Find excess pressure inside a soap bubble.

12. What is capillaries? Derive Ascent formula

## BIOLOGY

### WINTER BREAK HOMEWORK

CLASS: XI      SUBJECT: BIOLOGY

Write down the answers of the following questions in your note-book.

1. Give comparison between the following:

(i) C<sub>3</sub> and C<sub>4</sub> Pathway

(ii) Cyclic and non cyclic photophosphorylation

(iii) Anatomy of leaf in C<sub>3</sub> and C<sub>4</sub> plants.

2. (a) Which group of plants exhibits the two types of cells i.e. Bundle sheath cell and Mesophyll cell?  
(b) What is the first product of C3 and C4 cycle?  
(c) Which enzyme is there in bundle sheath cells and mesophyll cells?

3. (a) What conditions enable RuBisCO to function as an oxygenase. Explain the ensuing process.  
(b) Name the enzyme and process in which Ribulose 1,5- biphosphate is split into 3-phosphoglyceric acid and 2-phosphoglyceric acid?

4. List the important events and end products of the Light reaction.

5. (a) Where is NADP reductive enzyme located in the chloroplast? What is the role of this enzyme in proton gradient development?  
(b) How many molecules of ATP and NADPH are required to fix one molecule of carbon dioxide?  
(c) Does moonlight support photosynthesis?

5. (a) State the Blackmann's law of limiting factor.  
(b) How light intensity and carbon dioxide concentration affects the rate of photosynthesis?  
(c) If chlorophyll a is responsible for light reaction of photosynthesis, why do the action spectrum and absorption spectrum not overlap?

6. Give the schematic representation of an overall view of Kreb's cycle and glycolysis. What is the net gain of ATP during aerobic respiration.

7. Distinguish:  
(i) Aerobic respiration and anaerobic respiration  
(ii) Glycolysis and Fermentation  
(iii) Glycolysis and Citric acid cycle

8. What is the significance of step-wise release of energy in respiration?

9. (a) What is Respiratory quotient? What is the value of RQ for a fat molecule?  
(b) Which substrate has RQ 4 and 0.7?  
(c) What is RQ of fermentation?

10. What is amphibolic pathway? Why respiration is considered as amphibolic pathway?

11. (a) Name the mobile carriers involved in ETS.  
(b) How many high energy rich phosphate molecules are formed in glycolysis, fermentation, Kreb's cycle and ETS?

12. Explain the following terms with the help of examples taken from NCERT from different plant tissues?  
(a) Differentiation  
(b) Redifferentiation  
(c) Redifferentiation

13. (a) Define parthenocarpy. Name the plant hormone used to indicate parthenocarpy.  
(b) While eating watermelons, all of us wish it was seedless. As a plant physiologist can you suggest any method by which this can be achieved?

14. The role of Ethylene and Abscisic acid is positive and negative. Justify the statement.

15. (a) List two functions of cytokinin.  
(b) What do you understand by bolting. Which hormone causes it?  
(c) What do you mean by apical dominance? Which hormone is responsible for it?  
(d) Give one example of Plasticity in plants.  
(e) How is ethephon important?

16. Explain: Logistic growth and Arithmetic growth.

Complete the assigned work in your Bio Practical Note-book.

**COMPUTER SCIENCE**

1. Revise chapters List, Dictionary, tuple and modules.
2. Complete practical file.
3. Prepare a project that incorporates features of python studied in XI.

## WINTER BREAK HOLIDAY HOMEWORK- (2025-26)

### CLASS XII

#### HINDI

[https://drive.google.com/drive/folders/1Rhl\\_u\\_8G1pyRAwpytK0awZqBYVY9y25Md](https://drive.google.com/drive/folders/1Rhl_u_8G1pyRAwpytK0awZqBYVY9y25Md)

इस लिंक पर जाकर सभी आदर्श प्रश्न पत्र को हल करना है

#### ENGLISH

#### CHAPTER- THE LAST LESSON (10 MARKS)

Q.1-Give a brief character-sketch of M.Hamel. (5M)

Q.2- All at once the churchclock struck twelve. Then the Angelus. At the same moment the trumpets of the Prassians, returning from drill, sounded under our windows. M. Hamel stood up, very pale, in his chair. I never saw him look so tall. "My friends", said he, "I—I—" But something choked him. He could not go on: (5M)

- (a) What is an 'Angelus' ?
- (b) What did Franz listen under their windows ?
- (c) 'I never saw him look so tall'
- . What does this mean ?
- (d) Why M. Hamel couldn't speak ? What choked him ?

