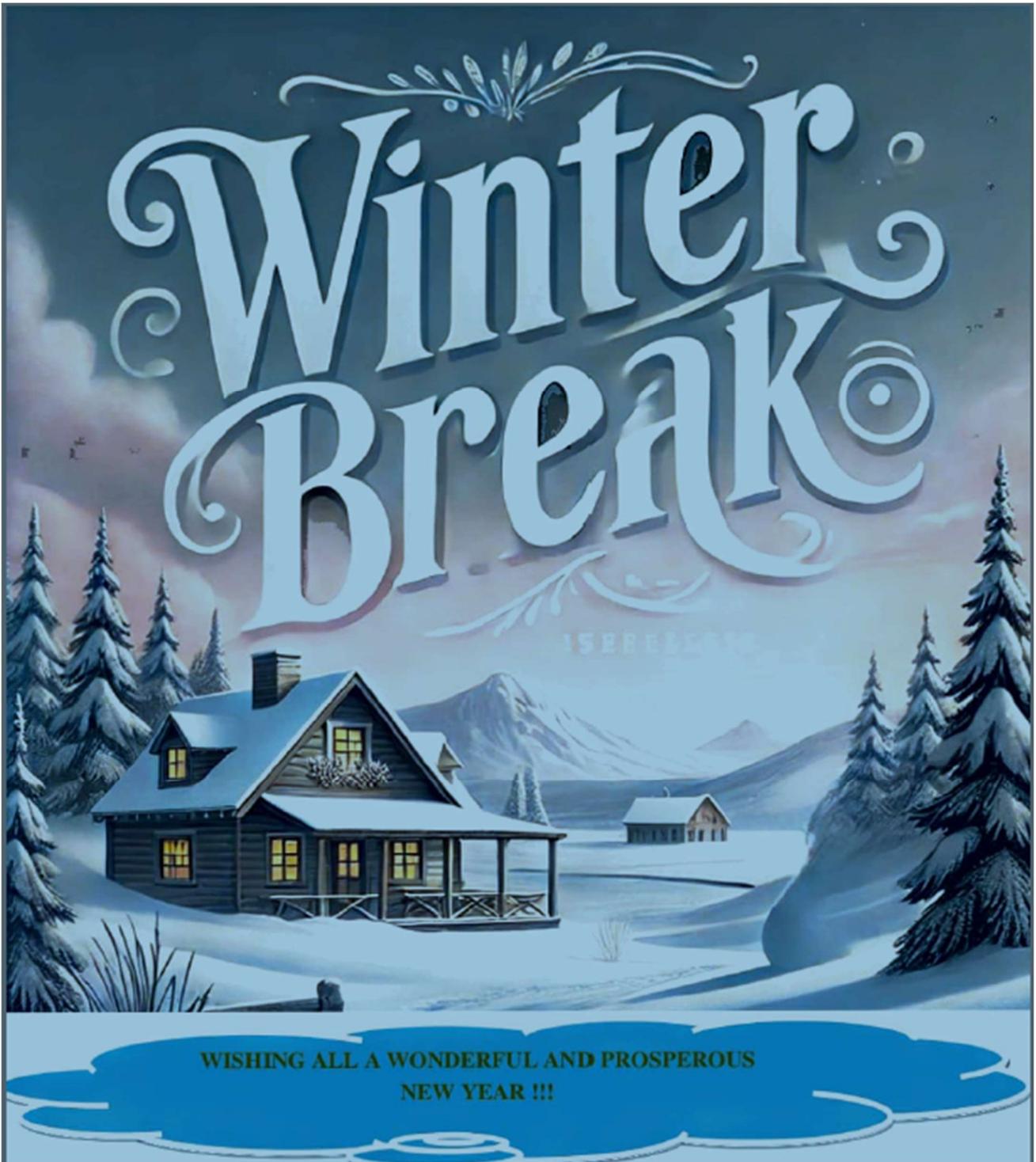




**RAO MOHAR SINGH MEMORIAL SR. SEC. PUBLIC SCHOOL**

**WINTER BREAK HOME WORK**

**GRADE VIII**



## SUBJECT: ENGLISH

- **Instructions**

All work must be done neatly in an English notebook / A4 sheets. Use drawings, colours, and creativity wherever possible.

**Write in your own words.**

Submit the homework on the reopening day of school.

### Section A: Reading Skills

#### 1. Reading Comprehension

Read a story or chapter from any English storybook (e.g. Panchatantra, Ruskin Bond stories, or any moral story) and answer:

- Title of the story
- Author
- Main characters
- Summary (100–120 words)
- Moral of the story

 Illustrate one scene from the story.

