

पीएम श्री केंद्रीय विद्यालय, क्रमांक 1 सागर कैंट

सत्र-2025-26

(23.12.2025 to 11.01.2026)

जबलपुर संभाग

शीतकालीन अवकाश गृहकार्य



केंद्रीय विद्यालय,: क्रमांक 1 सागर कैंट

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कक्षा:- षष्ठी विषय:- संस्कृतम्

शीतकालीन अवकाश गृहकार्यम्

१. पाठितान् पाठान् स्मरत । ।

(पढ़ाए गए पाठों को याद करो ।)

२. लोट् लट् च लकारस्य प्रयोगं कृत्वा नव- नव वाक्यानि लिखत ।

(लोट् और लट् लकार का प्रयोग करके ०९-०९ वाक्य लिखो)

३. संस्कृते १- ५० संख्या लेखनम्, स्मरणम् च।

(संस्कृत में १ से ५० तक संख्या लिखो और याद करो)

४. स्वनामस्य शब्दरूपम् लिखते ।

(अपने नाम के शब्दरूप लिखें )

५. निम्नलिखित शब्दानां संस्कृते-पर्यायम् लिखत-

(संस्कृत में पर्यायपद लिखिए)

यथा-घर = गृहम्

(i) भवन = .....

(ii) बाग् = .....

(iii) मोर = .....

(iv) कबूतर = .....

(v) केला= .....

(vi) मंदिर = .....

(vii) दुकान = .....

(viii) गेंद = .....

(ix) फूलमाला .....

(X) नारियल .....

नोट- सभी कार्य संस्कृत की कॉपी में करना है।

## शीतकालीन गृहकार्य

### कक्षा 6

#### कक्षा:- षष्ठी विषय - हिंदी

1. अपने विद्यालय के प्राचार्य को शुल्क मुक्ति हेतु एक प्रार्थना पत्र लिखो।
2. अपने मित्र को योग का महत्व बताते हुए एक पत्र लिखो।
3. निम्न विषय पर अनुच्छेद लिखो।

खेलों का महत्व

मेरा प्रिय पालतू जानवर

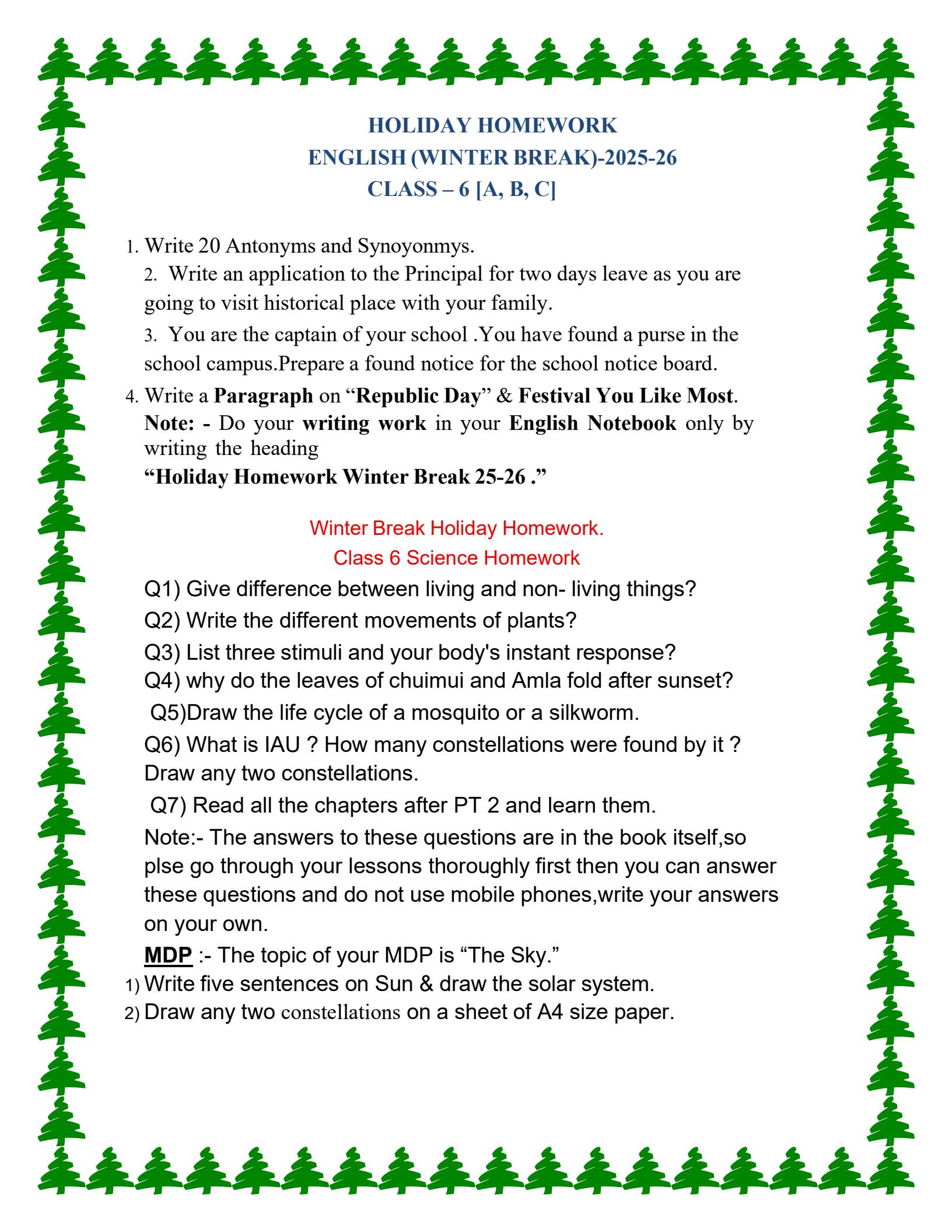
4. अपने नए मित्र से परिचय लेते हुए एक संवाद लिखो।
5. किन्हीं 10 शब्दों के तीन तीन तुकांत शब्द Rhyming Words लिखो।
6. माता, मित्र, चंद्रमा, सूर्य, घर, हवा, पानी, बादल, समुद्र, कमल और धरती के चार चार पर्यायवाची लिखो।

#### MDP TOPIC – आकाश

निम्न प्रश्न आधारित MDP तैयार कर लें।

1. आकाश को परिभाषित कीजिए।
2. आकाश का वास्तविक रंग नीला क्यों है? प्रकाश के प्रकीर्णन की प्रक्रिया को समझाइए।
3. तारों से भरा ब्रह्मांड होने के बावजूद रात का आकाश काला क्यों दिखाई देता है?
4. आकाश में सूर्य, चंद्रमा और तारों की गति का वर्णन करें।
5. आकाश में दिखाई देने वाली विभिन्न खगोलीय घटनाओं (जैसे इंद्रधनुष, उल्कापात) पर एक निबंध लिखें।

यह MDP अलग से फाइल में तैयार करना है। सभी विषय का MDP एक ही फाइल में तैयार करें।



## HOLIDAY HOMEWORK

### ENGLISH (WINTER BREAK)-2025-26

#### CLASS – 6 [A, B, C]

1. Write 20 Antonyms and Synonyms.
2. Write an application to the Principal for two days leave as you are going to visit historical place with your family.
3. You are the captain of your school. You have found a purse in the school campus. Prepare a found notice for the school notice board.
4. Write a **Paragraph** on “**Republic Day**” & **Festival You Like Most**.

