



Summer Break Holiday Homework  
Secondary Section Session 2026-26

**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS VI**

# SUMMER HOLIDAYS HOME WORK

## CLASS-6 SEC-B

*Instructions:*

*Complete neatly in Notebook.*

*Do all sections.*

*Use your own words*

### **Part 1: Basic Revision**

- 1] Define; Science, Observation, Experiment
- 2] Write characteristics of living and non-living things and give 5 examples each
- 3] What is Science, write in your own words.

### **Part 2: Observation/Real life**

- 1) Observe 3 plants and write differences.
- 2) Why do plants bend towards light?
- 3) What changes do you see in day/night?

### **Part 3: Creative Work (Any Two)**

- A) Draw paste of your favourite plant
- B) Make a chart on living vs. non-living organisms
- C) Mini project: My Surroundings
- D) Keep a diary of daily temperature and write a note on global warming
- E) Grow seeds (like moong dal) and document the stages of seed germination.

### **Part 4: Reading**

Read next chapter and write 3 doubts.

# SUMMER HOLIDAYS HOME WORK

## CLASS-6 SEC-A

*Instructions:*

*Complete neatly in Notebook.*

*Do all sections.*

*Use your own words*

### **Part 1: Basic Revision**

1. What is Science, write in your own words.
2. Why do plants need sunlight?
3. Why do we eat food?

### **Part 2: Observation/Real life**

- A) Observe 4 (four) animals and write differences.
- B) Why is Earth considered unique in the universe?
- C) How science is connected to our daily life, give 2 examples.

### **Part 3: Creative Work (Any Two)**

- A) Draw paste of your favourite plant
- B) Make a chart on living vs. Non-living organisms
- C) Mini project: My Surroundings
- D) Keep a diary of daily temperature and write a note on global warming
- E) Grow seeds (like moong dal) and document the stages of seed germination.

### **Part 4: Reading**

Read next chapter and write 3 doubts.

# PM SHRI KV KARIMNAGAR

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## SUMMER HOLIDAY HOMEWORK

**Class: VI**

Subject: Mathematics

### Objective

To revise concepts in a simple, practical, and interesting way.

### Part A: Concept-Based Practice (Do in Notebook)

#### 1. Large Numbers

a) Write in expanded form:

- 4,56,321

- 7,08,945

- 3,20,109

b) Write in number names:

- 6,45,210

- 8,09,003

- 5,70,680

#### 2. Addition (Word Problems)

1. A shopkeeper sold goods worth ₹2,345 and ₹3,678 in a day. Find total sales.

2. A school library has 4,567 Hindi books and 3,289 English books. Find total books.

3. Ramesh travelled 125 km on Monday and 235 km on Tuesday. Total distance?

#### 3. Subtraction (Word Problems)

1. A tank had 8,500 litres of water. 3,275 litres were used. How much left?

2. A factory produced 9,000 toys, 4,678 were sold. How many remain?

3. A man had ₹7,500 and spent ₹2,345. How much money left?

#### 4. Multiplication

-  $234 \times 12$

-  $456 \times 23$

-  $321 \times 14$

## 5. Division

-  $875 \div 5$

-  $936 \div 6$

-  $725 \div 4$

## 6. Fractions

Draw and colour:  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{3}{4}$

Compare:  $\frac{2}{3}$  and  $\frac{3}{5}$ ,  $\frac{1}{2}$  and  $\frac{4}{8}$ ,  $\frac{3}{4}$  and  $\frac{5}{6}$

## 7. Measurement

Estimate:

1. Length of study table

2. Weight of school bag

3. Height of a door

## Part B: Activity-Based Learning (A4 Sheets)

1. Maths in daily life (3 examples with pictures)

2. Make a picture using shapes and label them

3. Draw a clock showing your daily routine

## Part C: Mental Maths

Learn tables 2 to 15

Practice 5 addition and 5 subtraction mentally

## Part D: Real-Life Task

Note 5 items with prices from a shop

Find total bill

Calculate change from ₹1000

## Part E: Reflection

Write 5 lines: "How Maths helps me in daily life"

## Instructions

Maintain neat work

Use colours where needed

Do work independently

Submit after holidays

## **SUMMER HOLIDAYS HOMEWORK CLASS 6 A/B**

1. Dairy entry –“About summer vacation.”
2. News paper task -read the English new paper [Hindu /Deccan] find new vocabulary Write its meaning [daily 3 new words]
3. Practice hand writing in hand writing note book [2 days 1 page.]
4. Write an informal letter to your friend expressing your summer holiday vacation experience
5. Write a formal letter [application for sick leave to Principal Sir]
6. Essay writing topic on **“Uses of Tress”**

### **6. GRAMMAR**

Daily 1 parts of speech [with definition] and minimum5 to maximum10 examples each. [Write parts of speech for 2 weeks]

7. Read the story /listen to audio book of any one of the following.

**THE SECRET GARDEN** by Frances Hadgson Burnett

**THE MAGIC OF LOST EARRINGS** by Sudha Murthy

## ग्रीष्मकालीन अवकाश गृह कार्य, कक्षा 6, हिंदी।

1. सर्वनाम तथा विशेषण की परिभाषा उनके भेद और प्रत्येक के दो-दो उदाहरण लिखो।
2. ,, 51 से 100 तक हिंदी में गिनती लिखिए।
3. अपने मित्र को जन्मदिन के लिए बधाई पत्र लिखो।
4. अपने विद्यालय के प्राचार्य महोदय को 2 दिन के अवकाश के लिए प्रार्थना पत्र लिखो।
5. विद्यार्थी और अनुशासन, समय का महत्व, मेरे सपनों का भारत विषयों पर 120 शब्दों में अनुच्छेद लिखो।
6. कोई एक कहानी पुस्तक या कोई पत्रिका पढ़कर इसका संक्षिप्त कर 100 शब्दों में लिखो।

## Summer holiday homework

Class 6

Kriti

### Drawing Exercises

Task1-Still Life Sketch: Arrange two non-moving objects (like a bottle and a fruit) and draw them while carefully observing how light falls on them.

Task2-Texture Practice: Step outdoors and draw three leaves with different shapes, then use your pencil to shade and represent their unique textures (smooth, rough, or bumpy).

Task3-Value Scale: Draw a long rectangle and divide it into five squares. Practice your pencil pressure by shading them from the lightest tone to the darkest tone.

Task4-Multi-angle Drawing: Choose a simple object like a cup or a box. Draw it from three different angles (front, side, and top) to show how its shape changes with your view.

## **AI SUMMER HOME WORK FOR 6<sup>th</sup> CLASS**

### **Section A: Understanding AI &Automation**

- 1) Write any 5 examples of AI or Automation from your daily life. Clearly mention whether it is AI or Automation and give a reason.
- 2) How does AI help us in daily life?
- 3) What will happen if there is no Automation?
- 4) Can a machine be both AI and Automation? Explain with an example.

### **Section B: Creative Thinking**

- 5) If you create your own AI, what problem will it solve?

### **Section C: Poster Making**

- 6) Draw a poster on "AI vs Automation".

### **Section D: Activity / Interaction**

- 7) Explain AI to your family member. Ask their opinion about AI, one example, and if it is useful. Write their answers and what you learned.

## **Vi class**

### **holidays homework**

#### **Social Science**

1. Draw the Indian political map.
2. Draw the Out line map of the world.
3. write in Detail about any ten historical monument's and past the pictures .
4. Make a list of six political parties, Its symbols ,area and main political agenda.
5. Write about in Indian any few state's festivals .

## SANSKRIT

1. सभी छात्र सरस्वती माता का चित्र बनाकर विद्या के महत्व से संबंधित श्लोक खिलकर उत्तर पुस्तिका पर कवर करें।
2. 1 से 100 तक की संख्या संस्कृत में खिलकर याद करें।
3. अस्मद् - युष्मद् शब्द रूप खिलें व याद करें।
4. ख ाद्, स्था, गम्, पा धातुओं को पाँचों लकारों में खिलें व याद करें।
5. 10 पक्षियों 10 सब्जियों के चित्र बनाकर संस्कृत में नाम खिलें

**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS VII**

## SCIENCE SUMMER HOLIDAYS HOME WORK

### **Class-7 sec-A**

*Instructions:*

*Answer in your own words*

*Complete neatly in notebook*

*Do all sections*

#### **Part 1: Basic Revision**

- A) Define: Acid, Base, Indicator and give examples
- B) What is neutralization? Give 2 examples
- C) What is evolution. Give examples -from daily life.
- D) Define Science, Curiosity in your own words

#### **Part 2: Observation/Real life**

- 1) Why is lemon sour? Observe sour substances at home
- 2) Find 3 acidic, 3 basic and 3 neutral substances at home
- 3) Observe changes in plants and animals in your surroundings

#### **Part-3: Creative Work (Any THREE)**

- A) Make a chart on Acids vs Bases
- B) Make a chart on neutralization in daily life
- C) Draw pH scale and litmus test colour change.
- D) Create a poster titled “ Science in My Home” showing the innovations you use daily.
- E) Draw any 5 Uses of Light in daily life Prepare a chart showing physical and chemical changes
- F) Prepare a secret message “using “Natural Substances and indicators, and reveal it on school reopen day.

#### **Part-4: Reading**

Read next chapter and write 5 doubts.

## Class-7 sec-B

*Instructions:*

*Answer in your own words*

*Complete neatly in notebook*

*Do all sections*

### **Part 1: Basic Revision**

- A) Define Science, Curiosity in your own words
- B) Why is Curiosity important in science?
- C) How does science help as in everyday life?
- D) How did early humans measure time?

### **Part 2: Observation/Real life**

- 1) Observe spoiled food and write reasons.
- 2) How human activities are linked to environmental changes?
- 3) Observe why do clothes dry-faster on a sunny day than on a on a cloudy day – give reasons

### **Part-3: Creative Work (Any THREE)**

- A) Make a chart on Acids vs Bases
- B) Make a chart on neutralization in daily life
- C) Draw pH scale and litmus test colour change
- D) Create a poster titled “ Science in My Home” showing the innovations you use daily.
- E) Draw any 5 Uses of Light in daily life
- F) Prepare a chart showing physical and chemical changes
- G) Prepare a secret message “using “Natural Substances and indicators, and reveal it on school reopen day.

### **Part-4: Reading**

Read next chapter and write 5 doubts.

## **SUMMER HOLIDAYS HOMEWORK CLASS 7 A/B**

1. Dairy entry –“About summer vacation.”
2. News paper task -read the English new paper [Hindu /Deccan] find new vocabulary Write its meaning [daily 3 new words]
3. Practice hand writing in hand writing note book [2 days 1 page.]
4. Write an informal letter to your friend expressing your summer holiday vacation experience
5. Write a formal letter [application for sick leave to Principal Sir]

### **6. GRAMMAR**

Daily 1 parts of speech [with definition] and minimum 5 to maximum 10 examples each. [Write parts of speech for 2 weeks]

7. Read the story /listen to audio book of any one of the following.

**THE SECRET GARDEN** by Frances Hadgson Burnett

**THE MAGIC OF LOST EARRINGS** by Sudha Murthy

### **8. Creative activity**

Essay writing topic on “**nature beauty**”

ग्रीष्मकालीन छुट्टियों का गृह कार्य

विषय -हिंदी

कक्षा -सातवीं अ,ब

- 1 मां और बेटे पर 100 शब्दों में एक संवाद लिखिए ।
- 2 दो मित्रों के बीच परीक्षा की तैयारी को लेकर 100 शब्दों में एक संवाद लिखिए ।
- 3 'शिक्षक दिवस' पर 150 शब्दों में एक अनुच्छेद लिखिए।
- 4 अपने विद्यालय के प्राचार्यको 2 दिन का अवकाश लेने के संबंध में एक प्रार्थना- पत्र लिखिए ।
- 5 अपने विद्यालय के वार्षिकोत्सव का उल्लेख करते हुए मित्र/ सहेली को पत्र लिखिए ।
- 6 सर्वनाम किसे कहते हैं और उसके भेद को सोदाहरण परिभाषित लिखिए ।
- 7 कोई पत्रिका एवं कहानी पढ़कर उसका सार 150 शब्दों में लिखिए
- 8 कारक किसे कहते हैं उसके भेद को सोदाहरण परिभाषित लिखिए ।

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## Assignment

80

1) Write the following numbers in Indian (Hindu Arabic) system and International system, by using commas

(a) 1493256      (b) 678957      (c) 30006587

2) What is the value of  $14,63,128 - 4,90,020$  ?

3) In Surat city population is in 2015 year 24,33,835 and in 2025 year 44,67,797. How much population increased in ten years ?

4) How many 1000's make 1 million ?

5) How many zeroes are in 1 crore ?

6) What is the place value of 7 in the number 38,793 ?

7) What is the face value of 7 in the number 38,793 ?

8) How many 100's make 26,300 ?

9) If you have ₹ 100 notes, ₹ 50 notes, ₹ 10 notes. How many possibilities are to make the value of ₹ 150.

10) In a bank cashier gave 7 notes ₹ 500's, 8 notes ₹ 100's, 13 notes ₹ 50's and 15 notes ₹ 10, to customer. How much money received by customer ?