#### CHAPTER- MY MOTHER AT SIXTY SIX (10 MARKS)

... old  
familiar ache,  
my childhood's fear,  
but all I said was,  
see you soon,  
Amma,  
All I did was smile and smile and smile...

Q.1-: (4M)

- (a) What does the phrase, 'familiar ache' mean ?
- (b) What was the poet's childhood fear ?
- (c) What do the first two lines tell us about the poet's feeling for her mother ?
- (d) What does the repeated use of the word 'smile' mean ?

Q.2- Name the poem and the poet? (2M)

Q.3- What do the parting words of the poet and her smile signify ? (2M)

Q.4- Why are the young trees described as sprinting'? (2M)

#### CHAPTER- THE THIRD LEVEL (10 MARKS)

Q.1- What does the third level refer to? What is the significance of the third level? (2M)

Q.2- Who was Sam Wiener? Where was he disappeared and why?(3M)

Q.3- How does Charley make his description of the third level very realistic? (5M)

#### CHAPTER- LOST SPRING (10 MARKS)

Q.1- What does the title, 'Lost Spring' convey? (4M)

Q.2-Why does the author say that the bangle makers are caught in a vicious web?(4M)

Q.3- What does the writer mean when she says, 'Saheb is no longer his own master'? (2M)

#### CHAPTER- KEEPING QUIET (10 MARKS)

Q.1- Read the extract given below and answer the questions that follow:- (4M)

Now we will count to twelve

and we will all keep still.

For once on the face of the Earth

let's not speak in any language,

let's stop for one second,

and not move our arms so much.

How long does the poet want to stay still?

What does he hope to achieve by keeping quiet?

What does the poet mean by 'not move our arms so much'?

Name the poet.

Q.2- What is the exotic moment referred to in the poem, 'Keeping Quiet'? What makes it exotic?(2M)

Q.3- Read the extract given below and answer the questions that follow: (4M)

‘ It would be an exotic moment

without rush, without engines,

we would all be together

in a sudden strangeness.’

Which exotic moment is referred to in these lines?

Why would that moment be strange?

What does the poet advocate in the poem?

What does the poet mean by the word, 'engines'?

#### CHAPTER- THE TIGER KING (10MARKS)

Q.1- Who killed the 100th tiger? Why? (2M)

Q.2- What was the prediction made by astrologers when the king was born? (3M)

Q.3- Giving a bribe is an evil practice. How did the Tiger King bribe the British officer to save his kingdom? How do you view this act of his? (5M)

#### CHAPTER-DEEP WATER (10MARKS)

Q.1- What lesson do we get from the chapter deep water? (2M)

Q.2- When Douglas realised that he was sinking, how did he plan to save himself? (2M)

Q.3- Which factors led Douglas to decide in favour of YMCA pool? (2M)

Q.4- Which two frightening experiences did Douglas have in water in his childhood? (3M)

Q.5- Who is the writer of the story deep water?(1M)

#### CHAPTER- A THING OF BEAUTY (10MARKS)

Q.1- Therefore, on every morrow, are we wreathing A flowery band to bind us to the earth,  
Spite of despondence, of the inhuman dearth Of noble natures, of the gloomy days,  
Of all the unhealthy and o'er-darkened ways  
Made for our searching: yes, in spite of all,

(a)Name the poem and the poet.

(b)Why are we despondent?

(c)What removes the pall from our dark spirits?