**Note:** - Do your **writing work** in your **English Notebook** only by writing the heading

**“Holiday Homework Winter Break 25-26 .”**

#### Winter Break Holiday Homework.

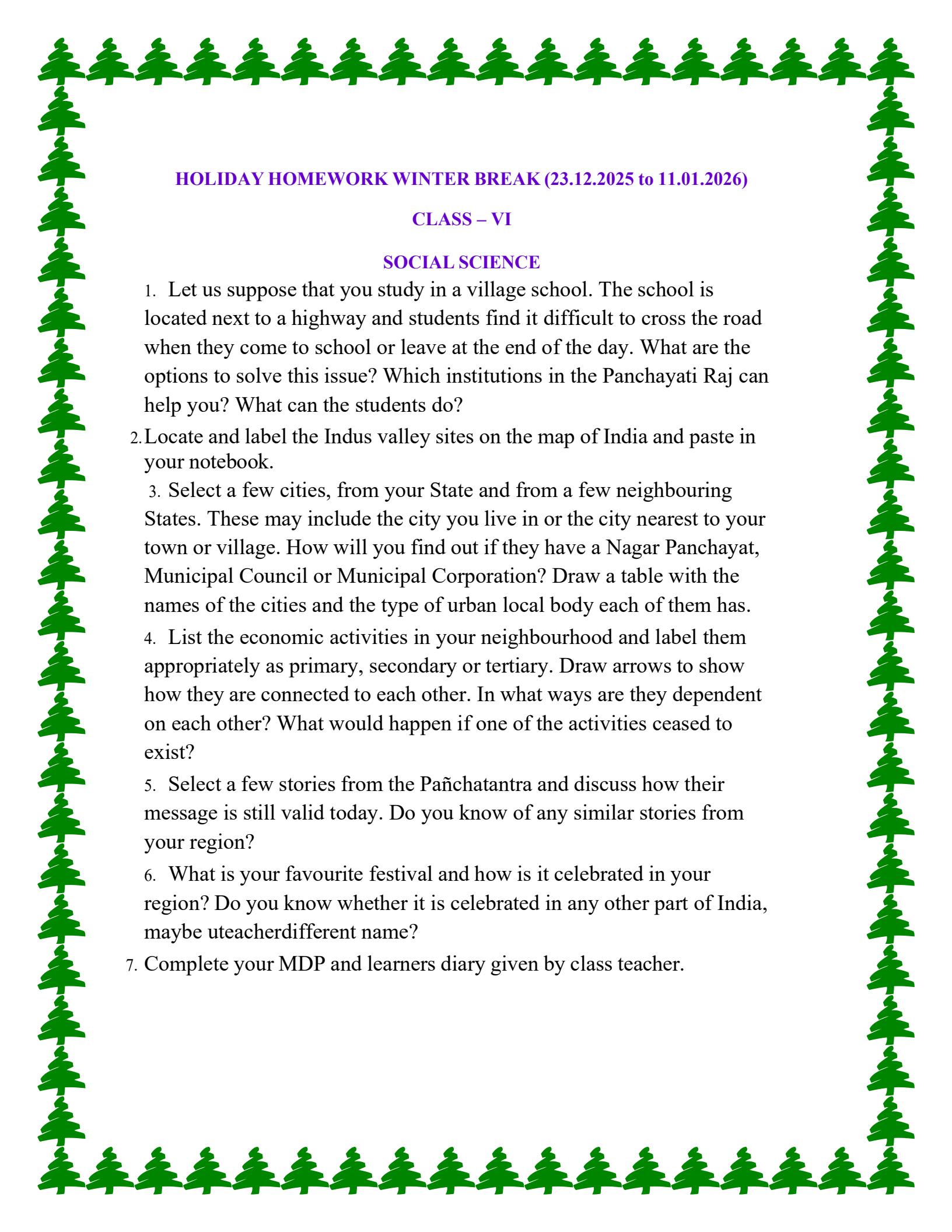
#### Class 6 Science Homework

- Q1) Give difference between living and non- living things?
- Q2) Write the different movements of plants?
- Q3) List three stimuli and your body's instant response?
- Q4) why do the leaves of chumui and Amla fold after sunset?
- Q5) Draw the life cycle of a mosquito or a silkworm.
- Q6) What is IAU ? How many constellations were found by it ?  
Draw any two constellations.
- Q7) Read all the chapters after PT 2 and learn them.

**Note:-** The answers to these questions are in the book itself, so please go through your lessons thoroughly first then you can answer these questions and do not use mobile phones, write your answers on your own.

**MDP** :- The topic of your MDP is “The Sky.”

- 1) Write five sentences on Sun & draw the solar system.
- 2) Draw any two constellations on a sheet of A4 size paper.

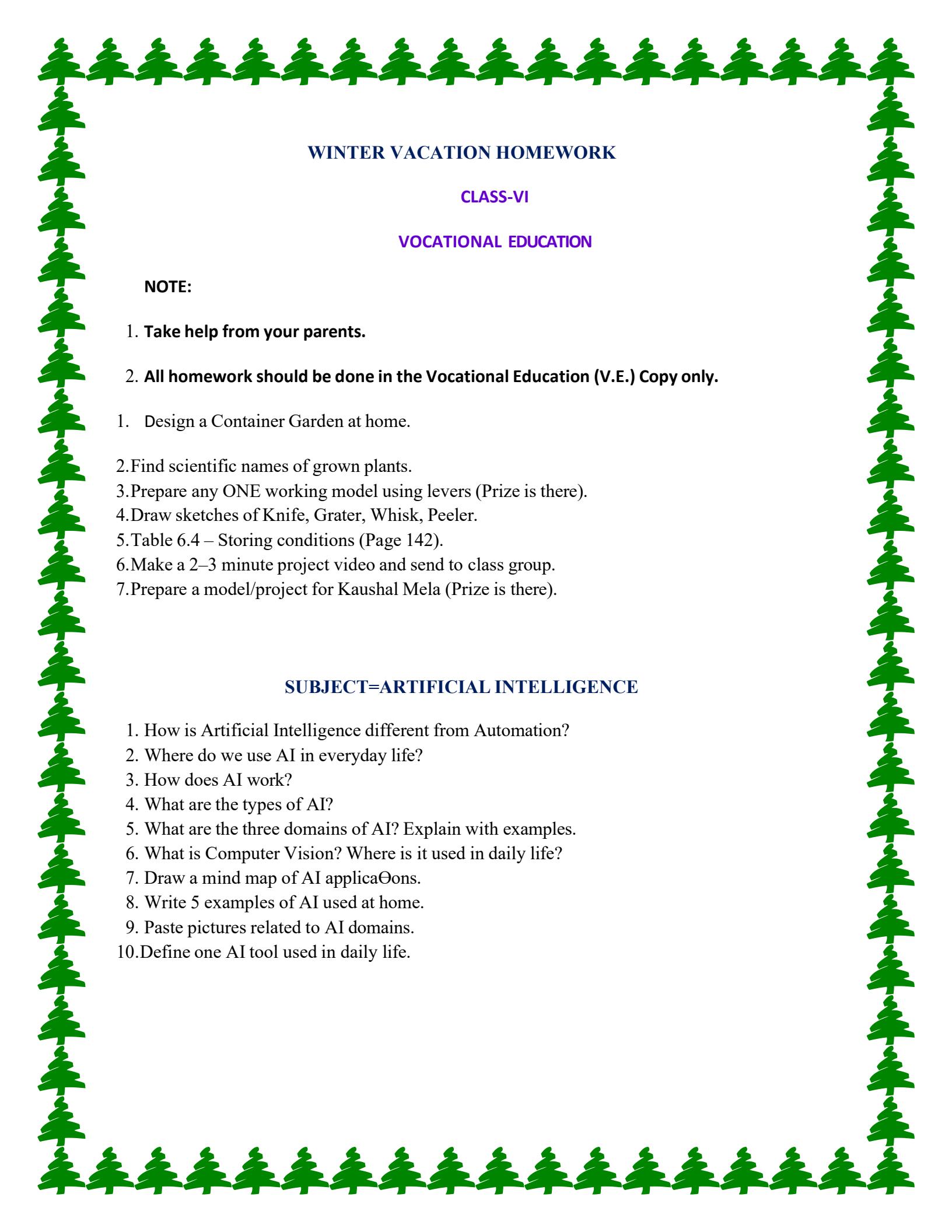


## **HOLIDAY HOMEWORK WINTER BREAK (23.12.2025 to 11.01.2026)**

### **CLASS – VI**

#### **SOCIAL SCIENCE**

1. Let us suppose that you study in a village school. The school is located next to a highway and students find it difficult to cross the road when they come to school or leave at the end of the day. What are the options to solve this issue? Which institutions in the Panchayati Raj can help you? What can the students do?
2. Locate and label the Indus valley sites on the map of India and paste in your notebook.
3. Select a few cities, from your State and from a few neighbouring States. These may include the city you live in or the city nearest to your town or village. How will you find out if they have a Nagar Panchayat, Municipal Council or Municipal Corporation? Draw a table with the names of the cities and the type of urban local body each of them has.
4. List the economic activities in your neighbourhood and label them appropriately as primary, secondary or tertiary. Draw arrows to show how they are connected to each other. In what ways are they dependent on each other? What would happen if one of the activities ceased to exist?
5. Select a few stories from the Pañchatantra and discuss how their message is still valid today. Do you know of any similar stories from your region?
6. What is your favourite festival and how is it celebrated in your region? Do you know whether it is celebrated in any other part of India, maybe under a different name?
7. Complete your MDP and learners diary given by class teacher.