11) Somu is 1m tall, Each floor of somu's building height is 4 times of somu's height, total floors of somu's building 10 floors. (a) Find the somu's building total height ?

(b) If Kunchikal waterfall in Karnataka its height is 460 metres. How much taller this Kunchikal waterfall than somu's building ?

(c) Statue of unity in Gujarat depicting Sardar Vallabh bhai Patel. Its height is 200 metres. How much taller this Statue of unity than somu's building ? How many floors should somu's building have to be as high as the statue of unity ?

- 12) Form a largest and smallest 6 digit number formed by the digits 3, 4, 7, 0, 2, 8 ?
- 13) In a General year 365 days. Each day 24 hours.
  - (a) How many hours in June month ?
  - (b) How many days in 7 years ? (Excluded Leap years)
  - (c) How many hours for 1 year 3 months ? (consider each month 30 days)
- 14) What is the different between largest 5 digit number and smallest 5 digit number ?
- 15) A circus company ticket cost is ₹ 56. Daily entry only 430 people. How much money earned the circus company for 12 days ?
- 16) what number comes after 13,099 ?
- 17) Sachin Tendulkar runs in 10 matches are 83, 57, 63, 59, 95, 103, 89, 92, 45, 127. Find the total score of these 10 matches ?
- 18) A metro train ticket between two stations is ₹ 40 for an adult and ₹ 20 per child what is the total cost of tickets
  - (a) for 4 adults and 3 children ?
  - (b) for 2 groups having 3 adults each ?
- 19) Find the value of  $5 + (3 \times 7) - 19$  ?
- 20) How many 5's make 1,25,320 ?

Summer holiday homework

Class 7

Kriti

Nature drawing question

- 1-Draw and color a beautiful garden with different flowers, butterflies, and birds.
- 2-Make a drawing of a lotus flower in a pond with leaves and water waves.
- 3-Draw a sunflower with clear petals and leaves, and color it neatly.
- 4-Draw and color a rose plant with buds, leaves, and thorns.

Icon drawing questions

- 1-Make a school bag icon using creative patterns and decorative lines.
- 2-Draw an icon of a mobile phone with simple shapes and neat coloring.
- 3-Design an icon of a butterfly using simple shapes and bright colors



## **AI SUMMER HOME WORK FOR 7<sup>th</sup> CLASS**

### **Section A: Understanding AI**

- 1) List any 3 applications of Artificial Intelligence that you use in your daily life.
- 2) Write 2–3 lines about each application. Which AI application do you like the most? Why?

### **Section B: Activity – Interaction with AI**

3) Interact with any AI tool (Chatbot / Voice Assistant / Online Search). Write:

- Ask any 3 questions
- Write the questions you asked and the answers you received
- Was the AI helpful? Write your opinion in 3–4 lines

### **Section C: Creative Writing**

4) Write about “My Life with Robots in the Future”.

### **Section D: Poster Making**

5) Draw a poster on “Applications of AI”.

### **Section E: Fun Activity**

6) Give 3 instructions to a family member and make them act like a robot. Then write:

- The instructions you gave
- Did they follow correctly?
- What mistakes happened?

## **Vii class**

### **holidays homework**

#### **Social Science**

1. Draw the Indian political map.
2. What are some key Geographical features of India .
3. Write and learn the “preamble of the Indian constitution”.
4. India is a diversity country ,collect the different types of Indian bird’s and animals pictures.
5. Write a short Story on Ashoka Empire .

## SANSKRIT

1. संकल्पम् पाठ- 1, 2 के शब्दार्थ एवं प्रश्न उत्तर याद करके लिखिए ।
2. अकारांत पुल्लिंग शब्दरूप, (1- राम, 2-बालक) याद करके लिखिए ।
3. आकारांत स्त्रीलिंग शब्दरूप, ( 1-लता, 2-रमा) याद करके लिखिए ।
4. धातु रूप- पठ् धातु रूप (1. लृट लकार, 2. लङ्. लकार) में याद करके लिखित अभ्यास करिए ।
5. सूर्य नमस्कार के मंत्र चित्र सहित (A3 size sheet) पर लिखिए ।

**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS VII**

## ग्रीष्मकालीन छुट्टियों का गृह कार्य

### विषय- हिंदी

#### कक्षा- आठवीं अ,ब

- प्रश्न ( 1) परीक्षा की तैयारी को लेकर 100 शब्दों में दो मित्रों के बीच एक संवाद लिखिए ।
- (2 ) मोबाइल और पुस्तक पर 100 शब्दों में एक संवाद लिखिए ।
- (3) अपने विद्यालय के प्राचार्यको 2 दिन का अवकाश लेने के संबंध में एक प्रार्थना -पत्र लिखिए ।
- (4) दशहरा अवकाश में आने के लिए अपने मित्र को एक पत्र लिखिए ।
- (5) हिंदी पखवाड़ा पर 150 शब्दों में एक अनुच्छेद लिखिए ।
- (6) विशेषण किसे कहते हैं और उसके भेद को सोदाहरण परिभाषित करते हुए लिखिए ।
- (8) कारक किसे कहते हैं और उसके भेद को साधारण परिभाषित करते हुए लिखिए ।

# SUMMER HOLIDAYS HOME WORK

## Class-8 Sec-A

*Instructions:*

*Complete neatly and be ready to present your work*

*Answer in your own words*

*Do all parts in your notebooks*

### **Part 1: Basic Revision**

1. What is Scientific investigation? Write steps of Scientific method.
2. What are microorganisms Name different types of microorganisms and their uses/effects.
3. Write short notes on food Preservation and Modes of Transmission.
4. Write 2 examples of Natural phenomenon that can be investigated.
5. What precautions should we take to avoid diseases?

### **Part 2: Observation / Real life**

- 1) Where do you see science in your daily life. Give 4 examples
- 2) How are micro organisms helpful in agriculture, labe?
- 3) What will happen if there were no microorganisms?
- 4) What causes food poisoning. What are common Symptoms?

### **Part 3: Creative Work (Any THREE)**

- A) Make a chart: Useful vs harmful microorganisms
- B) Project on microbes in daily life.
- C) Draw and label - Types of microorganisms
- D) Make a chart on "Role of Scientists in daily life"
- E) Prepare a chart on any 3 Scientists and their discoveries and how their contributions change our understanding of our living world
- F) Prepare Mini-Compost (kitchen waste), Observe it Over 2-3 weeks to create manure and note down your recordings
- G) Observe how your family deposes of caste. Make a list-what type of wastes is placed together, and what type is kept separate?
- H) Keep daily log of 3 small observations ( like why shadows form)& write short scientific explanation for each.

### **Part 4: Reading**

Read next chapter and write 5 questions/doubts.

## SUMMER HOLIDAYS HOME WORK

### Class-8 Sec-B

*Instructions:*

*Complete neatly and be ready to present your work*

*Answer in your own words*

*Do all parts in your notebooks*

#### **Part 1: Basic Revision**

1. Describe steps of a scientific investigation using any 2 examples.
2. How do microorganisms cause disease in humans
3. Explain the process of fermentation in Yeast.
4. Define Virus and Write how do they enter our body.
5. What precautions should we take to avoid diseases?

#### **Part 2: Observation / Real life**

- 1) How can we prevent food poisoning. Talk to elders about traditional food safety practices and note.
- 2) Observe and record: how curd is formed and why does food spoil at home.
- 3) How does a microscope help scientists. Observe tiny details in leaves or insects using a magnifying lens.
- 4) What changes would we see in our health if our body had no helpful microorganisms and what would happen to garbage and waste around us?

#### **Part 3: Creative Work (Any THREE)**

- A) Make a chart: Useful vs harmful microorganisms
- B) Project on microbes in daily life.
- C) Draw and label – Types of microorganisms
- D) Make a chart on “Role of Scientists in daily life”
- E) Prepare a chart on any 3 Scientists and their discoveries and how their contributions change our understanding of our living world
- F) Prepare Mini-Compost (kitchen waste), Observe it Over 2-3 weeks to create manure and note down your recordings
- G) Observe how your family disposes of waste. Make a list-what type of wastes is placed together, and what type is kept separate?
- H) Keep daily log of 3 small observations ( like why shadows form)& write short scientific explanation for each.

#### **Part 4: Reading**

Read next chapter and write 5 questions/doubts.

## **SUMMER HOLIDAYS HOMEWORK CLASS 8A/B**

1. Dairy entry –“About summer vacation.”
2. News paper task -read the English new paper [Hindu /Deccan] find new vocabulary Write its meaning along with antonym and synonym [daily 3 new words]
3. Compose an essay on your “School life”.
4. Read any one of the novels given below and write down the summery of novel in your own words.
  1. LORD OF FLIES by William Golding
  2. ANIMAL FARM by George Orwell
  3. MALGUDI DAYS by R.K Narayan
5. Watch HARRY POTTER movie with English subtitles (to enhance your listening and speaking skills in English)

### **6. GRAMMAR**

Write TENSES structures of all 12 tenses AND write down any [3] sentences given below. [Convert sentence into all 12 tenses]

1. She reads English books daily.
2. I play cricket every day.
3. He eats breakfast
4. We sing a song
5. They go to college
6. What do you do?

#### **Convert active voice to passive voice**

1. She writes a letter
2. The students will submit the home work
3. He has repaired the car
4. He will have painted the wall
5. The police caught the thief.

#### **Convert passive voice to active voice**

1. He reported the news
2. Tomorrow we will arrive
3. The game is being watched by them
4. He is insisting that I speak to you.
5. The stranger was barked at by the dog.

### **7) CREATIVE ACTIVITY**

1. Write poetry about your “**Mother**” in your own words.

## Subject Enrichment

Number	Square number	Number	Square number	Number	Square number
17	289	5.4		1.03	
2.6	6.76	$\frac{3}{7}$		$\frac{7}{9}$	
$\frac{3}{5}$	$\frac{9}{25}$	59		1.73	

\* Find the smallest square number that is divisible by 4, 9 and 10.

Ans: Step-I: First we find the L.C.M of 4, 9 and 10

$$\begin{array}{r}
 2 \mid 4, 9, 10 \\
 2 \mid 2, 9, 5 \\
 3 \mid 1, 9, 5 \\
 3 \mid 1, 3, 5 \\
 5 \mid 1, 1, 5 \\
 \hline
 1, 1, 1
 \end{array}$$

L.C.M of 4, 9 and 10 is

$$2 \times 2 \times 3 \times 3 \times 5 = 180$$

Step-II: In LCM  $2 \times 2 \times 3 \times 3 \times 5$   
 Paired Paired Not Paired

So we multiply 180 by 5 we get perfect square

Step-III:  $2 \times 2 \times 3 \times 3 \times 5 \times 5 = 900$  is the perfect square

$\therefore$  900 is the perfect smallest square number which is divisible by 4, 9 and 10.

\* A Farmer land is in square shape, its area is 7396 sq.m Find its side.

Ans: We know that square area = side  $\times$  side

$$7396 = \text{side} \times \text{side}$$

$$\text{side} = \sqrt{7396}$$

$$\text{side} = \sqrt{2 \times 2 \times 43 \times 43}$$

$$= 2 \times 43$$

$$= 86$$

$\therefore$  Land side is 86 m.

Land Area 7396 m <sup>2</sup>
----------------------------------

$$\begin{array}{r}
 2 \mid 7396 \\
 2 \mid 3698 \\
 43 \mid 1849 \\
 \hline
 43
 \end{array}$$

\* Find the smallest number by which 9408 must be multiply so that Product is a Perfect square. Find the square root of the Product.

Ans: Step I: Given number 9408

9408 write in Product of Primes (Prime factorisation)

$$\begin{array}{r}
 2 \overline{) 9408} \\
 2 \overline{) 4704} \\
 2 \overline{) 2352} \\
 2 \overline{) 1176} \\
 2 \overline{) 588} \\
 2 \overline{) 294} \\
 3 \overline{) 147} \\
 7 \overline{) 49} \\
 7
 \end{array}$$

$$9408 = \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times 3 \times \underbrace{7 \times 7}_{\text{Pair}}$$

$\downarrow$   
 not paired

If we multiply 9408 by 3 to get Perfect square

$$9408 \times 3 = 28224 \text{ is a Perfect square}$$

Step II: 28224 square root is

$$\begin{aligned}
 \sqrt{28224} &= \sqrt{\underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{3 \times 3}_{\text{Pair}} \times \underbrace{7 \times 7}_{\text{Pair}}} \\
 &= 2 \times 2 \times 2 \times 3 \times 7 \\
 &= 168
 \end{aligned}$$

$\therefore$  9408 is multiply by 3 the product is 28224 Perfect square and square root of 28224 is 168.

\* Find the smallest number by which 9408 must be divided so that the number is a Perfect square. Find the square root of the number.