### Section B: Writing Skills

#### 2. Diary Writing

Write any two diary entries (80–100 words each) on the following topics:

- A memorable day of my summer holidays.
- My feelings during a rainy day.
- A day without mobile phone.

#### 3. Story Writing

Write a short story (150–200 words) on any one topic:

- A Kind Act Can Change the World.
- The Day Everything Went Wrong.
- An Unexpected Gift.

 Give your story a title and moral.

### Section C: Grammar

#### 4. Grammar Practice

Attempt the following:

- Write 10 sentences using different tenses.
- Frame 5 sentences using:
  - Simile
  - Metaphor
- Write 10 synonyms and 10 antonyms.
- Change 5 sentences from Active to Passive Voice.

### Section D: Literature

### 5. Character Sketch

Choose any one character from your English textbook and write:

- Physical appearance
- Nature and habits
- Qualities you like
- What you learn from the character. (120–150 words)

### Section E: Speaking & Creativity

#### 6. Poem Recitation / Self-composed Poem

- Learn any one English poem (8–12 lines)

OR

- Write a self-composed poem on:

- Nature
- Friendship
- Hope

 Decorate the page with drawings or borders.

### Section F: Vocabulary & Fun Activity

#### 7. Word Power

- Write 20 new English words. Mention their meanings and use each in a sentence.

 Decorate the page with word bubbles or icons.

## हिंदी

### भाग-1 : साहित्य पाठ्यपुस्तक कार्य वसंत

पाठ 10 (अकबरी लोटा) शब्दार्थ याद करो और वेस्ट उतर याद करके नोटबुक में लिखो।

पाठ 11 (सूरदास के पद) शब्दार्थ याद करो, कविता की पंक्तियों का भावार्थ नोटबुक में लिखो। और प्रश्न उत्तर याद करो।

पाठ 12 (जहां पहिया है) कहानी का सारांश अपने शब्दों में लिखो 150 शब्दों में और प्रश्न उत्तर याद करो।

पाठ 13 (बाज और सांप) शब्दार्थ याद करो और प्रश्न उत्तर याद करके नोटबुक में लिखो।

### भाग-2 : रचनात्मक लेखन

प्रश्न 2. अनुच्छेद लेखन (कोई एक)

- मेरा प्रिय शिक्षक
- पर्यावरण संरक्षण
- मोबाइल फोन: लाभ और हानि (100-120 शब्द)

प्रश्न 3. पत्र लेखन

- अपने मित्र को ग्रीष्मावकाश में किए गए कार्यों के बारे में बताते हुए पत्र लिखिए।

प्रश्न 4. कहानी लेखन

- विषय – ईमानदारी सबसे बड़ी नीति है (120 शब्द)

### भाग-3 : हिंदी व्याकरण

(i). संज्ञा

- परिभाषा लिखिए।
- संज्ञा के भेद उदाहरण सहित लिखिए।

(ii) सर्वनाम

- परिभाषा
- भेद व उदाहरण सहित लिखिए

(iii) विशेषण

- परिभाषा व भेदों के नाम लिखिए।

(iv) क्रिया

- परिभाषा
- क्रिया के भेद उदाहरण सहित लिखिए।

(v) काल

- काल की परिभाषा व भेदों के नाम लिखिए।
- तीनों कालों के 5-5 वाक्य लिखिए।

### भाग-4 : सुलेख

प्रश्न 11. किसी एक अच्छे विचार या कविता के 10-12 वाक्य सुंदर लिखावट में लिखिए।

### भाग 5 भारत की खोज (प्रश्नों के उत्तर लिखिए)

- (i) भारत क्या है ?
- (ii) इस्लाम धर्म भारत कैसे पहुंचा?
- (iii) मुगल साम्राज्य की नींव किसने और कब रखी?
- (iv) 19वीं शताब्दी के समाज सुधार को के नाम लिखिए?
- (v) गांधी जी के सपनों का भारत कैसा था?

- (vi) मरुशल लॉ क्या है?
- (vii) भारतीय संस्कृति के बारे में गांधीजी के क्या विचार थे?
- (viii) भारत छोड़ो प्रस्ताव रखने का क्या कारण था?
- (ix) भारतीय प्रश्नों की क्या विशेषता थी?
- (x) ताजमहल किसने और कब बनवाया?