## WINTER VACATION HOMEWORK

CLASS-VI

### VOCATIONAL EDUCATION

**NOTE:**

1. Take help from your parents.
2. All homework should be done in the Vocational Education (V.E.) Copy only.

1. Design a Container Garden at home.
2. Find scientific names of grown plants.
3. Prepare any ONE working model using levers (Prize is there).
4. Draw sketches of Knife, Grater, Whisk, Peeler.
5. Table 6.4 – Storing conditions (Page 142).
6. Make a 2–3 minute project video and send to class group.
7. Prepare a model/project for Kaushal Mela (Prize is there).

### SUBJECT=ARTIFICIAL INTELLIGENCE

1. How is Artificial Intelligence different from Automation?
2. Where do we use AI in everyday life?
3. How does AI work?
4. What are the types of AI?
5. What are the three domains of AI? Explain with examples.
6. What is Computer Vision? Where is it used in daily life?
7. Draw a mind map of AI applications.
8. Write 5 examples of AI used at home.
9. Paste pictures related to AI domains.
10. Define one AI tool used in daily life.

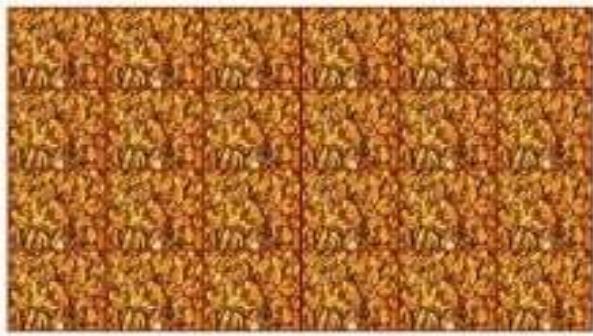
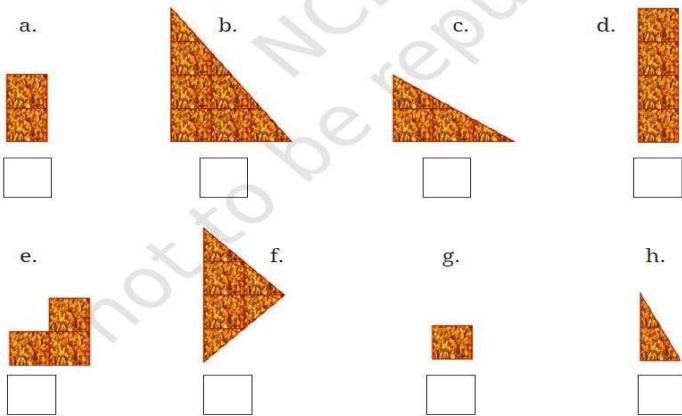
## PM SHRI KENDRIYA VIDYALAYA NO.1 SAGAR WINTER BREAK HW

2025-26

### CLASS-VI MATHS

**A.ACTIVITY:** Do given activities in Class work copy using color pen/pencil

1. Draw a picture to show how much each child gets when 2 *rotis* are shared equally by 4 children.
2. The figures below show different fractional units of a whole chikki. How much of a whole chikki is each piece?



A whole chikki

**B. LEARNER'S DIARY :** Prepare a learner's diary given by the class teacher

**C. MDP :** Prepare a Multidisciplinary Project given by subject teacher's.

**D. ASSIGNMENT:**

1. Learn Table from 2 to 20.
2. Name the three sided regular polygon.
3. Name the four sided regular polygon.
4. Name the five sided regular polygon.
5. Perimeter of an equilateral triangle = ....  $\times$  length of a side.
6. Perimeter of a five sided regular polygon = ....  $\times$  length of a side.
7. Perimeter of a six sided regular polygon = ....  $\times$  length of a side.
8. The sum of the lengths of all sides of a closed plane figure is called
9. A rectangle ABCD has length and breadth 12 cm and 8 cm, respectively.  
What is its perimeter?
10. Perimeter of a rectangle = .....
11. 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?
12. Perimeter of a square = ....  $\times$  length of a side.
13. A triangle is having three sides of lengths 4 cm, 5 cm and 7 cm. Find its perimeter.
14. Perimeter of a triangle = sum of the lengths of its .....sides.
15. 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.

## Multi-Disciplinary Project (Term-02): Project-Jal Shakti (Water Power)

**Theme:** Project-Jal Shakti (Water: Importance, Sources, and Conservation) **Grade Level:** 6 (Based on New NCERT Curriculum)

**Objective:** To help students understand the crucial role of water, its different sources, the water cycle, and practical methods of conservation through interdisciplinary learning.

### Mathematics (Maths)

Questions align with Grade 6 NCERT topics: **Prime Time (Numbers), Fractions, The Other Side of Zero (Integers), and Data Handling.**

**Prime Time (Prime/Composite Numbers):** The number of days a city received rain in a month is **23**. Is this number a

Prime or a Composite number? Explain your answer with the definition.

**Fractions:** A village has a water tank with a capacity of 5000 litres. If  $\frac{5}{3}$  of the tank is full, how many **litres of water** does it contain?

**Data Handling:** A survey on water usage in four houses (A, B, C, D) showed the following daily consumption (in litres): 150, 120, 180, 130. Draw a **bar graph** to represent this data and identify the house with the **mean** water consumption.

### Science

Questions align with Grade 6 NCERT topics: **Water, Water Cycle, and Components of Environment.**

**Water Cycle:** Distinguish between **evaporation** and **condensation** with respect to the water cycle. Give one common observation from daily life for each process.

**Sources of Water:** Name any **three natural sources** of water mentioned in your chapter. Explain why only a small fraction of the total water on Earth is available as **freshwater**.

**Water Conservation:** Explain the method of **Rainwater Harvesting** as a way to conserve water. How does this technique help to recharge **groundwater**?

### Hindi

Questions align with Grade 6 NCERT topics: **Vasant (Reading, Grammar), and Creative Writing.**

1. **Reading Comprehension/Vachan Badlo (Number Change):** निम्नलिखित शब्दों के वचन बदलकर लिखिए:

(i) (ii) बूँद (iii) समस्या। (Change the number of the following words: (i) river, (ii) drop, (iii) problem.)

2. **Creative Writing:** यदद आप एक जि की बूँद होते, तो अपि सफर के से तय करते? इस यात्रा को पाँच वाक्यों में लिखिए। (If you were a drop of water, how would you complete your journey? Write this journey in five sentences.)

3. **Vyakaran (Adjective/Visheshan):** 'जि' शब्द के लिए ती उपयुक्त ववशेषण (adjectives) लिखिए जो उसकी शुद्धता, मात्रा या स्थिति को दर्शाते हैं। (Write three suitable adjectives for the word 'Jal' (water) that describe its purity, quantity, or state.)

## **SANSKRIT**

Questions align with Grade 6 NCERT topics: Shabd Roopa (Nouns), Dhatu Roopa (Verbs), and simple sentence construction.

1. Simple Sentence Formation: संस्कृत में 'जि' (Water), 'जीविम' (Life) और 'अस्स्त' (Is) शब्दों का प्रयोग करके एक सरि वाक्य बिलाइए। (Form a simple sentence in Sanskrit using the words 'Jal', 'Jeevanam', and 'Asti'.)

2. Shabd Roopa (Nouns): 'जि' शब्द के लिए तीनों वचनों (एकवचि, द्विवचि, बहुवचि) में प्रिमा ववभस्क्त का रूप लिखिए। (Write the Nominative case forms of the word 'Jal' in all three numbers (singular, dual, plural).)