Ans: Step I: Given number 9408

9408 write in Product of Primes (Prime factorisation)

$$\begin{array}{r}
 2 \overline{) 9408} \\
 2 \overline{) 4704} \\
 2 \overline{) 2352} \\
 2 \overline{) 1176} \\
 2 \overline{) 588} \\
 2 \overline{) 294} \\
 3 \overline{) 147} \\
 7 \overline{) 49} \\
 7
 \end{array}$$

$$9408 = \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times 3 \times \underbrace{7 \times 7}_{\text{Pair}}$$

$\downarrow$   
 not paired

If we divide 9408 by 3 to get Perfect square

$$9408 \div 3 = 3136$$

$$3 \overline{) 9408} \quad (3136)$$

$$\begin{array}{r}
 9 \downarrow \\
 4 \downarrow \\
 3 \downarrow \\
 \hline
 10 \\
 9 \downarrow \\
 \hline
 18 \\
 18 \\
 \hline
 0
 \end{array}$$

Step II: 3136 square root is

$$\begin{aligned}
 \sqrt{3136} &= \sqrt{\underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{2 \times 2}_{\text{Pair}} \times \underbrace{7 \times 7}_{\text{Pair}}} \\
 &= 2 \times 2 \times 2 \times 7 \\
 &= 56
 \end{aligned}$$

$\therefore$  9408 is divided by 3, the number 3136 is a Perfect square and square root of 3136 is 56.

Number	cube number	Number	cube number	Number	cube number
6	216	$\frac{3}{5}$	$\frac{27}{125}$	2.03	
13	2197	43		$\frac{4}{7}$	
1.4	2.744	1.7		3.3	

\* Find the cuberoot of 1728

Ans: STEP I: Prime factorisation of 1728

$$\begin{array}{r}
 2 \overline{) 1728} \\
 \underline{2 \quad 864} \\
 2 \quad 432 \\
 \underline{2 \quad 216} \\
 2 \quad 108 \\
 \underline{2 \quad 54} \\
 2 \quad 27 \\
 \underline{3 \quad 27} \\
 3 \quad 9 \\
 \underline{3 \quad 9} \\
 3
 \end{array}$$

$$1728 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$$

$$\begin{aligned}
 \sqrt[3]{1728} &= \sqrt[3]{\underbrace{2 \times 2 \times 2} \times \underbrace{2 \times 2 \times 2} \times \underbrace{3 \times 3 \times 3}} \\
 &= 2 \times 2 \times 3
 \end{aligned}$$

$$\sqrt[3]{1728} = 12$$

$\therefore$  cube root of 1728 is 12.

\* Find the values of followings

$$(a) \sqrt[3]{512} = \sqrt[3]{\underbrace{2 \times 2 \times 2} \times \underbrace{2 \times 2 \times 2} \times \underbrace{2 \times 2 \times 2}} = 2 \times 2 \times 2 = 8$$

$$\therefore \sqrt[3]{512} = 8$$

$$(b) \sqrt[3]{\frac{27}{64}} = \sqrt[3]{\frac{3 \times 3 \times 3}{2 \times 2 \times 2 \times 2 \times 2 \times 2}} = \frac{3}{2 \times 2} = \frac{3}{4}$$

$$(c) \sqrt[3]{729} = \sqrt[3]{\underbrace{3 \times 3 \times 3} \times \underbrace{3 \times 3 \times 3}} = 3 \times 3 = 9$$

\* Find the smallest number by which 200 multiply so that number is a perfect cube.

Ans: Given number 200

$$\begin{array}{r}
 2 \overline{) 200} \\
 \underline{2 \quad 100} \\
 2 \quad 50 \\
 \underline{2 \quad 25} \\
 5 \quad 25 \\
 \underline{5 \quad 25} \\
 5
 \end{array}$$

$$200 = \underbrace{2 \times 2 \times 2}_{\text{triple}} \times \underbrace{5 \times 5}_{\text{not triple}}$$

If we multiply 200 by 5 to get perfect cube

$$200 \times 5 = 1000 \text{ is a perfect cube}$$

\* Find the smallest number by which 1323 must be divided to make a perfect cube.

Ans: Given 1323      Prime factorisation of 1323

$$1323 = \underbrace{3 \times 3 \times 3}_{\text{triple}} \times \underbrace{7 \times 7}_{\text{not triple}}$$

$$\begin{array}{r|l} 3 & 1323 \\ \hline 3 & 441 \\ \hline 3 & 147 \\ \hline 7 & 49 \\ \hline & 7 \end{array}$$

So If we divide 1323 by 49 to get perfect cube

$$1323 \div 49 = 27$$

∴ 1323 is divided by 49, we get  
Perfect cube 27

$$\begin{array}{r} 49 \overline{) 1323} \quad (27) \\ \underline{98} \phantom{0} \\ 343 \\ \underline{343} \\ * \end{array}$$

### Higher Order Thinking

- \* Find the smallest number which is subtracted from 149 so that make a perfect square?
- \* Find the smallest number which is add to 137 so that make a perfect square?

Teacher questions: (a) which method use to find answers for above questions.

(b) why the answer not find to Prime factorisation method.

Conclusion: Learning of Division method is also important to find square roots.

## A SQUARE AND A CUBE (Assignment)

- 1) which of the following is a square of 85 [ ]  
 A) 7252      B) 7522      C) 7225      D) 2725
- 2) which of the following is a prime factorisation of 660 [ ]  
 A)  $2 \times 3 \times 5 \times 11$       B)  $2 \times 2 \times 3 \times 5 \times 11$       C)  $3 \times 5 \times 11$       D)  $2 \times 3 \times 5 \times 11$
- 3) which of the following is a square root symbol [ ]  
 A)  $\cong$       B)  $\angle$       C)  $\sqrt{\quad}$       D)  $\Sigma$
- 4)  $(52)^2 = 2704$  then  $(53)^2$  value is [ ]  
 A)  $2704 + 52$       B)  $2704 + 105$       C)  $2704 + 53$       D)  $2704 + 1$
- 5) How many numbers lies between  $(13)^2$  and  $(14)^2$ . [ ]  
 A) 26      B) 27      C) 28      D) 1
- 6) Square root of 576 is [ ]  
 A) 44      B) 34      C) 24      D) 14
- 7) Number of digits in square of 4 digit number [ ]  
 A) 5 or 6      B) 6 or 7      C) 7 or 8      D) 8 or 9
- 8)  $\sqrt{625} + \sqrt{121} =$  [ ]  
 A) 36      B) 28      C) 26      D) 38
- 9)  $\sqrt[3]{2 \times 2 \times 2 \times 5 \times 5 \times 5}$  value is [ ]  
 A) 2      B) 5      C) 10      D) 7
- 10) 1729 is shown as [ ]  
 A)  $10^3 + 9^3$       B)  $12^3 + 1^3$       C) A & B      D) None of these

Fill the pattern to its missing numbers

$$1^2 + 2^2 + 2^2 = 3^2$$

$$2^2 + 3^2 + 6^2 = 7^2$$

$$3^2 + 4^2 + 12^2 = 13^2$$

$$4^2 + 5^2 + (\quad)^2 = (\quad)^2$$

$$5^2 + (\quad)^2 + 30^2 = 31^2$$

$$9^2 + 10^2 + (\quad)^2 = (\quad)^2$$

Class 8th

SUMMER HOLIDAY HOMEWORK OF ART'

Q.1- DRAW & COLOUR ANY 2 OBJECT DRAWINGS.

CHAIR

TABLE LAMP

SCHOOL BAG

WATER BOTTLE

Q.2- DRAW ANY 2 HUMAN FIGURE..

BOY PLAYING

GIRL READING

FARMER WORKING

CHILD FLYING KITE

Q.3-WRITE ABOUT ELEMENTS & PRINCIPLES OF ART IN SHORT

Q.4- DRAW ANY 3 OBJECTS IN DIFFERENT EYE LEVELS.

a-COMPUTER MOUSE

b-SHOE/SLIPPER

c- WRIST WATCH

d- TEA CUP

## **SUMMER HOME WORK FOR 8<sup>th</sup> CLASS**

### **Section A: Understanding AI**

- 1) Write about how people lived before Artificial Intelligence and how life has changed after AI.
- 2) Think and write the pros and cons of Artificial Intelligence.

### **Section B: Research and Learning**

- 3) Learn about any AI tool and write what you have learned from it.

### **Section C: Project Work**

- 4) Choose a simple problem and find a solution by following all the steps of the AI Project Cycle.

### **Section D: Creative Writing**

- 5) Write a short conversation between a student and an AI assistant (Dialogue Writing).
- 6) Write a letter to Artificial Intelligence thanking it for helping you in your daily life.

### **Section E: Poster Making**

- 7) Make a poster on "AI Project Cycle".

## **Viii class**

### **holidays homework**

#### **Social Science**

1. Draw the Indian political map.
2. Write the fundamental Duties of Indian constitution .
3. Write about government of India .
4. Describe a few major types of Soil 's Found in india.
5. prepare Constitution of India scarab book.
6. Collect the different types of seeds and write about them.
7. How to protect natural resource .

## SANSKRIT

1. संकल्पम् पाठ- 1, 2 के शब्दार्थ एवं प्रश्न उत्तर याद करके लिखिए ।
2. अकारांत पुल्लिंग शब्दरूप, (1- राम, 2-बालक) याद करके लिखिए ।
3. आकारांत स्त्रीलिंग शब्दरूप, ( 1-लता, 2-रमा) याद करके लिखिए ।
4. धातु रूप- पठ् धातु रूप (1. लृट लकार, 2. लङ्. लकार) में याद करके लिखित अभ्यास करिए ।
5. सूर्य नमस्कार के मंत्र चित्र सहित (A3 size sheet) पर लिखिए ।

**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS IX**

**PMSHRI KV KARIMNAGAR**

**CLASS 9 SCIENCE HOLIDAY HOME WORK**

**Instructions- 1. Write all the holiday homework of all 3 subjects of science in subject enrichment activity book. You can divide the book into 3 parts and write them separately in that respective part.**

**SUB : CHEMISTRY**

1. Prepare a periodic chart of 1 to 30 elements with their atomic number and atomic mass.
2. Compare the rate of evaporation using three cups of water placed in a fan, in sunlight, and at room temperature.
3. Activity : Observe your surroundings and identify the materials and classify them into elements, compounds and mixtures.
4. Activity : Observe the uniform and non uniform mixtures by using available substances.
5. Activity : Prepare different concentrations of solutions by using food colour.
6. Activity : How the solubility changes with temperature ? Using sugar solution tabulate the results.
7. Activity : Write any 10 materials and identify the elements present in that objects.
8. Classify the following elements into metals and non metals.

Zinc, Aluminium, carbon , nitrogen, silicon, Iron, copper ,silver, gold, boron, fluorine.

**SUB: BIOLOGY**

1. Perform an activity to demonstrate osmosis in raisins (kishmish). Write the activity procedure, observations, take a photograph of yourself with the experimental setup, take printout and paste it.

**SUB-PHYSICS**

1. Complete the work sheets in bridge course basing on 8th knowledge.

# SUMMER HOLIDAY HOMEWORK

## MATHEMATICS

Class IX | Session 2026–27

**Q1.** Represent  $-5/3$  and  $7/4$  on the number line. Find FOUR rational numbers between them and write them in ascending order.

**Q2.** Verify the following properties for  $a = 2/3$ ,  $b = -5/6$ ,  $c = 1/4$  :

- (i)  $a + (b + c) = (a + b) + c$  [Associativity of Addition]
- (ii)  $a \times (b + c) = a \times b + a \times c$  [Distributivity of Multiplication over Addition]
- (iii) Find the additive inverse and multiplicative inverse of each of  $a$ ,  $b$ ,  $c$ .

**Q3.** Fill in the blanks and justify each answer:

- (i) The product of a rational number and its reciprocal is \_\_\_\_\_.
- (ii) Between any two rational numbers there are \_\_\_\_\_ rational numbers.
- (iii) Write three rational numbers equivalent to  $5/7$ .
- (iv) Which is greater:  $-4/5$  or  $-3/4$ ? Show on a number line.
- (v) The sum of a rational number and its additive inverse is \_\_\_\_\_. Verify with  $-8/11$ .

### CASE STUDY 1 – School Canteen Budget at KV Karimnagar

The canteen manager of KV Karimnagar plans the weekly budget. He spends  $3/8$  of the total budget on vegetables,  $1/4$  on milk and dairy, and  $1/6$  on cooking gas. The remaining amount of ₹ 525 is set aside as weekly savings.

**Based on the above information, answer the following:**

- (i) Find the total fraction of the budget spent on vegetables, milk and gas.
- (ii) What fraction of the budget is saved? Show that it is a rational number.
- (iii) If  $S$  is the savings fraction and total budget is  $T$ , form an equation and find  $T$ .
- (iv) Represent the fraction spent on vegetables on a number line.

**Q4.** Solve and verify the solution for each equation:

- (i)  $(3x + 5)/4 - (2x - 1)/3 = 2$
- (ii)  $5(2x - 3) - 3(3x - 7) = 4$
- (iii)  $(x + 2)/(x + 5) = (2x - 1)/(2x + 3)$  [cross-multiplication method]

**Q5. Frame a linear equation and solve:**

- (i) The sum of three consecutive even integers is 78. Find the integers.
- (ii) The present age of a father is three times the age of his son. After 12 years, the father will be twice as old as his son. Find their present ages.
- (iii) The denominator of a fraction is 4 more than its numerator. If both are increased by 3, the fraction becomes  $\frac{4}{5}$ . Find the original fraction.