**SUBJECT: MATHEMATICS**

 **CHOOSE THE CORRECT OPTION**

- Q1. Sum of  $a - b + ab$ ,  $b + c - bc$  and  $c - a - ac$  is  
(a)  $2c + ab - ac - bc$                       (b)  $2c - ab - ac - bc$                       (c)  $2c + ab + ac + bc$                       (d)  $2c - ab + ac + bc$
- Q2. Area of a rectangle with length  $4ab$  and breadth  $6b^2$  is  
(a)  $24a^2b^2$                       (b)  $24ab^3$                       (c)  $24ab^2$                       (d)  $24ab$
- Q3. Volume of a rectangular box (cuboid) with length =  $2ab$ , breadth =  $3ac$  and height =  $2ac$  is  
(a)  $12a^3bc^2$                       (b)  $12a^3bc$                       (c)  $12a^2bc$                       (d)  $2ab + 3ac + 2ac$
- Q4. Product of  $6a^2 - 7b + 5ab$  and  $2ab$  is  
(a)  $12a^3b - 14ab^2 + 10ab$                       (b)  $12a^3b - 14ab^2 + 10a^2b^2$                       (c)  $6a^2 - 7b + 7ab$                       (d)  $12a^2b - 7ab^2 + 10ab$
- Q5. In the below question, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as

**Assertion (A):** The terms of the expression  $3x^2y - 5xy + 7x$  are  $3x^2y$ ,  $-5xy$ , and  $7x$ .

**Reason (R):** Terms in an algebraic expression are separated by addition or subtraction signs.

- (a) Both A and R are true and R is the correct explanation of A  
(b) Both A and R are true but R is not the correct explanation of A  
(c) A is true but R is false  
(d) A is false but R is true
- Q6. The area of a trapezium-shaped field is  $480 \text{ m}^2$ . The distance between the parallel sides is  $15 \text{ m}$  and one of the parallel sides is  $20 \text{ m}$ . What is the length of the other parallel side?  
(a)  $24 \text{ m}$                       (b)  $44 \text{ m}$                       (c)  $40 \text{ m}$                       (d)  $64 \text{ m}$
- Q7. The area of a rhombus with diagonals  $d_1$  and  $d_2$  is given by:  
(a)  $d_1 \times d_2$                       (b)  $\frac{1}{2} d_1 d_2$                       (c)  $2 d_1 d_2$                       (d)  $(d_1 + d_2) / 2$
- Q8. If the side of a cube is  $l$ , its total surface area is:  
(a)  $4l^2$                       (b)  $2l^2$                       (c)  $6l^2$                       (d)  $8l^2$
- Q9. The curved (lateral) surface area of a right circular cylinder of radius  $r$  and height  $h$  is:  
(a)  $2\pi r^2$                       (b)  $\pi r^2 h$                       (c)  $2\pi r h$                       (d)  $2\pi r(r + h)$
- Q10. Assertion–Reason Question

**Assertion (A):** The total surface area of a cuboid is  $2(lb + bh + hl)$ , where  $l$ ,  $b$  and  $h$  are its length, breadth and height.

**Reason (R):** A cuboid has three pairs of identical rectangular faces and the sum of the areas of all these six faces gives its total surface area.

- (a) Both A and R are true, and R is the correct explanation of A.  
(b) Both A and R are true, but R is not the correct explanation of A.  
(c) A is true, but R is false.  
(d) A is false, but R is true.
- Q11. What is the value of  $2^{-3}$ ?  
(a)  $8$                       (b)  $1/8$                       (c)  $6$                       (d)  $1/6$
- Q12. Simplify  $3^{-2} \times 3^5$ .  
(a)  $3^3$                       (b)  $3^{-7}$                       (c)  $3^7$                       (d)  $3^{-3}$
- Q13. Express  $0.000035$  in standard form.  
(a)  $3.5 \times 10^5$                       (b)  $3.5 \times 10^{-5}$                       (c)  $35 \times 10^{-6}$                       (d)  $0.35 \times 10^{-4}$
- Q14. The multiplicative inverse of  $5^{-3}$  is:  
(a)  $5^3$                       (b)  $5^{-3}$                       (c)  $1/125$                       (d) Both a and c

Q15. Assertion–Reason

**Assertion (A):**  $a^{-m} = 1 / a^m$  for any non-zero integer  $a$  and positive integer  $m$ .

**Reason (R):** Negative exponents represent the reciprocal of the base raised to the positive power.

- (a) Both A and R are true and R explains A.  
(b) Both A and R are true but R does not explain A.  
(c) A is true but R is false.  
(d) A is false but R is true.

Q16. What are the common factors of  $12x$  and  $36$ ?

- (a) 12 (b) 6 (c) 3 (d) 2

Q17. When dividing  $6x^3$  by  $2x$ , the quotient is:

- (a)  $3x^2$  (b)  $3x$  (c)  $2x^2$  (d)  $6x$

Q18. Which identity is used for  $49p^2 - 36$ ?