3. Dhatu Roopa (Verbs): 'वपब' (पीड़िता/To Drink) धातुका प्रिटिकार (Present Tense) में प्रिम पुरुष एकवचन का रूप लिखिए। इस क्रिया का प्रयोग करते हुए एक वाक्य बिलाइए। (Write the present tense form of the root 'वपब' in the first-person singular. Construct a sentence using this verb.)

## **English**

Questions align with Grade 6 NCERT topics: **Grammar (Tenses, Conjunctions), Vocabulary, and Writing Skills.**

**Grammar (Conjunctions):** Complete the following sentence using the correct conjunction (**because** or **so**): "We must conserve water, it is a limited resource."

**Vocabulary/Proverb:** Water is precious. Give one **proverb** or **slogan** related to water conservation and explain its meaning in a single sentence.

**Writing Skills (Descriptive Paragraph):** Write a short paragraph (10-12 sentences) describing the journey of a raindrop from the cloud back to the river. Use simple present or simple past tense.

## **Social Science (SST)**

Questions align with Grade 6 NCERT topics: **Geography (Environment, Landforms and Life), and Civics (Local Governance).**

**Geography (Environment):** How do **mountains** and **glaciers** play a vital role as a source of freshwater for the **plains**? Relate this to the formation of major rivers.

**Civics (Local Governance):** In a village or a town, which local government body is primarily responsible for ensuring a clean and adequate **supply of drinking water** to all citizens?

**Geography (Human Interaction):** Explain the difference between a **flood** and a **drought**. Give one example of how each natural event (flood or drought) negatively impacts the life of a farmer.

## **Art Education**

Questions align with Grade 6 NCERT topics: **Visual Arts (Elements of Art), and Creative Expression.**

**Visual Arts (Colour Mixing):** Using only the **primary colours** (Red, Yellow, Blue), demonstrate how you would mix a colour that represents **clean water** and a colour that represents **polluted water**. Explain your colour choice.

**Creative Expression (Sketching):** Draw a simple, clear **diagram or symbol** that represents "Jal Shakti" (Water Power/Conservation). Use basic geometric shapes and lines to make it easy to understand.

**Visual Arts (Texture/Pattern):** Create two different **patterns** (one smooth and one rough) using pencil shading or lines, to represent the **surface of a calm lake** and the **surface of a dry, cracked riverbed** respectively.

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## कक्षा सप्तमी

## विषय- हिंदी

- 1- पांच पृष्ठ सुलेख
- 2- पाठ 5,6,7 के सभी शब्दार्थ
- 3- पाठ 5,6,7 के मिलकर करें मिलान वाले प्रश्न
- 4- शीत कालीन अवकाश आपने कैसे बिताया? एक अनुच्छेद लिखें।
- 5- पुस्तक पढ़ने का महत्व बताते हुए अपने छोटे भाई को पत्र लिखिए।

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### Winter Break Homework & Project – Mathematics (Class VII)

#### PART A: WRITTEN HOMEWORK

##### 1. Integers

- Solve:
  - $-15 + 27$
  - $-36 \div 6$
  - $(-8) \times 7$
- Write 3 real-life situations where integers are used.

##### 2. Fractions & Decimals

- Convert:
  - $3/5$  into decimal
  - $0.75$  into fraction
- Solve:
  - $2 \frac{1}{4} + 1 \frac{3}{8}$
  - $5.6 - 2.75$

##### 3. Lines and Angles

- Define:
- Parallel lines
- Transversal
- Draw 3 suitable diagrams and find missing angles.

##### 4. Mensuration

- Find the area of:
  - A parallelogram with base 10 cm and height 6 cm
  - A triangle with base 8 cm and height 5 cm

#### PART B: MATHEMATICS PROJECT (ANY ONE)

Project 1: Math Project

- Identify 5 objects showing angles, triangles, or parallel lines.
- Draw or paste pictures.
- Label mathematical terms.

Project 2: Data Handling Project

- Collect data of favourite sports of 15 students.
- Draw a bar graph.
- Write 3 observations.

Project 3: Fractions & Decimals in Daily Life

- Show usage of fractions/decimals in daily life.
- Use pictures and examples.
- Write 5 lines on importance.

**PROJECT GUIDELINES**

- Use A4 sheets or scrapbook
- Neat handwriting and creativity
- Cover page compulsory

**ASSESSMENT RUBRIC (20 MARKS)**

- Neatness & Presentation – 5 marks
- Mathematical Accuracy – 5 marks
- Graphs/Diagrams – 5 marks
- Creativity & Effort – 5 marks

**WINTER VACATION HOMEWORK SUBJECT=ARTIFICIAL  
INTELLIGENCE CLASS=VII**

1. What are emerging frontiers in Artificial Intelligence?
2. Write any two applications of Natural Language Processing.
3. Describe different domains of Artificial Intelligence.
4. Explain Natural Language Processing and its applications.
5. Discuss applications of statistical data in real life.
6. Explain Artificial Intelligence innovations and their impact on societal sustainability.
7. What are Sustainable Development Goals (SDGs)? Explain their importance.
8. Explain system maps and their purpose.
9. Identify one real-life example where AI supports sustainability.
10. Create a simple system map for any societal problem (like pollution or waste management).
11. Write five points explaining how AI can help achieve SDGs.

## HOLIDAY HOMEWORK

### ENGLISH (WINTER BREAK)-2025-26

#### CLASS - 7 [A, B, C]

1. Write 20 Idioms with their meanings and sentences.
2. Write a letter to your brother/sister to congratulate him/her on his/her success in Annual Sports Day.
3. Write a Bio-sketch of **Stephen Hawking**.
4. Write a Paragraph on “**Republic Day**” & “**My Aim in Life**”.

**Note:** - Do your writing work in your **English Notebook** only by writing the heading “**Holiday Homework Winter Break 25-26**”.

विषय:- संस्कृत

शीतकालीन अवकाश गृहकार्यम्

१. पाठितान् पाठान् स्मरत।

(पढ़ाए गए पाठों को याद करो।)

२. प्रतिलिपारस्य प्रयोगं कृत्वा पञ्चचत्वारिंशत् वाक्यानि लिखत।

(प्रत्येक लिपार का प्रयोग करके 45 वाक्य लिखो।)

३. संस्कृते १- 100 संख्या लेखनम्, स्मरणम् च।

(संस्कृत में १ से 100 तक संख्या लिखो और याद करो)

४. स्वनामस्य शब्दरूपम् लिखते ।

(अपने नाम के शब्दरूप लिखें )

५. शरीरस्य अङ्गानि स्फोरणपत्रे सचित्र निर्माणयतु।

(चार्ट पेपर में शरीर के अंगों का नाम चित्र बनाओ।)

नोट-प्रश्न चार को छोड़कर सभी कार्य संस्कृत की कॉपी में करना है।

### CLASS - VII

#### VOCATIONAL EDUCATION

##### NOTE:

1. Take help from your parents.
2. All homework should be done in the Vocational Education (V.E.) Copy only.

### CLASS – 7

1. Activity 3: Visit to a Hospital / PHC / CHC. (Page 145–147)
2. Activity 4: Create a First-Aid Kit.
3. Make a 2–3 minute project video and send to class group. (Prize is there)
4. Prepare an AI-based image project using Google Teachable Machine.
5. Prepare a Bird Nest or Bird Feeder.

## **SUBJECT-SCIENCE**

Q.1 What are the good practices for maintaining oral hygiene ?Try to gather information on the same from books/newspapers/conversation with elders  
.Prepare a report.

Q.2 Find out different ways to maintain a healthy digestive system  
.Suggest some food items that help to maintain good digestive health. Make a report and present it in class.

Q.3 Using coloured clay a 3-D model of the digestive system and label all parts of the digestive system using black paper strips.

Q.4 What is air quality and AQI ? Find out the effect of air quality on the respiratory system of people working in various fields -farmers, factory workers, or street vendors.

Q.5 Make a Kaleidoscope .(given in page no.164 text book curiosity)

Q.6 Read chapter 10 and 11.