**Q6. Mixed problems on linear equations:**

- (i) Ritu's present age is 5 years more than three times her daughter's age. Five years hence, the sum of their ages will be 56. Find their present ages.
- (ii) A number is such that when 6 is subtracted from 5 times the number, the result equals 3 times the number plus 5. Find the number.
- (iii) The angles of a triangle are in ratio 2 : 3 : 5. Frame a linear equation using the angle sum property and find each angle

**Q7. Answer based on properties of quadrilaterals:**

- (i) The angles of a quadrilateral are in ratio 1 : 2 : 3 : 4. Find all angles. Is it a special quadrilateral? Justify.
- (ii) In parallelogram ABCD,  $\angle A = (4x - 10)^\circ$  and  $\angle C = (2x + 20)^\circ$ . Find x, and hence find all four angles.
- (iii) In a rhombus, diagonals are 16 cm and 12 cm. Find: (a) side, (b) perimeter, (c) area.

**Q8. Pythagorean triplets and applications:**

- (i) A rectangular park is 40 m long and 30 m wide. Find the length of the diagonal path.
- (ii) Find the smallest number by which 1512 must be divided to make it a perfect cube. Also find its cube root.

**Q 9. Compound Interest problems (show formula and all steps):**

- (i) Find CI on ₹ 15,000 at 12% p.a. for 2 years compounded annually. Also find the difference between CI and SI.
- (ii) The population of the ward served by KV Karimnagar is 80,000 and decreases at 5% per year. Find the population after 3 years.
- (iii) A sum becomes ₹ 6,760 in 2 years and ₹ 7,436 in 3 years at CI. Find the rate and original principal.

**Q10. Discount, GST and Profit-Loss:**

- (i) A shopkeeper marks a laptop bag at ₹ 1,800, offers 15% discount and charges 12% GST on the discounted price. Find the final price.
- (ii) The cost price of 15 articles equals the selling price of 12 articles. Find the profit or loss percent.
- (iii) A shopkeeper buys two fans at ₹ 3,000 each. Sells one at 10% profit and the other at 10% loss. Find his net profit or loss.
- (iv) A TV is listed at ₹ 24,000. After two successive discounts of 10% and 5%, find the final price and the equivalent single discount.

**Q11. Expand using standard identities:**

- (i)  $(4x + 3y)^2$
- (ii)  $(5a - 2b)^2$
- (iii)  $(3m + 4n)(3m - 4n)$
- (iv) Evaluate  $998^2$  using the identity  $(a - b)^2$
- (v) Evaluate  $102 \times 98$  using the identity  $(a + b)(a - b)$

**Q12. Factorise completely:**

- (i)  $9x^2 - 24xy + 16y^2$
- (ii)  $25p^2 - 49q^2$
- (iii)  $x^2 + 7x + 12$
- (iv) Multiply:  $(x^2 + 3x - 2)(2x - 1)$  and simplify

**Q13. Advanced identity applications:**

- (i) Expand  $(2x + 3y)^3$  using  $(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$
- (ii) Find the value of  $a^2 + b^2$ , given  $a + b = 9$  and  $ab = 20$ .
- (iii) If  $x + 1/x = 5$ , find  $x^2 + 1/x^2$  and  $x^3 + 1/x^3$ .
- (iv) Factorise by regrouping:  $2xy + 3x + 2y + 3$

**Q14. Probability applications:**

- (i) Two unbiased coins are tossed. List all outcomes. Find: (a) exactly one head, (b) at least one tail, (c) no head.
- (ii) A bag has 5 red, 8 white and 4 green marbles. One is drawn at random. Find: (a)  $P(\text{red})$ , (b)  $P(\text{not green})$ , (c)  $P(\text{red or white})$ .
- (iii) A card is drawn from a pack of 52 cards. Find: (a)  $P(\text{king})$ , (b)  $P(\text{red card})$ , (c)  $P(\text{face card})$ , (d)  $P(\text{number between 3 and 8, exclusive})$ .

**Q15. Simplify using laws of exponents (positive exponents only):**

- (i)  $(3^3 \times 2^4) \div (6^2 \times 2)$
- (ii)  $[(a^4 \times b^{-3}) \div (a^{-2} \times b^2)]^2$
- (iii) Write 0.00000632 in standard form and  $4.15 \times 10^4$  in usual form.

**Q16. Exponent applications and standard form:**

- (i) Simplify:  $(2^0 + 3^0 + 4^0) \times (5^0 + 6^0 + 7^0)$  [all bases to power zero]
- (ii) Distance from Earth to Sun is  $1.5 \times 10^8$  km and speed of light is  $3 \times 10^5$  km/s. How many seconds does sunlight take to reach Earth?
- (iii) A computer performs  $2.5 \times 10^9$  operations per second. How many operations in one hour? Express in standard form.

**Q17. Proportion word problems:**

- (i) 15 workers complete a project in 24 days. How many workers are needed to finish in 9 days? [Inverse proportion]
- (ii) A car at constant speed covers 360 km in 5 hours. How far will it travel in 8 hours? [Direct proportion]
- (iii) A recipe for 6 people needs 450 g of flour. How much for 16 people? If only 900 g is available, how many people can be served?

**Q18. Coordinate Geometry basics:**

- (i) Plot these points on a Cartesian plane and state which quadrant or axis each lies on: A(4, -3) B(-2, 5) C(0, -4) D(-5, 0) E(3, 3) F(-2, -2)

Formula / Identity	Expression
Compound Interest	$A = P(1 + R/100)^n$ ; $CI = A - P$
Simple Interest	$SI = P \times R \times T / 100$
Cylinder — TSA	$2\pi r(r + h)$
Cylinder — Volume	$\pi r^2 h$
Cuboid — TSA	$2(lb + bh + lh)$
Cuboid — Volume	$l \times b \times h$
Trapezium Area	$\frac{1}{2} (a + b) \times h$
$(a + b)^2$	$a^2 + 2ab + b^2$
$(a - b)^2$	$a^2 - 2ab + b^2$
$(a + b)(a - b)$	$a^2 - b^2$
$(a + b)^3$	$a^3 + 3a^2b + 3ab^2 + b^3$
Sum of angles — Quadrilateral	$360^\circ$

## **SUMMER HOLIDAYS HOMEWORK CLASS 9A**

1. Dairy entry –“About summer vacation.”
2. News paper task -read the English new paper [Hindu /Deccan] find new vocabulary Write its meaning along with antonym and synonym [daily 3 new words]
3. Compose an essay on your “School life”.
4. Read any one of the novels given below and write down the summery of novel in your own words.
  1. LORD OF FLIES by William Golding
  2. ANIMAL FARM by George Orwell
  3. MALGUDI DAYS by R.K Narayan
5. Watch HARRY POTTER movie with English subtitles (to enhance your listening and speaking skills in English)

### **6. GRAMMAR**

Write TENSES structures of all 12 tenses AND write down any [3] sentences given below. [Convert sentence into all 12 tenses]

1. She reads English books daily.
2. I play cricket every day.
3. He eats breakfast
4. We sing a song
5. They go to college
6. What do you do?

#### **Convert active voice to passive voice**

1. She writes a letter
2. The students will submit the home work
3. He has repaired the car
4. He will have painted the wall
5. The police caught the thief.

#### **Convert passive voice to active voice**

1. He reported the news
2. Tomorrow we will arrive
3. The game is being watched by them
4. He is insisting that I speak to you.
5. The stranger was barked at by the dog.

### **7) CREATIVE ACTIVITY**

1. Write poetry about your “**Mother**” in your own words.

Activity: Write the following points where they lie in Coordinate Plane or  $xy$ -plane.

- (a)  $(-3, 5) \rightarrow$  lies in Quadrant II  
 (b)  $(-7, -3) \rightarrow$  lies in Quadrant III  
 (c)  $(7, 5) \rightarrow$  lies in Quadrant I  
 (d)  $(3, -2) \rightarrow$  lies in Quadrant IV  
 (e)  $(0, 4) \rightarrow$  lies on  $y$ -axis  
 (f)  $(-3, 0) \rightarrow$  lies on  $x$ -axis  
 (g)  $(0, 0) \rightarrow$  lies at origin

Activity: Teacher Questions - Student Response

(i) If you plot  $(-4, 0), (-3, 0), (-2, 0), (-1, 0), (1, 0), (6, 0), (5, 0)$  points on coordinate plane where these points lie

Ans: These all points are lies on  $x$ -axis  
 Because these points  $y$ -coordinates are '0'

(ii) If you plot  $(-4, 3), (-3, 3), (-2, 3), (-1, 3), (5, 3), (6, 3)$  points and join these points with a line. what is your observation.

Ans: These points are collinear points because these points are lies on same line

And the line which is going through these points is parallel to  $x$ -axis and 3 units distance from  $x$ -axis

(iii) The distance between two points on  $x$ -axis is  $|x_2 - x_1|$ . Justify your answer with an example.

Ans: Let take  $(8, 0)$  and  $(3, 0)$  are two points on  $x$ -axis

$$\begin{aligned} \text{Distance} &= |x_2 - x_1| \\ &= |3 - 8| \\ &= |-5| \\ &= 5 \text{ units} \end{aligned}$$

Symbol modulus  $| |$   
 it means -ve number  
 turn into +ve  
 it gives always +ve.

(iv) The distance between two points on y-axis is  $|y_2 - y_1|$  is it correct?

Ans: Yes

(v) what is the distance between two points  $(x_1, y_1)$  and  $(x_2, y_2)$

Ans: Distance =  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$  units

(vi) Find the distance between A  $(-5, -1)$  and B  $(-2, -5)$

Ans: Given points A  $(-5, -1)$  and B  $(-2, -5)$

$$x_1 = -5, y_1 = -1$$

$$x_2 = -2, y_2 = -5$$

$$\begin{aligned} \text{AB distance} &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\ &= \sqrt{(-2 - (-5))^2 + (-5 - (-1))^2} \\ &= \sqrt{(-2 + 5)^2 + (-5 + 1)^2} \\ &= \sqrt{(3)^2 + (-4)^2} \\ &= \sqrt{9 + 16} \\ &= \sqrt{25} \\ &= 5 \text{ units} \end{aligned}$$

(vii) why you use distance formula  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$  instead of  $|x_2 - x_1|$  or  $|y_2 - y_1|$

Ans: Because the given points are not lies on x-axis or y-axis.

A  $(-5, -1)$  lies in Quadrant III and

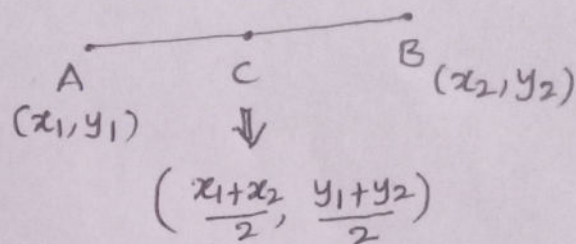
B  $(-2, -5)$  lies in Quadrant III

If the two points where it lies on any Quadrant we apply distance formula  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

(viii) How can you find midpoint of C if two points A ( $x_1, y_1$ ) and B ( $x_2, y_2$ )

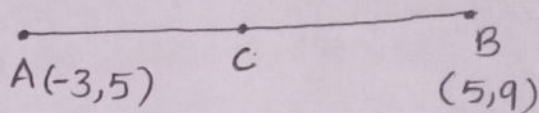
Ans By using

$$\text{mid point } C = \left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$$



(ix) Find the mid point of A (-3, 5) and B (5, 9)

Ans: Let take C is the mid point of AB



$$\text{AB mid point } C = \left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$$

$$x_1 = -3$$

$$x_2 = 5$$

$$y_1 = 5$$

$$y_2 = 9$$

$$C = \left( \frac{-3+5}{2}, \frac{5+9}{2} \right)$$

$$C = \left( \frac{2}{2}, \frac{14}{2} \right)$$

$$C = (1, 7)$$

(x) Triangle ABC vertices are A = (3, 4), B = (9, 6), C = (7, 1) and this  $\Delta ABC$  mid points are D, E and F respectively on AB, BC and AC. Find the points of D, E and F

Ans: A (3, 4) and B (9, 6)

$$\text{AB mid point } D = \left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$$

$$= \left( \frac{3+9}{2}, \frac{4+6}{2} \right)$$

$$= \left( \frac{12}{2}, \frac{10}{2} \right)$$

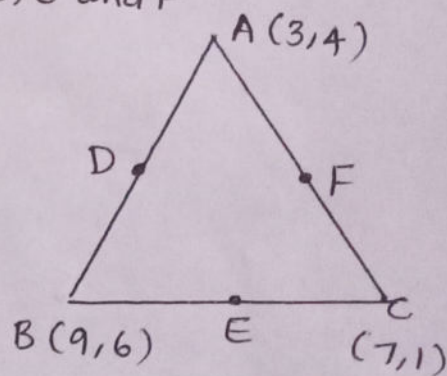
$$D = (6, 5)$$

B (9, 6) and C (7, 1)

$$\text{BC mid point } E = \left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$$

$$= \left( \frac{9+7}{2}, \frac{6+1}{2} \right)$$

$$= \left( \frac{16}{2}, \frac{7}{2} \right) = \left( 8, \frac{7}{2} \right)$$



C(7,1) and A(3,4)

$$\begin{aligned} \text{AC midpoint } F &= \left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right) \\ &= \left( \frac{7+3}{2}, \frac{1+4}{2} \right) \\ &= \left( \frac{10}{2}, \frac{5}{2} \right) \\ &= \left( 5, \frac{5}{2} \right) \end{aligned}$$

(xi) If A(3,6), B(3,2) and C(6,2) joined together which type of triangle formed?