(d) What are we doing every day? (4M)

Q.2- List the things of beauty mentioned in the poem?(2M)

Q.3- What makes human beings love life in spite of troubles and sufferings?(2M)

Q.4- What is the source of the 'endless fountain' and what is its effect?(2M)

#### CHAPTER- THE RATTRAP (10MARKS)

Q.1- The peddler was given to thievery and hegging. Why?(2M)

Q.2- Which act of the crofter surprised the peddler? Why? (2M)

Q.3- Why did the peddler derive pleasure from his idea of the world as a rattrap?(2M)

Q.4- What were the contents of the package left by the peddler as a Christmas gift for Edla Willmansson?(2M)

Q.5- Which act of the crofter surprised the peddler? Why?(2M)

#### CHAPTER- JOURNEY TO THE END OF THE EARTH (10MARKS)

Q.1- What are the indications for the future of humankind? (3M)

Q.2- Why was Tishani Doshi filled with relief and wonder when he set foot on the Antarctic continent? (3M)

Q.3- What do you think is the reason behind the success of the programme, 'Students on Ice'?(2M)

Q.4- What do you learn about Gondwana from the Chapter Journey to the End of the Earth?(2M)

#### CHAPTER- THE ENEMY (10MARKS)

Q.1- Do you think the doctor's final solution to the problem was the best possible one in the circumstances? (3M)

Q.2- What do you learn about Sadao's father from the story 'The Enemy'?(2M)

Q.3- How did Dr Sadao respond to the boy's query: "What are you going to do with me?...Are you going to hand me over?"(2M)

Q.4-What will Dr Sadao do to get rid of the man?(3M)

#### CHAPTER- INDIGO (10MARKS)

Q.1- Justify the appropriateness of the title 'Indigo' to this extract.(5M)

Q.2- What impression do you form about Gandhi on reading the chapter 'Indigo'? (3M)

Q.3- Why is Rajkumar Shukla described as being 'resolute'? (2M)

#### CHAPTER- POETS AND PANCAKES (10MARKS)

Q.1- Subbu is described as a many-sided genius. List four of his special abilities.(2M)

Q.2- Who was the English visitor to the studio?(1M)

Q.3- The author has used gentle humour to point out human foibles. Pick out instances of this to show how this serves to make the piece interesting.(3M)

Q.4- What is the example of national integration that the author refers to?(2M)

Q.5- Why is the Englishman's visit referred to as unexplained mystery? (2M)

#### CHAPTER- A ROADSIDE STAND (10MARKS)

Q.1- The little old house was out with a little new shed  
In front at the edge of the road where the traffic sped,  
A roadside stand that too pathetically pled,  
It would not be fair to say for a dole of bread,  
But for some of the money, the cash, whose flow  
supports

The flower of cities from sinking and withering faint.

Name the poem and the poet?

Where was the new shed put up? What was its purpose?

Why does the poet use the word 'pathetic'?

Explain: 'too pathetically pled'

Who are referred to as 'the flower of cities'? (5M)

Q.2- The sadness that lurks near the open window there, That waits all day in almost open prayer For the squeal of brakes, the sound of a stopping car, Of all the thousand selfish cars that pass, Just one to inquire a farmer's prices are.

Which open window is referred to? Why does sadness lurk there?  
What does the farmer pray for?  
Is the farmer's prayer ever granted? How do you know? (3M)

Q.3- Why didn't the 'polished traffic' stop at the roadside stand? (2M)

#### CHAPTER- THE INTERVIEW (10MARKS)

Yet despite the drawbacks of the interview, it is a supremely serviceable medium of communication. "These days, more than at any other time, our most vivid impressions of our contemporaries are through interviews." Denis Brian has written. "Almost everything of moment reaches us through one man asking questions of another. Because of this, the interviewer holds a position of unprecedented power and influence."

Q.1- Read the following paragraph and answer the questions that follow: (4M)

- (a) Despite the drawbacks, what is an interview ?
- (b) Through which medium, how do we get most vivid impressions of our contemporaries ?
- (c) How, according to Denis Brian, almost everything of moment reaches us ?
- (d) Because of interviews, what position does the inter-viewer hold ?

Q.2- What is the belief in some primitive cultures about being photographed? (1M)

Q.3- In which way do the celebrities take an inter-view? (1M)

Q.4- Read the following paragraph and answer the questions :-

And then I have a secret. Did you know what will happen if you eliminate the empty spaces in all the atoms ? The universe will become as big as my fist. Similarly, we have a lot of empty space in our lives. I call them interstices. Say you are coming over to my place. You are in an elevator and while you are coming up, I am waiting for you. This is an interstice, an empty space.