## **HOLIDAY HOMEWORK WINTER BREAK**

### **CLASS – VII SOCIAL SCIENCE**

1. List of sacred side in your region enquire into why they are considered sacred are there stories connected with the sacred places write is short essay of 150 words.
2. From the various Sacred sites of India select two of your choice and create a project explaining their significance. cr
3. Visit a local "Weekly Market" (Haaat) and a "Shopping Mall." Compare the price of a basic item (like a cotton T-shirt or 1kg of potatoes). Create a Table in your notebook about type of market, Price of Item , Variety Available .
4. Write the Preamble of India on the left side of your notebook page. On the right side, pick 5 key words (e.g., *Sovereign, Socialist, Secular, Democratic, Republic*).
5. Imagine you are a member of a mini-Constituent Assembly for your class. Create a "Rule Book" for your classroom in your notebook. List 5 Fundamental Rules (e.g., "Every student has the right to ask questions") and 5 Fundamental Duties (e.g., "Every student must keep their desk clean").
6. Complete your MDP and learner's diary given by class teacher.

**PM SHRI KENDRIYA VIDYALAYA NO.1 SAGAR**  
**WINTER BREAK HW 2025-26**

**कक्षा: अष्टमी विषय:- संस्कृतम्**  
**शीतकालीन अवकाश गृहकार्यम्**

१. पाठितान् पाठान् स्मरत।  
(पढ़ाए गए पाठों को याद करो।)
२. प्रतिलिपारस्य प्रयोगं कृत्वा पञ्चचत्वारिंशत् वाक्यानि लिखत।  
(प्रत्येक लकार का प्रयोग करके 45 वाक्य लिखो। )
३. संस्कृते 1- 100 संख्या लेखनम्, स्मरणम् च।  
(संस्कृत में 1 से 100 तक संख्या लिखो और याद करो)
४. तत्, एतत् शब्दयोः शब्दरूपाणि त्रिषु लिङ्गेषु लिखत ।  
(तत्, एतत् शब्दो के शब्दरूप तीनों लिङ्गों में लिखे । )
५. अव्ययानां प्रयोगं कृत्वा 10 वाक्यानि लिखत।  
(अव्यय का प्रयोग करके 10 वाक्य लिखो।)

नोट-सभी कार्य संस्कृत की कॉपी में करना है ।

**PM SHRI KENDRIYA VIDYALAYA NO.1 SAGAR WINTER BREAK**  
**HW 2025-26**  
**CLASS-VIII MATHS**

**A.ACTIVITY:** Do given activities in Class work copy using colour pen/pencil

1. Make a venn diagram which shows the relationship between square rectangle and parallelogram
2. Make a venn diagram which shows the relationship between multiples of 3, 6 and 36

**B. LEARNER'S DIARY** : Prepare a learner's diary given by the class teacher

**C. MDP :** Prepare a Multidisciplinary Project given by subject teacher's.

**D. ASSIGNMENT:**

1. Learn Table from 2 to 20.
2. Draw a rhombus NUTS such that one side is 4cm and  $m \angle N = 75^\circ$
3. The four angles of a quadrilateral are in the ration 3:5:7:9. Find the angles.
4. ABCD is a parallelogram in which  $\angle A = 110$ . Find the measures of the angles B,C, D respectively.
5. Find the measure of all the angles of the quadrilateral obtained by joining two equilateral triangles with sides 5cm. Name the quadrilateral formed and write a property that make it different from square.
6. Is it possible to construct a quadrilateral with three angles equal to  $90^\circ$  and the fourth angle not equal to  $90^\circ$ ? Justify your answer why and why not?
7. A shopkeeper gives lucky draw coupons numbered 234, 345 and 456 to three customers. By using divisibility rules, check which of these numbers is divisible by 9. (Show working)
8. The sum of 4 consecutive numbers is 30, what are these numbers.
9. Find three consecutive numbers such that the first number is a multiple of 2, the second number is a multiple of 3, and the third number is a multiple of 4. Are there more such numbers? How often do they occur?
10. A railway ticket number is 5483.

The checker uses digital roots to quickly check divisibility.

i.	Find the digital root of 5483.
ii.	Using the digital root, check whether 5483 is divisible by 9.

**VOCATIONAL EDUCATION  
WINTER BREAK HOLIDAYS HOMEWORK  
SESSION 2025–2026**

**NOTE:**

1. Take help from your parents.
2. All homework should be done in the Vocational Education (V.E.) Copy only.

**CLASS – 8**

1. Activity 2: Growing Microgreens (Page 13).
2. Make a 2–3 minute project video and send to class group. (Prize is there)
3. Prepare a model/project for Kaushal Mela (Prize is there).
4. Electrical & Electronic Components (Page 86–88).
5. Activity 2: Interview with Water Supply Dept. official (Page 117–118).

**CLASS - 8  
SUBJECT-SCIENCE**

- Q1) Read Chapters 10,11 and 12 thoroughly.
- Q2) Write and learn all the definitions of light ,mirrors and lenses. Q3) Write and learn two laws of reflection and refraction.
- Q3) Observe the night sky for 15 days and draw the different phases of Moon. Also learn the different phases of moon.
- Q4) Explain the terms
  - a. habitat
  - b. Ecosystem
  - c. Biotic components.
  - d. Abiotic component
  - e. ,Food chains
  - f. Food webs
- 7) Trophic levels Project work:- Make any one of these :-
  - a. Make a kaleidoscope of mirrors,beads and bangles .
  - b. A periscope using mirrors.
  - c. A pinhole camera.
  - d. A chart showing food chain or a food web

**HOLIDAY HOMEWORK ENGLISH (WINTER BREAK)-2025-26  
CLASS – 8 [A, B, C]**

1. Write **20 Proverbs** with meaning and example.
2. Write a Bio-sketch of ‘**Swami Vivekananda**’.
3. Write a Diary Entry about your experiences of **Hill Station Visit**.
4. Write an essay on “**Women Empowerment**”.

**Note:** - Do your **writing work** in your **English Notebook** only by writing the heading “**Holiday Homework Winter Break 25-26.**”

**CLASS – VIII**  
**SUBJECT-SOCIAL SCIENCE**

**Q.1** Try to track the journey of a recent bill passed by the Parliament. Identify in which House it was introduced. Were there any major debates or disagreements? How long Did it take for the bill to become a law? Use newspaper Archives, government websites, and Lok Sabha debates.

**Q2.** Explore a local resistance movement (tribal, peasant, or Princely) from your state or region during the colonial period. Prepare a report or poster describing:

- What was the specific trigger, if any?
- Who led the movement?
- What were their demands?
- How did the British respond?
- How is this event remembered today (e.g., local festivals, Songs, monuments)?

**Q3.** Choose one area of Indian life, such as agriculture, education, trade, or village life. How was it affected by colonial rule? Can you find any signs of those changes still with us today? Express your ideas through a short essay, a poem, a drawing, or a painting.

**Q4.** Imagine you are a reporter in 1857. Write a brief news report on Rani Lakshmi Bai's resistance at Jhansi. Include a Timeline or storyboard showing how the rebellion began, Spread, and ended, highlighting key events and leaders.

**Q5.** Imagine an alternate history where India was never colonized by European powers. Write a short story of about 300 words exploring how India might have developed on its Own path.

(Take hint from chapter 6,4)

**Q6.** Complete your learner diary and MDP given by class Teacher

**SUBJECT=AI CLASS=VIII**

1. Explain Artificial Intelligence in your own words.
2. Write any three applications of Artificial Intelligence.
3. Differentiate between Artificial Intelligence and Automation.
4. How is Artificial Intelligence useful in education?
5. Write any four advantages of Artificial Intelligence.
6. Explain Machine Learning and its types.
7. Write a short note on the future of Artificial Intelligence.
8. Observe any AI-based application you use and explain its features.
9. Give one real-life example where Artificial Intelligence makes human work easier.
10. Draw and explain a simple diagram of an Artificial Intelligence system.