Ans: A(3,6) B(3,2)

$$\begin{aligned} \text{AB distance} &= |y_2 - y_1| \quad (\because x \text{ coordinates same}) \\ &= |2 - 6| \\ &= |-4| = 4 \text{ units.} \end{aligned}$$

B(3,2), C(6,2)

$$\begin{aligned} \text{BC distance} &= |x_2 - x_1| \quad (\because y \text{ coordinates same}) \\ &= |6 - 3| \\ &= |3| = 3 \text{ units} \end{aligned}$$

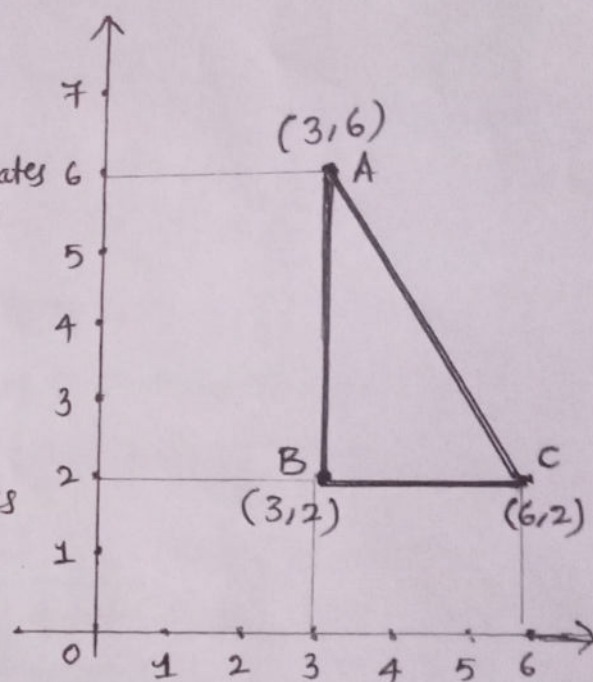
A(3,6) and C(6,2)

$$\begin{aligned} \text{AC distance} &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\ &= \sqrt{(6 - 3)^2 + (2 - 6)^2} \\ &= \sqrt{(3)^2 + (-4)^2} \\ &= \sqrt{9 + 16} \\ &= \sqrt{25} \\ &= 5 \text{ units} \end{aligned}$$

$\Delta ABC$  sides length are 3, 4 and 5

These are Triplets of right angled triangle

$\therefore \Delta ABC$  is a right angled triangle



Note

$$(AB)^2 + (BC)^2 = (AC)^2$$

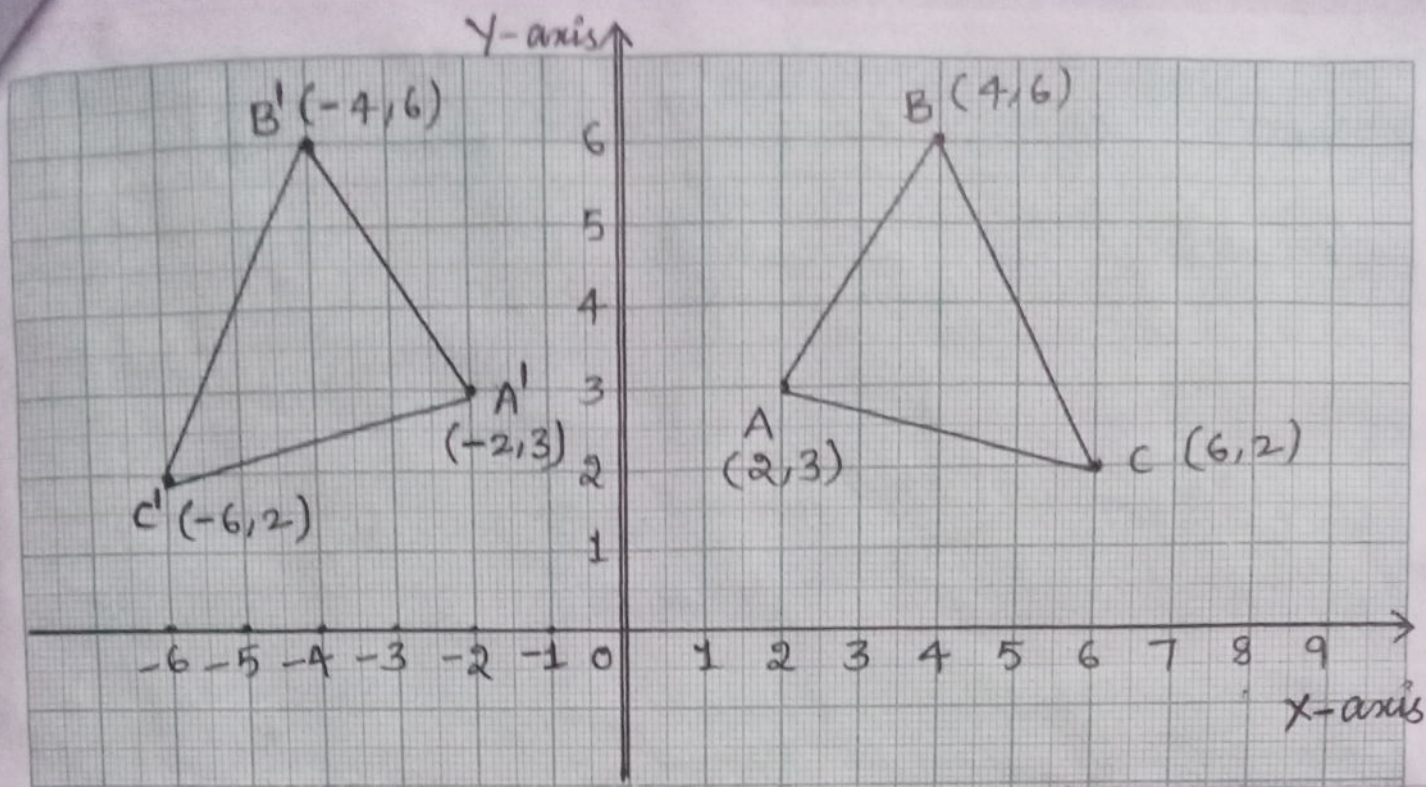
$$(4)^2 + (3)^2 = (5)^2$$

$$16 + 9 = 25$$

$$25 = 25$$

Pythagoras theorem satisfied.

$\Delta ABC$  is right angled triangle



- (i) ABC triangle and  $A'B'C'$  triangles are reflective each other according to y-axis
- (ii) A (2,3) reflection point according to y-axis is  $A'(-2,3)$   
 B (4,6) reflection point according to y-axis  $B'(-4,6)$   
 C (6,2) reflection point according to y-axis  $C'(-6,2)$

(iii) AB distance =  $\sqrt{(4-2)^2 + (6-3)^2}$   
 $= \sqrt{(2)^2 + (3)^2} = \sqrt{4+9} = \sqrt{13}$  units

$A'B'$  distance =  $\sqrt{(-4 - (-2))^2 + (6-3)^2}$   
 $= \sqrt{(-4+2)^2 + (3)^2}$   
 $= \sqrt{(-2)^2 + (3)^2} = \sqrt{4+9} = \sqrt{13}$  units

similarly  $BC = B'C'$  and  $AC = A'C'$

- (iv) Can you tell the reflective points of  $\triangle ABC$  according to x-axis.

A (2,3) reflection point according to x-axis is (2,-3)  
 B (4,6) reflection point according to x-axis is (4,-6)  
 C (6,2) reflection point according to x-axis is (6,-2)

# Assignment

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- 1) A (3,4) and B (5,8) then midpoint of AB is [ ]  
A) (8,12)      B) (4,6)      C) (3,5)      D) (4,8)
- 2) (-7,6) reflection point according to y-axis is [ ]  
A) (-7,-6)      B) (7,-6)      C) (-7,6)      D) (7,6)
- 3) (5,4) reflection point according to x-axis is [ ]  
A) (5,-4)      B) (5,4)      C) (-5,-4)      D) (-5,4)
- 4) circle diameter end points A (3,4) and B (7,6), it's centre is C, then point C coordinates are [ ]  
A) (3,7)      B) (5,5)      C) (4,6)      D) (7,3)
- 5)  $\Delta ABC$  vertices are A(2,1), B(4,3), C(2,5) and D is a mid point of AC then D coordinates are [ ]  
A) (2,3)      B) (3,2)      C) (3,4)      D) (4,5)
- 6) Distance between A(2,3) and B(6,3) is [ ]  
A) 4 units      B) 3 units      C) 2 units      D) 6 units
- 7) Area formed by  $\Delta ABC$  vertices are A(2,7), B(2,1), C(5,1) is [ ]  
A) 6 sq. units      B) 9 sq. units      C) 3 sq. units      D) 7 sq. units
- 8) A(-3,4), B(4,4), C(4,2), D(-3,2) are vertices of Quadrilateral ABCD. which type of these quadrilateral [ ]  
A) Parallelogram      B) Square      C) Rhombus      D) Rectangle
- 9) (-2,-7) point distance from x-axis is [ ]  
A) 7 units      B) 2 units      C) 9 units      D) 5 units
- 10)  $\Delta ABC$  vertices are A(4,2), B(6,5), C(1,4). which type of these  $\Delta ABC$  [ ]  
A) Equilateral      B) Isosceles      C) Scalane      D) Right
- 11) Q(-2,3) and R(3,3) are joined together P is a point which divides QR in the ratio 2:3 then find the coordinates of P [ ]  
A) (3,0)      B) (3,3)      C) (0,0)      D) (0,3).

## ग्रीष्मकालीन अवकाश गृह कार्य , कक्षा 9,

### विषय -हिन्दी

1. निम्नलिखित विषयों पर निबंध लिखिए।  
(मेरे सपनों का भारत, , विद्यार्थी और अनुशासन, मेरी प्रिय पुस्तक)
2. आपके शहर में बढ़ती सड़क दुर्घटनाओं की ओर प्रशासन का ध्यान दिलाते हुए किसी अखबार के संपादक को पत्र लिखिए।
3. आपके मित्र ने हिंदी वाद विवाद प्रतियोगिता में प्रथम स्थान प्राप्त किया है उसको बधाई देते हुए एक बधाई पत्र लिखिए।
4. वार्षिकोत्सव की तैयारी को लेकर दो छात्रों के बीच होने वाली बातचीत को संवाद के रूप में लिखिए।
5. कोई एक कहानी पुस्तक या पत्रिका को पढ़ो और 100 शब्दों में इसका संक्षिप्त सार लिखो।
6. संज्ञा, सर्वनाम और विशेषण की परिभाषा, उसके भेद और दो-दो उदाहरण लिखो।

Holiday Homework – Class 9

Subject: Kirti Visual Arts

Summer Vacation Homework

Q1 Draw one 1-Point Perspective Drawing of any one:

Road view

Railway track

Room interior

School corridor

Street view

Q2-Draw and color any 2 Human Figures:

Boy reading

Girl dancing

Farmer working

Child playing

Woman carrying water

Q3-Draw one 1-Point Perspective Interior Scene:

Bedroom

Classroom

Library

Living room

Q4-Draw and sketch any 2 Standing Human Figures:

Teacher

Gardener

Shopkeeper

Student

Mother cooking

# Grade 9 – AI SUMMER HOME WORK

## Section A: Creative Writing

1. Write a short paragraph on 'Importance of Communication Skills in Daily Life'.
2. Write about how AI will change jobs in the future.
3. Write a letter to your future self, keeping in mind the impact of AI in future lives. What type of life would you be leading with AI?
4. Write a short dialogue:
  - a) Between a teacher and student (Formal Communication) OR
  - b) Communication between friends (Informal Communication)

## Section B: Research and Learning

5. Learn about any AI tool and write what you have learned from it.
6. Observe how AI works in daily life and write what you have understood from your observation.

## Section C: Poster Making

7. Draw a poster on 'Applications of AI'.

## Social science ( Holidays Home work )

### Importance of Social science

1. Why is Social Science important in our daily life? Give two examples from your surroundings.
2. What problems do you see in your neighborhoods or society?
3. Describe how students today can become responsible citizens of tomorrow.

### Geography + Environment

1. How does climate change affect people's lives in your area?
2. Suggest three actions students can take to protect the environment.

### History + Society

1. What can we learn from history to solve present social problems?
2. Give one example where learning from the past can help improve the future.

### Political Science + Governance

1. Why should citizens follow rules and laws?
2. How does voting help in building a better country?

### Economics + Daily Life

1. How does saving resources help the economy?
2. Why is it important to reduce waste and avoid over-consumption?

### Art integrated activity (any one)

1. Sustainable City of the Future
2. Life Before and After Sustainable Practices
3. Save Water – Save Life
4. Reduce Plastic & Waste Management
5. Forest Conservation & Wildlife Protection

### Physical features of India.

**On the outline map of India, locate and label ANY TEN of the following physical features:**

Himalayas, Karakoram Range, Aravali Range, Vindhya Range, Satpura Range, Deccan Plateau, Chota Nagpur Plateau, Northern Plains, Thar Desert, Western Coastal Plains, Eastern Coastal Plains, Andaman & Nicobar Islands, Lakshadweep Islands.