- (a)  $(a + b)^2$  (b)  $(a - b)^2$  (c)  $a^2 + b^2$  (d)  $a^2 - b^2$

Q19. For  $x^2 + 5x + 6$ , the factors are:

- (a)  $(x + 2)(x + 3)$  (b)  $(x - 2)(x - 3)$  (c)  $(x + 1)(x + 6)$  (d)  $(x - 1)(x - 6)$

Q20. Assertion–Reason

**Assertion (A):**  $24xyz + xyz + xyz$  divided by  $8xyz$  gives  $3x + y + z$ .

**Reason (R):** In polynomial division by monomial, divide each term separately.

- (a) Both A and R are true and R explains A.  
(b) Both A and R are true but R does not explain A.  
(c) A is true but R is false.  
(d) A is false but R is true.

Q21. Two quantities  $x$  and  $y$  are said to be in direct proportion if:

- (a)  $x + y = \text{constant}$  (b)  $x - y = \text{constant}$  (c)  $x/y = \text{constant}$  (d)  $x \times y = \text{constant}$

Q22. If 5 metres of cloth costs ₹250, then the cost of 12 metres of the same cloth will be:

- (a) ₹500 (b) ₹600 (c) ₹1000 (d) ₹1200

Q23. A car travels 75 km in 1 hour. How far will it travel in 20 minutes?

- (a) 15 km (b) 20 km (c) 25 km (d) 30 km

Q24. If 6 pipes can fill a tank in 80 minutes, then 5 pipes will fill the same tank in:

- (a) 72 minutes (b) 90 minutes (c) 96 minutes (d) 120 minutes

Q25. **Assertion (A):** If the speed of a vehicle increases, the time taken to cover a fixed distance decrease.

**Reason (R):** Speed and time vary in inverse proportion when the distance is constant.

- (a) Both A and R are true and R explains A.  
(b) Both A and R are true but R does not explain A.  
(c) A is true but R is false.  
(d) A is false but R is true.

Q26. Bar graph is used to show

- (a) Parts of a whole (b) Comparison among categories (c) Data in intervals (d) Continuous change over time

Q27. In coordinates  $(3,4)$ , what does 3 represent?

- (a) y-coordinate (b) x-coordinate (c) Origin (d) Distance from y-axis

Q28. Histogram has

- (a) Gaps between bars (b) Adjacent bars with no gaps (c) Circular shape (d) Dotted lines

Q29. Linear graph passes through origin in

- (a) Direct variation cases (b) Inverse variation (c) Constant data (d) Random data

Q30. **Assertion (A):** Line graph shows data that changes continuously over time.

**Reason (R):** Points in line graph are connected by line segments.

- a) Both A and R are true, R explains A  
b) Both A and R are true, R does not explain A  
c) A is true, R is false  
d) A is false, R is true

#### Foundations & Rules

- **Rules:** List 5 "Rules of Exponents" (e.g., any number to the power 0 is 1).
- **Formulas:** Create a "Formula Master-Sheet" for Chapter 9 (Mensuration) including Perimeter and Area of Square, Rectangle, and Triangle.

#### Visuals & Data

- **Figures:** Draw a set of "Algebraic Tiles" (representing  $x^2$ ,  $x$ , and constants) and show how they form an expression like  $x^2 + 2x + 1$ .

### Application & Creative Work

- **Models:** Create a 3D model of a "Unit Cube" and a "Cuboid" using cardboard. Mark the Length, Breadth, and Height.
- **Figures:** Using a graph paper, plot your daily "Study Hours" for 5 days and create a simple Bar Graph.

### Case Study

1. National Association for blind aimed to empower and support visually challenged population of our country thus enabling them to lead a life of dignity. Raman donated  $(2x + 3y)$  and his friend Sohan donated  $(3x + 4y)$ .

**Based on the information provided, answer the following questions:**

- a) Find the expression representing total amount of money donated by both of them?
  - b) If the number of students in Raman's class are  $(x + y)$  and money donated by each one of them is  $(x + 2y)$ , then find the expression gives total amount collected?
  - c) If X equal to zero and Y equal to minus 2 then calculate the amount they donated.
2. Our solar system consists of our star, the Sun, and everything bound to it by gravity – the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune; dwarf planets such as Pluto; dozens of moons; and millions of asteroids, comets, and meteoroids. Beyond our own solar system, we have discovered thousands of planetary systems orbiting other stars in the Milky Way. The distance of all the planets from the Sun in kilometers (km) is given in below table:

Planet	Distance from Sun (km)
Mercury	57,900,000
Venus	108,200,000
Earth	149,600,000
Mars	227,900,000
Jupiter	778,600,000
Saturn	1,433,500,000
Uranus	2,872,500,000
Neptune	4,495,100,000

**Based on the above situation, answer the following questions:**

- (i) Write the distance of Mercury from the Sun in standard form.
- (ii) Write the sum of the distances of Mercury and Venus from the Sun in standard form.
- (iii) Write the difference of the distances of Earth and Venus from the Sun in standard form.
- (iv) Find the mean distance of Earth and Venus from the Sun in standard form.