**PM SHRI KENDRIYA VIDYALAYA NO.1 SAGAR**

**WINTER BREAK HW 2025-26**

**CLASS-IX**

**CHAPTER:11**

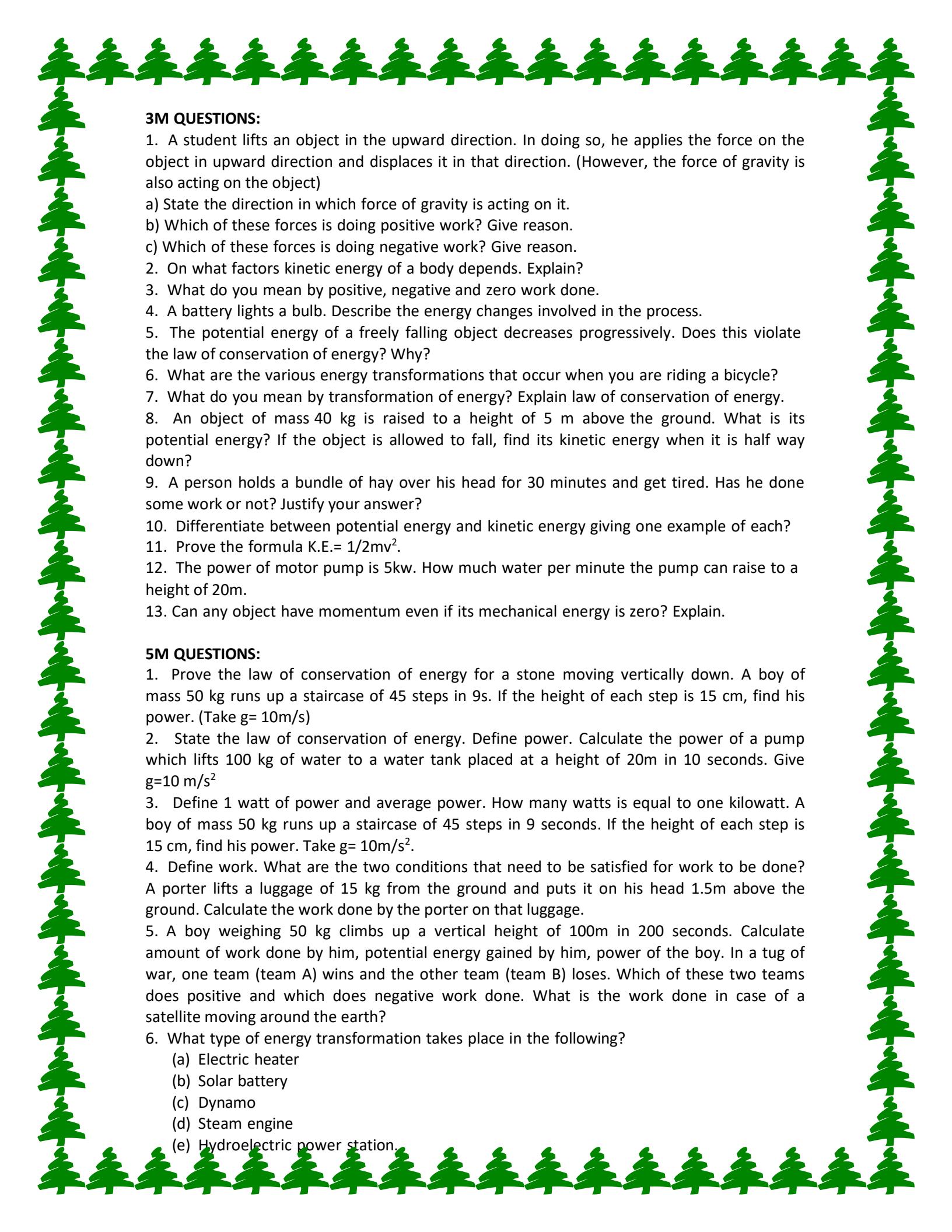
**WORK AND ENERGY**

**1 M QUESTION:**

1. Define work in terms of physics.
2. Define 1 Joule of work.
3. What is kinetic energy?
4. What is potential energy?
5. What is the formula of Kinetic energy?
6. What is the formula of Potential energy?
7. Define power and its S.I unit.
8. What do you mean by average power?
9. How many watts are in one kilowatt?
10. Give S.I unit of work and commercial unit of energy.
11. Define 1Watt of power.
12. A girl is running along a circular path with a uniform speed, how much work is done by the girl?
13. What type of energy is stored in the spring of the watch?

**2M QUESTION:**

1. Derive an expression for kinetic energy?
2. Derive an expression for potential energy?
3. An electric bulb of 60 W is used for 10h per day. Calculate the 'units' (KWh) of energy consumed in one day by the bulb.
4. A body of mass 2 kg is thrown up with a speed of 25 m/s. Find its maximum potential energy.
5. When do we say that work is done? Calculate the work done if a force of 6 N displaces a body to a distance of 7 m.
6. What are the conditions for work to be done?
7. An electric bulb of 40 W is lighted for 10 hours a day. What is the amount to be paid in a month of 30 days, if one unit of electricity costs Rs. 2.50?
8. Certain force acting on 20 kg mass changes its velocity from 5 m/s to 2m/s. Calculate the work done by the force.
9. An electric bulb is rated 10 W. What does it mean? What is the energy consumed in joules if it is used for 5 minutes?
10. A ball of mass 0.25 kg is moving horizontally with a uniform velocity of 25 m/s. Calculate the kinetic energy possessed by the ball.
11. A person holds a bundle of hay over his head for 30 min and gets tired. Has he done some work or not? Justify your answer.
12. A man of mass 62kg sums up a stair case of 65steps in 12 sec. if height of each step is 20cm, find his power consumed.
13. What is the relationship between 1kwh and Joule?



### 3M QUESTIONS:

1. A student lifts an object in the upward direction. In doing so, he applies the force on the object in upward direction and displaces it in that direction. (However, the force of gravity is also acting on the object)
  - a) State the direction in which force of gravity is acting on it.
  - b) Which of these forces is doing positive work? Give reason.
  - c) Which of these forces is doing negative work? Give reason.
2. On what factors kinetic energy of a body depends. Explain?
3. What do you mean by positive, negative and zero work done.
4. A battery lights a bulb. Describe the energy changes involved in the process.
5. The potential energy of a freely falling object decreases progressively. Does this violate the law of conservation of energy? Why?
6. What are the various energy transformations that occur when you are riding a bicycle?
7. What do you mean by transformation of energy? Explain law of conservation of energy.
8. An object of mass 40 kg is raised to a height of 5 m above the ground. What is its potential energy? If the object is allowed to fall, find its kinetic energy when it is half way down?
9. A person holds a bundle of hay over his head for 30 minutes and get tired. Has he done some work or not? Justify your answer?
10. Differentiate between potential energy and kinetic energy giving one example of each?
11. Prove the formula  $K.E. = \frac{1}{2}mv^2$ .
12. The power of motor pump is 5kw. How much water per minute the pump can raise to a height of 20m.
13. Can any object have momentum even if its mechanical energy is zero? Explain.

### 5M QUESTIONS:

1. Prove the law of conservation of energy for a stone moving vertically down. A boy of mass 50 kg runs up a staircase of 45 steps in 9s. If the height of each step is 15 cm, find his power. (Take  $g = 10 \text{ m/s}^2$ )
2. State the law of conservation of energy. Define power. Calculate the power of a pump which lifts 100 kg of water to a water tank placed at a height of 20m in 10 seconds. Give  $g = 10 \text{ m/s}^2$
3. Define 1 watt of power and average power. How many watts is equal to one kilowatt. A boy of mass 50 kg runs up a staircase of 45 steps in 9 seconds. If the height of each step is 15 cm, find his power. Take  $g = 10 \text{ m/s}^2$ .
4. Define work. What are the two conditions that need to be satisfied for work to be done? A porter lifts a luggage of 15 kg from the ground and puts it on his head 1.5m above the ground. Calculate the work done by the porter on that luggage.
5. A boy weighing 50 kg climbs up a vertical height of 100m in 200 seconds. Calculate amount of work done by him, potential energy gained by him, power of the boy. In a tug of war, one team (team A) wins and the other team (team B) loses. Which of these two teams does positive and which does negative work done. What is the work done in case of a satellite moving around the earth?
6. What type of energy transformation takes place in the following?
  - (a) Electric heater
  - (b) Solar battery
  - (c) Dynamo
  - (d) Steam engine
  - (e) Hydroelectric power station.