# अष्टमः अभ्यासः

## अशुद्धिसंशोधनम्

### 1. अधोलिखितानि वाक्यानि ध्यानेन पठत -

- (क) सः बालिका अस्ति ।  
(ख) तौ बालकाः क्रीडन्ति ।  
(ग) शिक्षकः सूचनां वदन्ति ।  
(घ) श्वः कार्यक्रमः अभवत् ।  
(ङ) त्वं पाठं पठति ।  
(च) क्रीडकः कन्दुकं क्रीडति ।  
(छ) माता बालकं मोदकं ददाति ।

वयं पश्यामः यत् उपरितन-वाक्येषु रेखाङ्कितानि पदानि शुद्धानि न सन्ति । यदि ध्यानेन पश्यामः तर्हि अवगम्यते यत् एतेषु लिङ्ग-वचन-लकार-पुरुष-विभक्ति-दृष्ट्या दोषाः सन्ति । अतः सर्वदा अपि वाक्यनिर्माण-सन्दर्भे एते अंशाः अनिवार्यतया अवधातव्याः ।

### 2. अधुना उपरितन-वाक्यानां शुद्धरूपाणि पश्यामः -

- (क) सा बालिका अस्ति । (लिङ्गसम्बद्धः)  
(ख) ते बालकाः क्रीडन्ति । (वचनसम्बद्धः-विशेषण-विशेष्यम्)  
(ग) शिक्षकः सूचनां वदति । (कर्तृक्रियात्मकः वचनसम्बद्धः)  
(घ) ह्यः कार्यक्रमः अभवत् । (लकारसम्बद्धः)  
(ङ) त्वं पाठं पठसि । (पुरुषसम्बद्धः)  
(च) क्रीडकः कन्दुकेन क्रीडति । (विभक्तिसम्बद्धः)  
(छ) माता बालकाय मोदकं ददाति । (विभक्तिसम्बद्धः)

### 3. अधोलिखितानि वाक्यानि संशोध्य लिखत - ( लिङ्गसम्बद्धानि वाक्यानि )

- (क) उत्तमा बालकः तत्र अस्ति । .....  
(ख) अद्य मम मित्रः गृहम् आगच्छति । .....  
(ग) सुन्दरः वातावरणम् अस्ति । .....  
(घ) विशाला जलधिः अस्ति । .....  
(ङ) वृक्षं छायां फलं च ददाति । .....

#### 4. वचनसम्बद्धानि वाक्यानि -

- (क) सुन्दरी बालिकाः वार्ता कुर्वन्ति।  
(ख) युवां पाठं पठसि।  
(ग) तत्र निपुणः क्रीडकौ क्रीडतः।  
(घ) अहं श्लोकान् स्मरामः।  
(ङ) कार्यक्रमः उत्तमः अभवन्।

#### 5. लकारसम्बद्धानि वाक्यानि -

- (क) श्वः परीक्षा अभवत्।  
(ख) अहं परह्यः विदेशं गच्छामि।  
(ग) त्वं ह्यः कुत्र गमिष्यसि।  
(घ) पुरा श्रीरामः अयोध्यायाः राजा अस्ति।  
(ङ) राघवः परश्वः वेदपारायणम् अकरोत्।

#### 6. पुरुषसम्बद्धानि वाक्यानि -

- (क) यूयं लेखम् अलिखन्।  
(ख) सः कार्यं कुरु।  
(ग) वयं सर्वे संस्कृतेन सम्भाषणं कुर्वन्ति।  
(घ) क्रीडकाः तत्र क्रीडत।  
(ङ) भवन्तौ कस्य देशस्य नागरिकौ स्थः ?

#### 7. विभक्तिसम्बद्धानि वाक्यानि -

- (क) कृषकः ग्रामेण नगरं गच्छति।  
(ख) राघवेन्द्रः लेखन्याः लिखति।  
(ग) गणेशं मोदकं रोचते।  
(घ) बालाः जन्तुशालायां जन्तवः पश्यन्ति।  
(ङ) छात्रः विद्यालये गच्छति।

### मिश्रितप्रश्नाः

#### 1. अधोलिखितवाक्येषु रेखाङ्कितशुद्धपदाय उचितं पदं चित्वा वाक्यानि पुनः लिखत -

- (क) भारति! तव अयं कोशः अपूर्व विद्यते।

(i) अपूर्वः

(ii) अपूर्वा

(iii) अपूर्वाः

(iv) अपूर्वाणि

(ख) नास्ति रागसमानि दुःखम् ।

(i) रागसमः (ii) रागसमा (iii) रागसमम् (iv) रागसमे

(ग) बोधिसत्त्वः शिवीनां राजा अभवम् ।

(i) अभवः (ii) अभवत् (iii) अभवम् (iv) अभवन्

(घ) राज्ञः नेत्रदाननिश्चयं ज्ञात्वा अमात्याः अवदत् ।

(i) अवदत् (ii) वदिष्यति (iii) अवदम् (iv) अवदन्

(ङ) अहम् अपि तत् नेत्रं यथास्थानम् अस्थापयत् ।

(i) सः (ii) त्वम् (iii) आवाम् (iv) ते

## 2. अधोलिखितानि वाक्यानि त्रुटियुक्तानि सन्ति, भवन्तः एतानि संशोध्य लिखन्तु -

(क) भूयः प्रीताः शक्रः वरम् अयच्छत् ।

(ख) सरस्तीरे राजहंसः हंसी च विहरन्ति ।

(ग) सः कथं माम् अपि अधिक्षिपसि ।

(घ) मम केकारवं श्रुत्वा कोकिलः अपि लज्जामहे ।

(ङ) युवां न तावत् कलहेन समयं वृथा यापयेत ।

## 3. अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितं पदं चिनुत -

(क) कस्मिंश्चित् नगरे चन्द्रो नाम भूपति प्रतिवसतः स्म ।

(i) प्रतिवसति (ii) प्रतिवससि (iii) प्रतिवसामि (iv) प्रतिवसन्ति

(ख) सूपकाराणां मेषेण सह एषः कलहः नूनं भवतां विनाशकारणं भवति ।

(i) अभवत् (ii) भवतु (iii) भविष्यति (iv) भवेत

(ग) यूथपः सर्वान् कपीन् आहूय रहसि अवदम् ।

(i) वदति (ii) वदिष्यन्ति (iii) अवदन् (iv) अवदत्

(घ) कपयः प्रहस्य अवदाम ।

(i) अवदत् (ii) अवदम् (iii) अवदन् (iv) वदिष्यन्ति

(ङ) ऊर्णाप्रचुरः मेषौ दाहवेदनया भूमौ लुठति ।

(i) मेषम् (ii) मेषः (iii) मेषेण (iv) मेषेस्य

## 4. एतानि त्रुटियुक्तानि वाक्यानि यूयं संशोध्य पुनः लिखत -

(क) चञ्चलः हि मनः कृष्ण ।

(ख) मनं दुर्निग्रहं चलं च भवति ।

(ग) अयं पुरुषः पापं चरसि ।

(घ) अग्निः इव दहन्ति मामयं शोकः ।

(ड) नकुलः तव सारथिः भव ।

5. अधोलिखितवाक्येषु रेखाङ्कितानि पदानि अशुद्धानि सन्ति, विकल्पेभ्यः उचितं शुद्धं विकल्पं चिनुत -

(क) मन्ये ते ब्रह्मास्त्रप्रयोगं न करिष्यति ।

(i) सः (ii) त्वम् (iii) अहम् (iv) तौ

(ख) रे दुष्ट भीम! त्वम् अद्य वध्योऽस्मि ।

(i) वध्योऽस्ति (ii) वध्योऽसि (iii) वध्यः सन्ति (iv) वध्यः स्मः

(ग) युधिष्ठिरार्जुनौ रथारोहणं नाटयति ।

(i) नाटयन्ति (ii) नाटयथः (iii) नाटयतः (iv) नाटयामः

(घ) न जानाति भवान् द्रौणेः चपलं प्रकृतिम् ।

(i) चपलाम् (ii) चपला (iii) चपलया (iv) चपलायाः

(ङ) प्रच्छन्नभाग्यस्य भार्या बुद्धिमान् आसीत् ।

(i) बुद्धिमन्तः (ii) बुद्धिमन्तौ (iii) बुद्धिमती (iv) बुद्धिमत्यः

6. अधोलिखितवाक्येषु काश्चन अशुद्ध्यः सन्ति । ताः अपाकृत्य वाक्यानि संशोध्य लिखत -

(क) परद्रव्ये अनासक्तः सा न्यवेदयत् ।

(ख) अहो विचित्रः स्वप्नं मया दृष्टः ।

(ग) दुष्टबुद्धिः क्षेत्रं गता ।

(घ) वाक्पटुः धैर्यवती मन्त्री न परिभूयते ।

(ङ) वयं स्वागतं कुर्वन्ति ।

7. अधोलिखितवाक्येषु रेखाङ्कितशुद्धपदाय उचितं पदं चिनुत -

(क) कृष्ण! मनः हि चञ्चलः ।

(i) चञ्चलम् (ii) चञ्चला (iii) चञ्चल! (iv) चञ्चलानि

(ख) सः शस्यक्षेत्रे हलकार्यं कर्तुम् आरभे ।

(i) आरभन्त (ii) आरभध्वम् (iii) आरभेताम् (iv) आरभत

(ग) 'साडकेन' एकम् अन्यत् पर्व सन्ति ।

(i) अस्मि (ii) अस्ति (iii) असि (iv) स्तः

(घ) अहं जानासि इदं स्थानम् ।

(i) जानाति (ii) जानन्ति (iii) जानामि (iv) जानीमः

(ङ) कालः भूतं वर्तमानं भविष्यदपि च वीक्षमाणं जगतः विकासस्य साक्षी भवति ।

(i) वीक्षमाणानि (ii) वीक्षमाणा (iii) वीक्षमाणाः (iv) वीक्षमाणः



**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS X**

**PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR**

**CLASS X – MATHEMATICS HOLIDAY HOMEWORK**

(Based on NCERT – First 3 Chapters)

**CHAPTER 1: REAL NUMBERS**

Section A (Very Short Answer)

1. Use Euclid's Division Algorithm to find HCF of 135 and 225.
2. Find LCM of 12 and 18 using prime factorization.
3. State Fundamental Theorem of Arithmetic.
4. Express 0.375 in the form of  $p/q$ .

Section B (Short Answer)

5. Find HCF and LCM of 306 and 657 using Euclid's Algorithm.
6. Check whether  $6^n$  can end with digit 0 for any natural number  $n$ .
7. Prove that  $\sqrt{5}$  is irrational.

Activity:

- Verify Euclid's Division Algorithm using any two numbers of your choice.

**CHAPTER 2: POLYNOMIALS**

Section A (Very Short Answer)

1. Find zeroes of polynomial  $x^2 - 5x + 6$ .
2. Write number of zeroes of cubic polynomial.
3. Find remainder when  $x^3 - 2x^2 + 3x - 1$  is divided by  $(x - 1)$ .

Section B (Short Answer)

4. Find zeroes of  $2x^2 - 7x + 3$  and verify relationship between zeroes and coefficients.
5. Divide  $x^3 - 3x^2 + 4x - 2$  by  $x - 2$ .
6. Find quadratic polynomial whose zeroes are 2 and  $-3$ .

Activity:

- Draw graph of  $y = x^2$  and identify number of zeroes.

**CHAPTER 3: PAIR OF LINEAR EQUATIONS IN TWO VARIABLES**

Section A (Very Short Answer)

1. Write general form of linear equation in two variables.

2. Check whether (2,3) is solution of equation  $2x + y = 7$ .
3. Write condition for consistency of two linear equations.

#### Section B (Short Answer)

4. Solve by substitution method:

$$x + y = 5$$

$$x - y = 1$$

5. Solve by elimination method:

$$2x + 3y = 13$$

$$3x - 2y = 4$$

6. Solve graphically:

$$x + y = 6$$

$$x - y = 2$$

#### Case Study / Application:

- The sum of two numbers is 27 and their difference is 3. Find the numbers.

#### HOTS (Higher Order Thinking Skills)

1. Prove that  $\text{HCF} \times \text{LCM} = \text{Product of two numbers}$ .
2. If one zero of polynomial is reciprocal of other, what is relation between coefficients?
3. Solve word problem involving two variables from daily life (create your own example).

#### Project Work:

- Prepare a chart on:

"APPLICATIONS OF LINEAR EQUATIONS IN REAL LIFE"

(Include at least 3 examples with diagrams)

PM Shri Kendriya Vidyalaya, Karimnagar

Summer Vacation Holiday Homework (2026)

Class X – English

General Instructions

Maintain a neat and well-organized Holiday Homework Notebook/File.

Use A4 sheets or a separate notebook.

Illustrate your work wherever possible.

Ensure originality and creativity.

Submit the work on time after reopening of school.

1. Reading Activities 

A. Novel/Story Reading

Read any one book/story collection suitable for your age.

Suggested themes: Courage, Humanity, Nature, or Science Fiction.