- (a) What secret did Umberto Eco had ?
- (b) What did Umberto Eco tell about the universe as well as fist ?
- (c) What, according to the interviewee an 'interstice' ?
- (d) What example did Umberto quote about an empty space ? (4M)

#### CHAPTER- AUNT JENNIFER'S TIGER (10MARKS)

Q.1- Read the extract given below and answer the questions : (2M)

Bright topaz denizens of a world of green.  
They do not fear the men beneath the tree;  
They pace in sleek chivalric certainty.

- a) Who are 'They'? Where are 'They'?
- b) Why are They' not afraid of men ?

Q.2- Read the extract given below and answer the questions : (4M)

Aunt Jennifer's fingers fluttering through her wool  
Find even the ivory needle hard to pull.  
The massive weight of Uncle's wedding band  
Sits heavily upon Aunt Jennifer's hand.

- a) Name the poem and the poet?
- b) What is Aunt Jennifer doing with the wool?

c) Why are her fingers fluttering?  
d) What does 'wedding band' mean?

Q.3- Why do you think Aunt Jennifer created animals that are so different from her own character? (2M)

Q.4- How do 'denizens' and 'chivalric' add to our understanding of the tigers' attitude? (2M)

#### CHAPTERS – GOING PLACES (10 MARKS)

Q.1- Why did Sophie enjoy living in a world of dreams? Describe some of her dreams? (5M)

Q.2- Why did Sophie like her brother, Geoff more than any other person? (2M)

Q.3- Did Geoff keep his promise? How do you know? (2M)

Q.4- Which country did Danny Casey play for? (1M)

#### CHAPTERS- ON THE FACE OF IT (10 MARKS)

Q.1- If you were to give a different ending to the story, 'On The Face of It' how would you end it? (3M)

Q.2- Who was Derry? What problems did he have? (3M)

Q.3- What change took place in Derry when he met Mr. Lamb? (4M)

#### CHAPTER- MEMORIES OF CHILDHOOD (10 MARKS)

Q.1- 'Why, do you think, was Zitkala-Sa so opposed to cutting of her hair? (3M)

Q.2- What does Zitkala-Sa remember about her 'first day in the land of apples'? (2M)

Q.3- Name some of the novelties and oddities in the streets that attracted Bama? (3M)

Q.4- How long would it take Bama to reach her home? (2M)

#### MATHS

Class XII winter break

Complete your practical file

#### POL SCIENCE

Solve pre board 1 & 2 question paper  
Solve shift 1 question papers  
And 10 sample papers sent in group

#### HISTORY

#### GEOGRAPHY

Prepare well for PB2  
Complete practical file  
Sample papers 2 sets given on the group  
Map practice from each topic submit on 13 jan 26

## ECONOMICS

## ACCOUNTANCY

Specific project 1&2 in accountancy  
Preparation of Pre-board 2  
Solve paper- [https://cbseacademic.nic.in/web\\_material/SQP/ClassXII\\_2024\\_25/Accountancy-SQP.pdf](https://cbseacademic.nic.in/web_material/SQP/ClassXII_2024_25/Accountancy-SQP.pdf)

## BUSINESS STUDIES

Project work on Marketing Management  
Revision of entire syllabus  
Solve paper-  
[https://cbseacademic.nic.in/web\\_material/SQP/ClassXII\\_2024\\_25/BusinessStudies-SQP.pdf](https://cbseacademic.nic.in/web_material/SQP/ClassXII_2024_25/BusinessStudies-SQP.pdf)

## CHEMISTRY

1. Solve pre board-1, pre board-2 question paper
2. Solve pre board shift-1 question paper.
3. Solve CBSE sample paper .

## PHYSICS

5. Solve half yearly question paper
6. Solve pre board shift question paper.
7. Solve CBSE sample paper .
8. Solve 2 more sample papers in class work note book.
4. Complete your practical file with project.

## BIOLOGY

### WINTER BREAK HOMEWORK

CLASS: XII      SUBJECT: BIOLOGY

1. Solve the given sample papers.
2. Solve the given Pre-Board both shifts' Question Paper.
3. Complete your bio practical file and Investigatory project.

## COMPUTER SCIENCE

1. Prepare and submit CS project
2. Practice Sample Questions shared in group.
3. Complete practical file.