### VALUE BASED QUESTION:

Prachi and kanchi were observing a building having two different staircases. One slanting and other vertically spiral. Prachi was of the opinion that a person using slanting staircase will be doing more work against gravity but kanchi thought otherwise. They started arguing. Sanchi, their friend, explained and gave entirely different view and pacified them.

- (a) What according to you was the explanation given by Sanchi?
- (b) What appreciable values do you see in the Sanchi?

### MULTIPLE CHOICE QUESTIONS:

1. When a spring is compressed work is done on it. Its elastic potential energy
  - a. Decreases
  - b. increases
  - c. Disappears
  - d. Does not change
2. When force acts in opposite direction the work done is
  - a. Positive
  - b. negative
  - c. Zero
  - d. infinity
3. The value of 1KWH is
  - a.  $3.6 \times 10^5$  J
  - b.  $3.6 \times 10^6$  J
  - c.  $3.6 \times 10^7$  J
  - d.  $3.6 \times 10^9$  J
4. Work done by tension in the string when a ball tied to a string is being whirled around in a circle is
  - a. tension does no work at all
  - b. tension does positive work
  - c. tension does negative work
  - d. tension does zero work

Write the answer of these questions in your homework copy

### शीतकालीन गृहकार्य (हिंदी)

1. अपने क्षेत्र के कलेक्टर को एक ईमेल लिखिए जिसमें शहर में चारों तरफ फैली गंदगी की शिकायत की गई हो।
2. आपके क्षेत्र के सरकारी चिकित्सालय की स्थिति बहुत खराब खराब है, व्यवस्था से अवगत कराते हुए चिकित्सा अधिकारी को एक पत्र लिखो।
3. आपके मित्र को दसवीं कक्षा में असफल होने पर उसे सांलग्न पत्र लिखिए।
4. निम्न विषयों पर लघु कथा लेखन कीजिए  
हाथी और दर्जा।  
एकता में ही शक्ति होती है।
5. निम्न विषयों पर अनुच्छेद लिखो।
  - a) समाचार पत्रों का महत्व
  - b) सुबह की सैर
6. आपके विद्यालय में वार्षिक महोसूल का आयोजन होना है उसकी सूचना देते हुए एक नोटिस लिखिए।

## Chemistry

Q1. Write the chemical formulae of the following.

(a) Magnesium sulphate      (b) Magnesium chloride  
(c) Copper nitrate      (d) Calcium hydroxide  
(e) Potassium sulphate      (f) Aluminium chloride  
(g) Aluminium sulphate      (h) Sodium sulphide

Q2. Calculate the

molecular masses of CO, ZnO, CaO, NH<sub>3</sub>

Q3. Describe Bohr's model of the

atom. Q4. Define-(a) Isotopes (b)  
Isobars

Q5. What are the limitations of J.J. Thomson's model of the  
atom. Q6. Compare the properties of electrons, protons

and neutrons. Q7. What are the limitations of Rutherford's  
model of the atom. Q8. Complete the following table.

Atomic Number	Mass Number	Number of Neutrons	Number of Protons	Number of Electrons	Name of the Atomic Species
9	-	10	-	-	-
16	32	-	-	-	Sulphur
-	24	-	12	-	-
-	2	-	1	-	-
-	1	0	1	0	-

## CLASS -9 [A, B, C] SUBJECT -ENGLISH

1. Write a Short Story in 150-200 words, with the help of the cues given below. Give a suitable title to the story.

Once upon a time, there lived a king in a palace. He was very handsome and smart but he was a great fool. One day, he announced that .....