Task:

Write a book review including:

Title and Author

Summary (150–200 words)

Main characters

Your favourite part

Message of the story

B. Textbook-Based Reading

Revise the following chapters from First Flight:

A Letter to God

Nelson Mandela: Long Walk to Freedom

Two Stories about Flying

From the Diary of Anne Frank

From Footprints Without Feet:

A Triumph of Surgery

The Thief's Story

Footprints Without Feet

Task:

Write short summaries (80–100 words each) of any two chapters.

2. Writing Activities 

A. Formal Letter Writing

Write a letter to the editor on:

“Importance of Water Conservation”

OR

“Impact of Social Media on Students”

B. Paragraph Writing

Write any two paragraphs (100–120 words each):

Importance of Discipline

Role of Technology in Education

Environmental Protection

C. Diary Entry

Write a diary entry about:

“A Day During Your Summer Vacation”

3. Creative Expression 

A. Poster Making

Make a poster on:

Save Water

Clean India Mission

Digital Learning

(Add slogans, drawings, and colours)

B. Character Sketch

Write a character sketch of any one:

Lencho (A Letter to God)

Anne Frank (From the Diary of Anne Frank)

Nelson Mandela


C. Poetry Writing

Compose a short poem (8–10 lines) on:

Nature

Friendship

Dreams

4. Interactive Learning 

A. Family Interview Activity

Interview any elder in your family.

Ask about:

Their school life

Changes in education over time

Task:

Present your findings in dialogue form.


B. Listening & Speaking

Watch any English news or educational video.

Write:

5 new things you learned

5 sentences describing it

5. Vocabulary Building 

A. Daily Vocabulary

Learn 5 new words daily for at least 10 days.

Task Format:

Word

Meaning

Sentence

B. Synonyms & Antonyms

Write 10 pairs of:

Synonyms

Antonyms

C. Idioms & Phrases

Learn and write meanings of any 10 idioms.

Use each in a sentence.

6. Integrated Project Work (Art + Technology) 

Topic:

“Water Conservation and Sustainable Living”

Instructions:

Create a project file or digital presentation (PPT).

Include:

Importance of water

Rainwater harvesting

Ways to conserve water

Real-life examples

Slogans and drawings

Technology Integration:

Add:

Pictures/graphics

Use PowerPoint or any digital tool

Include at least 5 slides

7. Self-Reflection 

Write a short reflection (100 words):

What did you learn during the holidays?

Which activity did you enjoy the most and why?

**PMSHRI KV KARIMNAGAR**

**CLASS 10 SCIENCE HOLIDAY HOME WORK**

- Instructions- 1. Write the experiments of all 3 subjects of science in practical record book book.  
You can divide the book into 3 parts and write them separately in that respective part.  
2. Write other assignments given in respective note books.

**SUB : CHEMISTRY**

1. Write the monthly test questions and answers in chemistry note book
2. Activity 1.2 (write reaction of lead nitrate with potassium iodide with balanced chemical equation )
3. Activity 1.3 (reaction of zinc granules with hydrochloric acid )
4. Activity 1.4 ( observation of change in temperature in exothermic reaction )
5. Activity 1.8 ( observation of photochemical decomposition )
6. Activity 1.10 ( observation of precipitation reaction )

**SUB: BIOLOGY**

1. Read complete chapter of life process from NCERT science text book and write the intext question and answers in note book.
2. Draw the labelled diagrams of Human digestive system, Human respiratory system, Double circulation in human body, Human excretory system.
3. Write the following experiments in science record book-
  - a. Study of stomata in leaf peel
  - b. To show that CO<sub>2</sub> is released during aerobic respiration.

**SUB-PHYSICS**

1. Draw the ray diagrams and applications of convex and concave mirrors and basing on reflection last 5 years board paper questions to be answered in physics note book.
- 2.

## ग्रीष्मकालीन अवकाश गृह कार्य , कक्षा 10,

### विषय -हिन्दी

1. निम्नलिखित विषयों पर निबंध लिखिए।  
(मेरे सपनों का भारत, मेरा प्रिय खेल, पर्यावरण प्रदूषण, मेरी प्रिय पुस्तक)
2. आपके शहर में बढ़ती सड़क दुर्घटनाओं की ओर प्रशासन का ध्यान दिलाते हुए किसी अखबार के संपादक को पत्र लिखिए।
3. आपके मित्र ने हिंदी निबंध लेखन प्रतियोगिता में प्रथम स्थान प्राप्त किया है उसको बधाई देते हुए एक बधाई पत्र लिखिए।
4. कोई तीन विज्ञापन लिखो।
5. कोई एक कहानी पुस्तक या पत्रिका को पढ़ो और 100 शब्दों में इसका संक्षिप्त सार लिखो।
6. संज्ञा, सर्वनाम और विशेषण की परिभाषा, उसके भेद और दो-दो उदाहरण लिखो।

## **Social science Holidays Home work (10 )**

### **Political science ( In Note book )**

#### **Topic:( Power sharing )**

- ❖ Prepare a Flow Chart on different Organs of the Government. Evaluate the power sharing system in India.

### **History ( in note book )**

#### **Topic : (The rise of Nationalism in Europe)**

- ❖ Prepare a time line major events "The rise of Nationalism in Europe".

#### **Topic : ( The rise of Nationalism in India.)**

- ❖ Prepare a time line specifying the major events of Indian National Struggle.

### **Complete In Activity book**

- ❖ **Map Activity**-Indian National Congress Sessions , Important Center's of Indian National Movements.

#### **Economic ( Development )**

- ❖ List a 10 examples of environmental degradation that you may have observed around you and write each in 2 sentence.
- ❖ Prepare a collage on methods of conservation of resources.(Collect picture and paste them any 4 or more then 4)

### **( Project work ) In Activity book**

**Topic : Social issue / Sustainable development .**

**Project Topics List choose any 1 topic**

- 1.Pollution and its impact**
- 2. Forest and its importance.**
- 3.Water scarcity in cities and villages**
- 4.Plastic waste problem**
- 5.Urbanization and slums**

- ❖ Correct project order:
- ❖ Front Page
- ❖ Index
- ❖ Slogan Page
- ❖ Acknowledgement
- ❖ Introduction
- ❖ Remaining content
- ❖ Government Steps
- ❖ Role of Students
- ❖ Suggestions & Solutions
- ❖ Conclusion

## **Sustainable Development Project Questions**

**1 What is Sustainable Development? Explain its importance.**

- **Content with**
- Pictures to collect:
- Earth/Globe image
- Renewable energy (solar panels/windmills)
- Tree plantation photo

**2 What are the major social issues affecting our society today?**

(Examples: Poverty, Pollution, Unemployment, Water scarcity)

- **Content with**
- Pictures to collect:
- Slum/poverty area
- Traffic pollution or factory smoke
- People searching for jobs
- Water shortage image

**3 Explain the causes and effects of Pollution.**

- **Content with**
- Pictures to collect:
- Air pollution (vehicles/factories)
- Water pollution (dirty rivers)

- Land pollution (plastic waste)

#### **4 Explain the concept of 3R's (Reduce, Reuse, Recycle).**

- Pictures to collect:
- Recycling symbol
- People using cloth bags
- Waste segregation bins

#### **5 What steps are taken by the Government to promote sustainable development?**

- **Content with**
- Pictures to collect:
- Swachh Bharat Mission cleanliness drive
- Electric vehicles / solar panels
- Plantation programs

#### **6 How can students help in achieving sustainable development?**

- **Content with**
- Pictures to collect:
- Students planting trees
- Saving water/electricity
- Using bicycles/public transport.

## दशमः अभ्यासः

### अपठितावबोधनम्

1. प्रकृतिः मनुष्यस्य उपकारिणी। मनुष्यैः सह तस्याः शाश्वतः सम्बन्धः। सा विविधरूपेषु अस्मिन् जगति आत्मानं प्रकटयति। पशवः पक्षिणः वनस्पतयः च तस्याः एव अङ्गानि। निराशाः असहायाः जनाः तस्याः एव आश्रयं प्राप्नुवन्ति। सा स्वमनोहरेण सौन्दर्येण नीरसं हृदयम् अपि सरसं करोति। सूर्यः चन्द्रः च तस्याः नेत्रे। शस्य-श्यामला एषा भूमिः। विविधाः ओषधयः सकलानि खनिजानि च प्रकृतेः एव शोभा। सा तु नित्यम् एव एतैः साधनैः सर्वेषाम् उपकारं करोति, परम् अधन्यः अयं जनः कृतज्ञतां विहाय असाधुसेवितं पथं गच्छति, विविधानि कष्टानि च अनुभवति। नरः शाश्वतं सुखं वाञ्छति चेत् तर्हि प्रकृतेः प्रतिकूलं कदापि न आचरेत् इति।

#### अ. एकपदेन उत्तरत -

- (क) कैः सह प्रकृते शाश्वतः सम्बन्धः अस्ति ?  
(ख) मानवः किं विहाय असाधुसेवितं पथं गच्छति ?  
(ग) निराशाः असहायाः जनाः कस्याः आश्रयं प्राप्नुवन्ति ?  
(घ) एषा भूमिः कीदृशी अस्ति ?

#### आ. पूर्णवाक्येन उत्तरत -

- (क) का प्रकृतेः एव शोभा अस्ति ?  
(ख) शाश्वतं सुखम् इच्छन् नरः किं न आचरेत् ?  
(ग) प्रकृतिः स्वमनोहरेण सौन्दर्येण किं करोति ?  
(घ) प्रकृतेः अङ्गानि कानि सन्ति ?

#### इ. गद्यांशस्य समुचितं शीर्षकं लिखत।

#### ई. यथानिर्देशं समुचितमुत्तरं विकल्पेभ्यः चिनुत -

- (क) आचरेत् इति क्रियापदस्य कर्तृपदं गद्यांशे किं प्रयुक्तम् ?  
(i) जनः (ii) नरः (iii) प्रकृतिः (iv) प्रतिकूलम्
- (ख) 'विविधाः' इति पदं कस्य पदस्य विशेषणम् ?  
(i) ओषधयः (ii) वनस्पतयः (iii) जनाः (iv) कष्टानि
- (ग) 'सरसम्' इति पदस्य विलोमपदं गद्यांशे किं प्रयुक्तम् ?  
(i) हृदयम् (ii) आश्रयम् (iii) शाश्वतम् (iv) नीरसम्
- (घ) 'सततम्' इति पदस्य पर्यायपदं गद्यांशे किं प्रयुक्तम् ?  
(i) सर्वेषाम् (ii) उपकारम् (iii) नित्यम् (iv) परम्

2. अहं पाटलपुष्पम् अस्मि । वृन्ते वसामि । पवनः मां मन्दं मन्दम् आन्दोलयति । दिने रविकिरणाः मां विकासयन्ति, रात्रौ ज्योत्सना मां लालयति । मम अनेके वर्णाः-श्वेतः, पीतः नारङ्गः, अरुणः पाटलश्च । एतेषु रक्तिमः वर्णः जनेभ्यः सर्वाधिकं रोचते । यत्र सौन्दर्यं कमनीयतां च कवयः वर्णयितुम् इच्छन्ति, मम उपयोगं कुर्वन्ति । अहं विवाहादिसमारोहेषु मण्डपानां शोभाम् आतनोमि । वर-वध्वोः जयमालयोः अहं विलसामि । अहं मृदुना सुगन्धेन वातावरणं सुरभितं करोमि । मम स्वल्पकालजीवनमपि लोकहितम् आतनोति अतः पूर्णं विकसितं मे रूपम् अभिनन्दन्ति जनाः । विकसितरूपे स्थितम् अहं मानवस्य निराशामयं जीवनम् अपि आशामयं करोमि । स्वगन्धं विकीर्य अन्ते प्रकृतिमातुः अङ्गे स्वपिमि ।

**अ. एकपदेन उत्तरत -**

- (क) पाटलपुष्पं स्वगन्धं विकीर्य अन्ते कस्याः अङ्गे स्वपिति ?  
 (ख) पाटलपुष्पं के विकासयन्ति ?  
 (ग) पाटलपुष्पस्य मृदुना सुगन्धेन वातावरणं कीदृशं भवति ?  
 (घ) पाटलपुष्पं कुत्र वसति ?

**आ. पूर्णवाक्येन उत्तरत -**

- (क) विकसितरूपे स्थितं पाटलपुष्पं किं करोति ?  
 (ख) पाटलपुष्पस्य के के वर्णाः भवन्ति ?  
 (ग) कवयः कदा पाटलपुष्पस्य उपयोगं कुर्वन्ति ?  
 (घ) पाटलपुष्पस्य स्वल्पकालजीवनम् अपि किं करोति ?