3. A school assembly hall is in the shape of a cuboidal room with internal dimensions: length = 25 m, breadth = 15 m, and height = 5 m. The school management plans to renovate it by painting the four walls and the ceiling (but not the floor), and also install cylindrical pillars for better support. There are 6 identical cylindrical pillars, each with radius 0.5 m and height 5 m (same as room height). The curved surfaces of all pillars need to be painted.

**Answer the following questions using mensuration formulas from the chapter:**

- (a) Find the lateral surface area of the four walls of the assembly hall.
- (b) Find the area of the ceiling that needs to be painted.
- (c) Calculate the total curved surface area of all 6 pillars. (Use  $\pi = 22/7$ ).
- (d) If the total painting cost is ₹10 per  $m^2$ , find the total cost for painting the walls, ceiling, and pillars.
- (e) Find the volume of air inside the assembly hall (excluding the space occupied by pillars).

**SUBJECT: SCIENCE**

**SECTION A: MULTIPLE CHOICE QUESTIONS (MCQs)**

1. The area reserved for conservation of wildlife is called:
  - a) Zoo
  - b) Biosphere reserve
  - c) Sanctuary
  - d) Botanical garden
2. Which of the following is a non-renewable resource?
  - a) Wind
  - b) Solar energy
  - c) Coal
  - d) Water
3. The hormone responsible for growth during adolescence is:
  - a) Insulin
  - b) Thyroxine
  - c) Growth hormone
  - d) Adrenaline
4. The transfer of electric charge through a conductor is called:
  - a) Magnetism
  - b) Static electricity
  - c) Electric current
  - d) Lightning
5. The phenomenon due to which light bends while entering another medium is:
  - a) Reflection
  - b) Dispersion
  - c) Refraction
  - d) Scattering

**SECTION B: FILL IN THE BLANKS**

1. Endangered plants and animals are protected in \_\_\_\_\_.
2. Petroleum is also known as \_\_\_\_\_ oil.
3. Adolescence is the period between childhood and \_\_\_\_\_.
4. Lightning is a form of \_\_\_\_\_ discharge.
5. A \_\_\_\_\_ mirror can form both real and virtual images.

**SECTION C: TRUE OR FALSE**

1. Coal is an inexhaustible natural resource.
2. National parks allow human activities like grazing.
3. Testosterone is a female hormone.
4. Like charges attract each other.
5. The image formed by a plane mirror is always virtual.

### **SECTION D: VERY SHORT ANSWER QUESTION**

1. What is deforestation?
2. Name one product obtained from petroleum other than petrol.
3. Define adolescence.
4. What causes lightning?

### **SECTION E: SHORT ANSWER QUESTIONS**

1. Differentiate between wildlife sanctuary and biosphere reserve.
2. Why should we conserve fossil fuels?
3. Mention any three physical changes during adolescence.

### **SECTION F: LONG ANSWER QUESTIONS**

1. Explain the importance of conservation of plants and animals.
2. Describe the formation of coal .
3. Discuss the role of hormones during adolescence.

### **SECTION G: DIAGRAM / SKILL-BASED QUESTIONS**

1. Draw and label: Ray diagram for law of reflection.
2. Observe any electrical appliance at home and write:
  - o Name
  - o Source of electricity
  - o Safety precautions related to electricity

### **SECTION H: THINKING & APPLICATION QUESTIONS (HOTS)**

1. What would happen if all forests disappeared from Earth?
2. Why is adolescence called a “turning point” in life?
3. Why should we not use mobile phones during thunderstorms?
4. Can we see objects if there is no light? Explain.

### **SECTION I: ACTIVITY-BASED LEARNING TASKS**

#### **Activity 1: Balanced Diet Planner**

Prepare a one-day balanced diet chart for an adolescent including:

- o Breakfast
- o Lunch
- o Snacks
- o Dinner
- o Mention nutrients present in each meal.

## **Activity 2: Shadow Study**

### **Observe shadows at:**

- Morning
- Noon
- Evening

### **Write:**

- Size of shadow
- Position of Sun

## **Activity 3: Energy Awareness Task**

Make a list of:

- Fossil fuel-based items used daily
- Alternatives to reduce their usage

## **Activity 4: My Science Learning Reflection**

Answer in your own words:

1. Which chapter did you enjoy the most and why?
2. Which topic was challenging?

## **Activity 5: Science in News**

Find a **newspaper or online news** related to:

- Lightning
- Earthquake
- Electric shock

## **Activity 6:**

Write **3 common myths** related to adolescence (food, growth, hygiene).