2. Write a short descriptive paragraph on William Shakespeare in 100-120 words.

3. Learn the syllabus of PT 3 in all respect.

4. Write an article on "Generation Gap".

**Note:** - Do your writing work of this homework in English Notebook only.

## PM SHRI KENDRIYA VIDYALAYA NO.1 SAGAR

### WINTER BREAK HW 2025-26

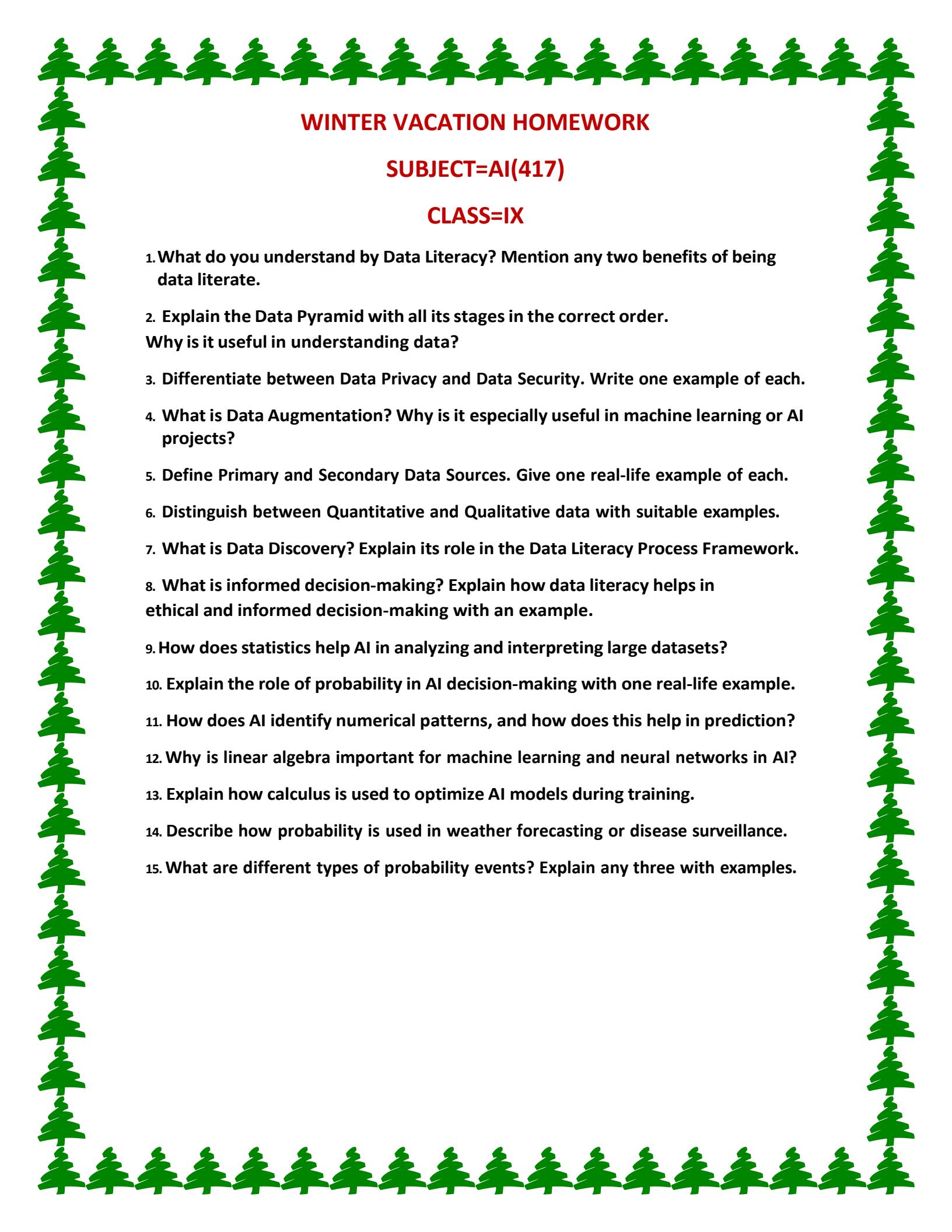
#### CLASS-IX MATHS

**A. ACTIVITY:** Do all the given activities in Math's Lab Activity Copy using graph/colour papers and Geometry box.

**B. PORTFOLIO:** Prepare a Portfolio given by the class teacher

**C. ASSIGNMENT:**

1. Learn Table from 2 to 20 by heart.
2. Prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
3. In a circle of radius 5cm, AB and AC are two equal chords such that  $AB=AC=6\text{cm}$ . Find the length of the chord BC.
4. The perimeter of a triangle is 54 cm and its sides are in the ratio 5:6:7. Find the area of the triangle.
5. Find the area of a triangle whose perimeter is 180 cm and its two sides are 80 cm and 18 cm.
6. The perimeter of a triangle is 50 cm. One side of the triangle is 4 cm longer than the smallest side and the third side is 6 cm less than twice the smallest side. Find the area of the triangle
7. A gardener has to put double fence all around a triangular field with sides 120 m, 80 m and 60 m. In the middle of each of the sides, there is a gate of width 10 m.
  - (i) Find the length of wire needed for fencing.
  - (ii) Find the cost of fencing at the rate of 6 per meter.
  - (iii) Find the area of triangular field.
8. A spherical football has a surface area of  $1256\text{ cm}^2$ . What will be the radius of the football?  
(Use  $\pi = 3.14$ )
9. A spherical football has a radius of 10.5 cm. How much leather is required to cover it? (Use  $\pi = 22/7$ )
10. A metal sphere is melted and cast into a cone of radius 2 cm and height 9 cm. Find the radius of the original sphere.
11. A student claims that doubling the radius of a sphere doubles its surface area. Is the claim correct?  
Explain.
12. Sanjay wants to paint a spherical ball on the outside and use it as a decoration in his house. If the radius of the ball is 14 cm,
  - (i) What will be the area to be painted (Use  $\pi = 22/7$ )
  - (ii) How much money will he have to pay at ₹2 per  $\text{cm}^2$ ?
13. A hollow sphere is made of metal of thickness 1 cm. The outer radius is 5 cm.
  - (i) What will be the volume of outer sphere?
  - (ii) What will be the volume of inner sphere?
  - (iii) What will be the volume of metal used to make the hollow sphere? (Use  $\pi = 3.14$ )

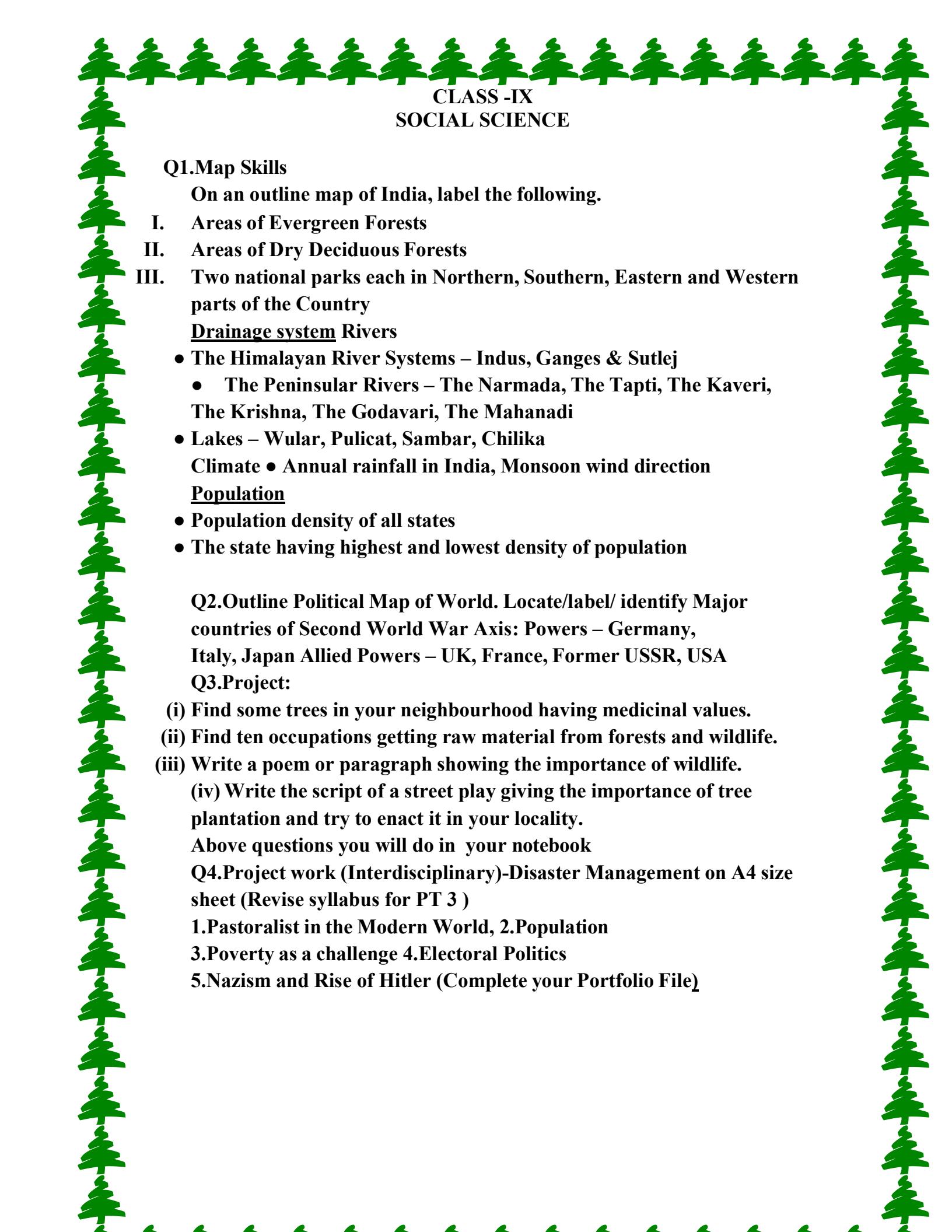


## **WINTER VACATION HOMEWORK**

**SUBJECT=AI(417)**

**CLASS=IX**

1. What do you understand by Data Literacy? Mention any two benefits of being data literate.
2. Explain the Data Pyramid with all its stages in the correct order.  
Why is it useful in understanding data?
3. Differentiate between Data Privacy and Data Security. Write one example of each.
4. What is Data Augmentation? Why is it especially useful in machine learning or AI projects?
5. Define Primary and Secondary Data Sources. Give one real-life example of each.
6. Distinguish between Quantitative and Qualitative data with suitable examples.
7. What is Data Discovery? Explain its role in the Data Literacy Process Framework.
8. What is informed decision-making? Explain how data literacy helps in ethical and informed decision-making with an example.
9. How does statistics help AI in analyzing and interpreting large datasets?
10. Explain the role of probability in AI decision-making with one real-life example.
11. How does AI identify numerical patterns, and how does this help in prediction?
12. Why is linear algebra important for machine learning and neural networks in AI?
13. Explain how calculus is used to optimize AI models during training.
14. Describe how probability is used in weather forecasting or disease surveillance.
15. What are different types of probability events? Explain any three with examples.



## CLASS -IX SOCIAL SCIENCE

### Q1. Map Skills

On an outline map of India, label the following.

- I. Areas of Evergreen Forests
- II. Areas of Dry Deciduous Forests
- III. Two national parks each in Northern, Southern, Eastern and Western parts of the Country

#### Drainage system Rivers

- The Himalayan River Systems – Indus, Ganges & Sutlej
  - The Peninsular Rivers – The Narmada, The Tapti, The Kaveri, The Krishna, The Godavari, The Mahanadi
- Lakes – Wular, Pulicat, Sambar, Chilika

Climate • Annual rainfall in India, Monsoon wind direction

#### Population

- Population density of all states
- The state having highest and lowest density of population

Q2. Outline Political Map of World. Locate/label/ identify Major countries of Second World War Axis: Powers – Germany, Italy, Japan Allied Powers – UK, France, Former USSR, USA

#### Q3. Project:

- (i) Find some trees in your neighbourhood having medicinal values.
- (ii) Find ten occupations getting raw material from forests and wildlife.
- (iii) Write a poem or paragraph showing the importance of wildlife.
- (iv) Write the script of a street play giving the importance of tree plantation and try to enact it in your locality.

Above questions you will do in your notebook

Q4. Project work (Interdisciplinary)-Disaster Management on A4 size sheet (Revise syllabus for PT 3 )

1. Pastoralist in the Modern World, 2. Population
3. Poverty as a challenge 4. Electoral Politics
5. Nazism and Rise of Hitler (Complete your Portfolio File)



Happy  
Holidays