Write:

- Myth
- Scientific fact

## SOCIAL SCIENCE

### LEARNING ABOUT OUR PAST, PRESENT & FUTURE

- Q1. What do you understand by colonialism?
- Q2. Why was Bengal important for the British rulers?
- Q3. What was the Permanent Settlement system?
- Q4. Write any two causes of the Revolt of 1857.
- Q5. Write two effects of British rule on Indian industries.
- Q6. What are natural resources?
- Q7. Name two renewable and two non-renewable resources.
- Q8. What is conservation of resources and why is it necessary?
- Q9. Explain human-made resources with two examples.
- Q10. What is the Constitution of India?
- Q11. Why is equality important in a democratic country?
- Q12. What do you understand by secularism?
- Q13. Write any four Fundamental Rights of Indian citizens.
- Q14. Long Answer Question
- Explain how British rule changed Indian society, economy, and administration.
- Q15. Think & Write

Write 5–6 lines on how equality helps in reducing discrimination in society.

### MAP & SKILL WORK

- Q16. On an outline map of India, mark and label:

Bengal

Delhi

Mumbai

Chennai

(Colour neatly)

### **ACTIVITY ZONE**

Q17. Make a chart or diagram showing:

Natural Resources

Human-made Resources

Human Resources

Use colours and pictures.

### **MINI PROJECT (ANY ONE)**

Prepare a short project (4–5 pages) on any one:

Indian National Movement

Types of Resources

Fundamental Rights and Duties

Instructions:

- ✓ Use headings & pictures
- ✓ Neat handwriting or printout
- ✓ Write in your own words

### **CREATIVE CORNER**

 Make a timeline of important events of 1857

OR

 Design a poster on “Save Resources, Save Future”

## **SUBJECT: DRAWING**

1. Draw a freedom fighter sketch and colour it on A3 sheet.
2. Craftwork: Make a wall hanging on republic day using different things. (Plastic bottle, wooden stick, colourful sheets, tissue paper thread)

**SUBJECT: - COMPUTER**

**Section A – Multiple Choice Questions**

- i. The tag used to insert an image in HTML is:
- a) <image>    b) <img>    c) <src>    d) <pic>
- ii. Which of the following attributes specifies the path of an image?
- a) src            b) path    c) href            d) loc
- iii. The <a> tag in HTML is used to create:
- a) a link        b) an image    c) a table        d) a frame
- iv. The <frameset> tag divides a web page into:
- a) headings    b) columns or rows    c) tables        d) lists
- v. An algorithm is a sequence of:
- a) Random steps    b) Logical steps    c) Functions    d) Loops
- vi. The while loop in Python runs:
- a) fixed no. of times    b) as long as a condition is true    c) until the user stops it    d) None of these
- vii. The function len("Python") returns:
- a) 5            b) 6            c) 7            d) Error
- viii. A user-defined function in Python starts with the keyword:
- a) define    b) def    c) function    d) create
- ix. The AI domain that focuses on image recognition is:
- a) NLP    b) Robotics    c) Computer Vision    d) Data Science
- x. AI systems that can understand and respond to human speech belong to:
- a) NLP    b) Machine Learning    c) Robotics    d) Deep Vision
- xi. The loop that iterates through a sequence of values in Python is:
- a) while loop    b) for loop    c) nested loop    d) repeat loop
- xii. Which tag helps you add a clickable image?
- a) <a>    b) <img>    c) <a href> with <img>    d) <frame>

## Section B – Fill in the Blanks

- i. The tag <img> requires the \_\_\_\_\_ attribute to specify the image source.
- ii. The <a> tag uses the \_\_\_\_\_ attribute to link webpages.
- iii. A group of statements that repeat again and again is called a \_\_\_\_\_.
- iv. The keyword used to define a function in Python is \_\_\_\_\_.
- v. The domain of AI that deals with human conversation is \_\_\_\_\_.
- vi. A \_\_\_\_\_ is a set of step-by-step instructions to solve a problem.
- vii. A function can return a value using the keyword \_\_\_\_\_.
- viii. The <frameset> tag divides the browser window into multiple \_\_\_\_\_.
- ix. In a for loop, the number of iterations is known \_\_\_\_\_ execution.
- x. The process of giving meaning to words in AI is known as \_\_\_\_\_.

## Section C – Short Answer Questions

- i. Explain the use of the <img> tag in HTML with an example.
- ii. What is the difference between a relative and absolute path in HTML images?
- iii. Define hyperlink. Give an example using the <a> tag.
- iv. What is an algorithm? Why is it important in programming?
- v. Explain the use of the for loop in Python with a small example.
- vi. How does a while loop differ from a for loop?
- vii. Write any two advantages of using functions in Python.
- viii. What is a string in Python? Write an example showing slicing.
- ix. Name and describe any three domains of AI.
- x. Explain the term Algorithmic Intelligence in your own words.

## Section D – Practical Zone

### 1. HTML PRACTICE

Create a webpage titled “My Favorite Tourist Places” that includes:

- A heading and short paragraph
- At least two images of places
- One hyperlink to a tourism website
- Divide the page into two frames — left frame for list, right for images

**(If computer not available, write HTML code in your notebook.)**

### 2. PYTHON PRACTICE

a. Using Loops:

Write a program to print the table of any number entered by the user.

b. Using Strings:

Write a Python program to count how many vowels are present in a string.

c. Using Functions:

Write a function add (a, b) that returns the sum of two numbers.

d. Using Nested Loops

Write a program to display the following pattern:

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

**3. ALGORITHM TASK**

Write an algorithm and flowchart to find the largest among three numbers.

**Section E – Artificial Intelligence Awareness**

1. Match the following:

Column A

Column B

- |                             |                                  |
|-----------------------------|----------------------------------|
| a) NLP                      | i) Self-driving cars             |
| b) Robotics                 | ii) Speech recognition           |
| c) Computer Vision          | iii) Image detection             |
| d) Algorithmic Intelligence | iv) Step-by-step problem-solving |

2. Answer briefly:

- What is the role of Computer Vision in daily life?
- How does AI help doctors in healthcare?
- Mention two examples of NLP-based applications.
- How does Algorithmic Intelligence improve decision-making?

3. Think and Write:

Write a paragraph (8–10 lines) on:

“How Artificial Intelligence is Transforming Our Future.”

## Section F – Creative Task

### According to Roll No.

- i. Create a colorful chart showing “Generation of Computers and key Technologies Used.”.( **Roll No.: 1-15**)
    - Mention features, year range, main components, and examples
  - ii. Make a detailed chart on “Types of Memory in Computer.” (**Roll No.: 16-30**)
    - Include: Primary (RAM, ROM, Cache), Secondary (HardDisk, SSD), and Tertiary. (Cloud)
    - Write a short note on “Difference between RAM and ROM.”
  - iii. Create a poster/chart on “Domains of Artificial Intelligence” — include images and short descriptions for: (**Roll No.: 31-45**)
    - Robotics
    - Natural Language Processing
    - Expert Systems
    - Computer Vision
    - Machine Learning
- ❖ Write a short note on:
- “Why Learning Coding and AI is Important for Students.”

## SUBJECT: SANSKRIT

प्र.1 गद्यांश पठित्वा प्रश्नानाम् उत्तराणि लिखत्

ग्रीष्मकालः सुखदस्य वसंतकालस्य भाग आगच्छति। ग्रीष्मकाले सूर्यस्य अत्यः प्रखरः वर्तते। मानवाः पशु-पक्षिणः वृक्षाः, पादपाः चापि प्रखर-तापेन व्याकुलः भवन्ति। केचित् जनाः विहाराय पर्वतस्थलेषु गच्छन्ति, केचित् गृहे वातानुकूलितेषु कक्षेषु तिष्ठन्ति। नदयः, स्त्रीमाः, तदागाः च शुष्यन्ति। सर्वत्र जलस्य अभावः दृश्यते। परं यदि ग्रीष्म-कालस्य प्रचण्डः तापः न स्यात् प्रकारि मेघाः कथं भविष्यन्ति। मेघं विना कुतः वृष्टिः? ग्रीष्मकालस्य प्रभावात् एव वर्षा ऋतुः आगच्छति। ग्रीष्मकाले गुलमोहर-वृक्षेषु रक्तानि पुष्पाणि अतिव शोभन्ते। मल्लिका-मालती-पादपेषु सुगंधमयनि श्वेतानि पुष्पाणि विकसन्ति।

1. एक पदेन उत्तराणि लिखत्-
  - (क) ग्रीष्मकालः कस्य कालस्य भाग आगच्छति?
  - (ख) जनाः किमर्थं पर्वतस्थलेषु गच्छन्ति?
  - (ग) ग्रीष्मकाले कस्य अभावः दृश्यते?
  - (घ) ग्रीष्मकाले केषु वृक्षेषु रक्तानि पुष्पाणि आगच्छन्ति?
2. तृतीय. यथा निर्देशम् उत्तराणि लिखित

स्यात् = धातुः....., लकारः....., वचनम्.....

पुरुषः .....

विभक्तिः 2. विहाराय =..... वचनम् .....

प्र.2 शुद्ध पदं चित्वा लिखत् ..

1. सप्त + ऋषि (सप्तार्षिः, सप्तर्षि, सप्तर्षिः).....
2. मम + एव (ममेव, ममिव, ममैव).....
3. सर्व + उपरि (सर्वपरि, सर्वोपरि, सर्वपरि).....
4. पितृ + आदेशः (पितादेशः, पितरादेशः, पित्रादेशः).....
5. यदि + अपि (यद्यापि, यद्यपि, यदियपि).....

प्र.3 सन्धिः विच्छेदः वा क्रियताम् (सन्धि अथवा विच्छेद कीजिए-)

1. महर्षिः.....
2. चापि .....
3. ममेच्छा .....
4. अध्ययनाभिलाषा .....
5. भवति .....

प्र.4 स्वर सन्धिः परिभाषा लिखत्

.....

प्र.5 गुण संधि परिभाषा उदाहरणं च लिखत्।

प्र.6 आयादि संधि परिभाषा उदाहरणं च लिखत्-

प्र.7 संधि कतिविधः नामानि च लिखत्।

प्र.8 कति कारकाणि नामानि च लिखत् ।

प्र.9 कर्म कारकस्य परिभाषा उदाहरणं च लिखत्।

प्र.10 संप्रदान कारकस्य परिभाषा उदाहरणं च लिखत्।

प्र.11 संख्या संस्कृते लिखत्- (50-70)

प्र.12 खाद् धातु ( लट् , लृट् , लङ् , लोट् ) रूपाणि लिखत्।

प्र.13 गद्यांश पठित्वा प्रश्नानाम् उत्तराणि लिखत् -

पूर्वदिशायाम् उदेति सूर्यः पश्चिमदिशायां पश्चिमदिशायां च अस्तं गच्छति इति दृश्यते हि लोके। परं न अनेन अवबोध्यमस्ति यत्सूर्यो गतिशील इति। सूर्योऽचलः पृथिवी च चला या स्वकीये अक्षे घूर्णति इति साम्प्रतं सुस्थापितः सिद्धान्तः। सिद्धान्तोऽयं प्राथम्येन येन प्रवर्तितः, स आसीत् महान् गणितज्ञः ज्योतिर्विच्च आर्यभटः। पृथिवी स्थिरा वर्तते इति परम्परया प्रचलिता रूढिः तेन प्रत्यादिष्टा। तेन उदाहृतं यद् गतिशीलायां नौकायाम् उपविष्टः मानवः नौकां स्थिरामनुभवति, अन्यान् च पदार्थान् गतिशीलान् अवगच्छति। एवमेव गतिशीलायां पृथिव्याम् अवस्थितः मानवः पृथिवीं स्थिरामनुभवति सूर्यादिग्रहान् च गतिशीलान् वेत्ति।

(क) सूर्य कुत्र गच्छति?

(ख) सूर्यः कथम् अस्ति?

(ग) कः सुस्थापित सिद्धान्तः?

(घ) शून्यस्य आविष्ककर्ता कः?

प्र.14 दशमः पाठः नीतिनवनीतम् श्लोकानाम् हिंदी भावार्थं लिखत्

अभिवादनशीलस्य नित्यं वृद्धोपसेविनः।

चत्वारि तस्य वर्धन्ते आयुर्विद्या यशो बलम् ।।।।।

यं मातापितरौ क्लेशं सहेते सम्भवे नृणाम्।

न तस्य निष्कृतिः शक्या कर्तुं वर्षशतैरपि ।।2।।

तयोर्नित्यं प्रियं कुर्यादाचार्यस्य च सर्वदा।

तेष्वेव त्रिषु तुष्टेषु तपः सर्व समाप्यते ।।3।।

सर्व परवशं दुःखं सर्वमात्मवशं सुखम्।

एतद्विद्यात्समासेन लक्षणं सुखदुःखयोः

प्र.15” संस्कृत भाषा महत्व” विषये अनुच्छेदं लिखन्तु-

प्र.16 गुरु ऊकारान्त शब्द रूपाणि लिखत्।

प्र.17 छात्र अकारान्त शब्द रूपाणि लिखत्।

प्र.18 भगिनी सप्तके कानि राज्यानि सन्ति नामावाली लिखत् –

प्र.19 पदनिर्माणं कुरुत-

धातुः प्रत्ययः पदम्

कृ तुमुन्। .....

वृ तुमुन्। .....

प्र.20। उपसर्गः धातुः प्रत्ययः

उप् गम्। .....

सम् पूज्। .....

आ नी। .....

परा दा। .....