**इ. गद्यांशस्य समुचितं शीर्षकं लिखत ।**

**ई. यथानिर्देशं समुचितमुत्तरं विकल्पेभ्यः चिनुत -**

- (क) 'पवनः' इति कर्तृपदस्य क्रियापदं गद्यांशे किं प्रयुक्तम् ?  
 (i) लालयति (ii) आन्दोलयति (iii) आतनोति (iv) रोचते  
 (ख) 'रक्तिमः वर्णः जनेभ्यः सर्वाधिकं रोचते ।' वाक्येऽस्मिन् विशेषणपदं किं प्रयुक्तम् ?  
 (i) वर्णः (ii) जनेभ्यः (iii) सर्वाधिकम् (iv) रक्तिमः  
 (ग) 'सुवासितम्' इति पदस्य पर्यायपदं गद्यांशे किं प्रयुक्तम् ?  
 (i) सुरभितम् (ii) विकसितम् (iii) स्थितम् (iv) आशामयम्  
 (घ) 'रात्रौ' इति पदस्य विलोमपदं गद्यांशे किं प्रयुक्तम् ?  
 (i) दिने (ii) वृन्ते (iii) विकीर्य (iv) विकसितरूपे

3. दक्षिणभारते सागर-मध्ये एकं लघुद्वीपं वर्तते । तस्मिन् द्वीपे सागरतरङ्गैः क्षाल्यमानं प्राचीनं नगरं कन्याकुमारी इति अस्ति । एषा कन्याकुमारी त्रयाणां सागराणां सङ्गमस्थली । समुद्रजले प्रतिबिम्बितं सूर्योदयस्य दृश्यम् अद्भुतम् एव । सूर्यस्य क्रमशः अरुणा पीता धवला च शोभा दर्शकान् मन्त्रमुग्धान् करोति । सागरस्य लहरीभिः क्षिसानां चित्र-विचित्रवर्णानां शुक्तीनां वृष्टिः इव भवति । जलधितटे स्थितैः नारिकेल-कदली पादपैः परिवृता इव एषा नगरी । एकदा स्वामिविवेकानन्दः समुद्रजले स्थितायाम् एकस्यां बृहत्-शिलायाम् उपविष्टः त्रीणि दिनानि ध्यानमग्नः जातः । एतस्यां शिलायाम् एव अधुना विवेकानन्दकेन्द्रं विकसितम् अस्ति । अत्र आगत्य साधकाः ध्यानं साधनां च कृत्वा जीवनं सफलं कुर्वन्ति ।

अ. एकपदेन उत्तरत -

- (क) समुद्रजले स्थितायां शिलायां किं विकसितम् ?  
(ख) कस्य दृश्यम् अद्भुतं प्रतिभाति ?  
(ग) त्रयाणां सागराणां सङ्गमस्थलस्य किं नाम अस्ति ?  
(घ) कन्याकुमारी इति नगरं कैः क्षाल्यमानम् अस्ति ?

आ. पूर्णवाक्येन उत्तरत -

- (क) कन्याकुमारीम् आगत्य साधकाः किं कुर्वन्ति ?  
(ख) का दर्शकान् मन्त्रमुग्धान् करोति ?  
(ग) सागरस्य लहरीभिः किं भवति ?  
(घ) स्वामिविवेकानन्दः समुद्रजले स्थितायां शिलायाम् किमकरोत् ?

इ. गद्यांशस्य समुचितं शीर्षकं लिखत ।

ई. यथानिर्देशं समुचितमुत्तरं विकल्पेभ्यः चिनुत -

- (क) 'दक्षिणभारते सागरमध्ये एकं लघुद्वीपं वर्तते ।' वाक्येऽस्मिन् किं कर्तृपदं प्रयुक्तम् ?  
(i) लघुद्वीपम् (ii) सागरमध्ये (iii) दक्षिणभारते (iv) एकम्  
(ख) 'प्रतिबिम्बितम्' इति विशेषणपदस्य विशेष्यपदं गद्यांशे किं प्रयुक्तम् ?  
(i) अद्भुतम् (ii) सूर्योदयस्य (iii) दृश्यम् (iv) समुद्रजले  
(ग) 'कृष्णा' इति पदस्य विलोमपदं गद्यांशे किं प्रयुक्तम् ?  
(i) शोभा (ii) अरुणा (iii) पीता (iv) धवला  
(घ) 'समुद्रतीरे' इत्यर्थे गद्यांशे किं पदं प्रयुक्तम् ?  
(i) समुद्रजले (ii) जलधितटे (iii) सागरमध्ये (iv) सागरतरङ्गैः

4. अहम् एकः छिन्नः द्रुमः अस्मि । ह्यः वने एकः नरः आगच्छत् । सः काष्ठाय मम शरीरम् अच्छिनत् । छेदनेन मे शरीरे अनेके व्रणाः जाताः । छुरिकायाः प्रहारेण शरीरात् अश्रुरूपाः जलबिन्दवः अपतन् । अकथनीया मम पीडा । हृदयं विदीर्णं जातम् । अश्रुभिः कण्ठः अवरुद्धः । मम अन्तकालः समीपे एव तिष्ठति । काष्ठानि एकत्रीकृत्य सः तु अगच्छत् । परं कोऽस्ति अत्र व्यथाकथाश्रवणाय ? वृक्षान् छित्त्वा नरः प्रकृतिमातुः अङ्गानि नाशयति । इन्धनाय, कर्गदपत्राय, भवननिर्माणाय मम काष्ठस्य प्रयोगः भवति । किन्तु कुतः मे पत्राणि, पुष्पाणि कुतः च रोगनिवारणाय औषधयः ? निराश्रिताः भविष्यन्ति आश्रिताः खगाः कीटपतङ्गाश्च । पन्थानः अपि छायाहीनाः भविष्यन्ति । आतपेन तप्तः श्रान्तः पथिकः अधुना कुत्र गमिष्यति ? मम जीवने पुनः वसन्तर्तुः न आगमिष्यति ।

अ. एकपदेन उत्तरत -

- (क) के छायाहीनाः भविष्यन्ति ?  
(ख) नरः किमर्थं वृक्षस्य शरीरम् अच्छिनत् ?  
(ग) पथिकः केन तमः भवति ?

(घ) वृक्षस्य कण्ठः कैः अवरुद्धः अभवत् ?

**आ. पूर्णवाक्येन उत्तरत -**

(क) वृक्षस्य काष्ठस्य प्रयोगः कुत्र कुत्र भवति ?

(ख) के निराश्रिताः भविष्यन्ति ?

(ग) छुरिकायाः प्रहारेण किम् अभवत् ?

(घ) वृक्षान् छित्वा नरः किं करोति ?

**इ. गद्यांशस्य समुचितं शीर्षकं लिखत ।**

**ई. यथानिर्देशं समुचितमुत्तरं विकल्पेभ्यः चिनुत -**

(क) 'अपतन्' इति क्रियापदस्य कर्तृपदं गद्यांशे किं प्रयुक्तम् ?

(i) अश्रुरूपाः (ii) प्रहारेण (iii) शरीरात् (iv) जलबिन्दवः

(ख) 'आतपेन तप्तः श्रान्तः पथिकः अधुना कुत्र गमिष्यति ।' वाक्येऽस्मिन् विशेष्यपदं किम् ?

(i) पथिकः (ii) तप्तः (iii) श्रान्तः (iv) अधुना

(ग) 'आश्रिताः' इति पदस्य विलोमपदं गद्यांशे किं प्रयुक्तम् ?

(i) पतङ्गाः (ii) निराश्रिताः (iii) छायाहीनाः (iv) अश्रुरूपाः

(घ) 'वृक्षः' इति पदस्य पर्यायपदं गद्यांशे किं प्रयुक्तम् ?

(i) छिन्नः (ii) काष्ठानि (iii) द्रुमः (iv) औषधयः

5. पुरा गुजरातप्रदेशे एकस्मिन् ग्रामे एकं गुरुकुलम् आसीत्। तत्र द्विशतं छात्राः गुरुभ्यः अनेकान् विषयान् पठन्ति स्म। तेषां भोजनादिव्यवस्थाम् एका नगरस्थिता संस्था अकरोत्। एकदा संस्थाधिकारिणः छात्रेभ्यः एकं वैद्यं प्रेषितवन्तः। सः त्रीन् मासान् तत्र अवसत्। किन्तु कोऽपि रुग्णः तस्य समीपे चिकित्सायै न आगच्छत्। वैद्यराजः प्रधानाचार्यम् अपृच्छत् - किम् अत्र कोऽपि रोगी न भवति ? प्रधानाचार्यः विहस्य अवदत् - वैद्यराज! अस्य एकं रहस्यम् अस्ति। अत्र सर्वे तदा भोजनं कुर्वन्ति, यदा ते तीव्रक्षुधाम् अनुभवन्ति। यदा तेषां भोजनेन तृप्तिः भवति, ततः पूर्वम् एव ते भोजनं त्यजन्ति। एतत् एव एतेषां स्वास्थ्यस्य रहस्यम्। भवान् जानाति एव यत् स्वस्थाः नराः औषधं न सेवन्ते। तद्वचनं श्रुत्वा वैद्यः हसित्वा अवदत् अत्र मम उपयोगः न अस्ति। अहं गच्छामि। नमस्कारः। यत्र रोगः तत्र वैद्यः।

**अ. एकपदेन उत्तरत -**

(क) गुरुकुलं कस्मिन् प्रदेशे आसीत् ?

(ख) कीदृशाः नराः औषधं न सेवन्ते ?

(ग) वैद्यः कियतः मासान् गुरुकुले अवसत् ?

(घ) कति सङ्ख्याकाः छात्राः गुरुकुले पठन्ति स्म ?

**आ. पूर्णवाक्येन उत्तरत -**

(क) एकदा संस्थाधिकारिणः किं कृतवन्तः ?

(ख) छात्राणां स्वास्थ्यस्य किं रहस्यम् अस्ति ?



- (ग) वैद्यः हसित्वा किम् अवदत् ?  
 (घ) छात्राणां भोजनादिव्यवस्थां का अकरोत् ?

इ. गद्यांशस्य समुचितं शीर्षकं लिखत ।

ई. यथानिर्देशं उत्तरत -

- (क) 'विहस्य' इति अर्थे गद्यांशे किं पदं प्रयुक्तम् ?  
 (ख) 'सः त्रीन् मासान् तत्र अवसत्।' वाक्येऽस्मिन् विशेषणपदं किम् ?  
 (ग) 'रुग्णाः' इति पदस्य विलोमपदं गद्यांशात् चित्वा लिखत ।  
 (घ) 'आगच्छत्' इति क्रियापदस्य कर्तृपदं गद्यांशे किं प्रयुक्तम् ?

6. एकदा कश्चिच् नरः आखेटाय अगच्छत् । सः सर्वं दिनं वने अभ्रमत्, किन्तु कमपि पशुं न अपश्यत् । सायङ्काले यदा सः आखेटकः स्वगृहं प्रति आगच्छति स्म तदा एकां पुत्रसहितां हरिणीम् अपश्यत् । सः नरः अश्वेन तस्या अनुसरणम् अकरोत् । किन्तु सा मृगी कुत्रचित् अदृश्या अभवत् । ततः सः तस्याः शावकं गृहीत्वा अश्वस्य पृष्ठे बद्धवान् । अश्वम् आरुह्य सः नरः किञ्चिद् दूरं गत्वा अपश्यत् यत् पुत्रस्नेहव्याकुला सा मृगी अपि पुत्रम् अनुसरति स्म । एतद् दृष्ट्वा तस्य मनसि करुणा उत्पन्ना अभवत् । करुणार्द्रहृदयः सः अचिन्तयत् - एषा हरिणी स्वप्राणमोहं त्यक्त्वा पुत्रं रक्षितुम् इच्छति । अहो! एतां निराशां न करिष्यामि इति विचार्य सः मृगीशावकम् अमुञ्चत् । हरिणी प्रसन्ना अभवत् । तस्याः नयनयोः कृतज्ञताभावः आसीत् । एतद् विलोक्य सः परमम् आनन्दं प्राप्तवान् ।

अ. एकपदेन उत्तरत -

- (क) स्वशावकं प्राप्त हरिण्याः नयनयोः कः भावः आसीत् ?  
 (ख) आखेटकः कदा स्वगृहं प्रति आगच्छति ?  
 (ग) का स्वप्राणमोहं त्यक्त्वा पुत्रं रक्षितुम् इच्छति ?  
 (घ) नरः केन हरिण्याः अनुसरणम् अकरोत् ?

आ. पूर्णवाक्येन उत्तरत -

- (क) पुत्रस्नेहव्याकुला मृगी किं करोति स्म ?  
 (ख) नरः मृगीशावकं गृहीत्वा किम् अकरोत् ?  
 (ग) करुणार्द्रहृदयः सः आखेटकः किम् अचिन्तयत् ?  
 (घ) आखेटकः किं विलोक्य परमम् आनन्दं प्राप्तवान् ?

इ. गद्यांशस्य समुचितं शीर्षकं लिखत ।

ई. यथानिर्देशं समुचितमुत्तरं विकल्पेभ्यः चिनुत -

- (क) 'पुत्रस्नेहव्याकुला सा मृगी अपि पुत्रम् अनुसरति स्म ।' वाक्येऽस्मिन् कर्तृपदं किं प्रयुक्तम् ?  
 (ख) 'एकां पुत्रसहितां हरिणीम् अपश्यत्।' वाक्येऽस्मिन् विशेष्यपदं किमस्ति ?  
 (ग) 'प्रातःकाले' इत्यस्य विलोमपदं गद्यांशात् चित्वा लिखत ?  
 (घ) 'सः नरः अश्वेन तस्याः अनुसरणम् अकरोत्।' इति कर्तृपदस्य क्रियापदं किमस्ति ?

7. वैज्ञानिकाः सञ्चारसाधनेषु प्रतिदिनं नवीनतमान् आविष्कारान् कुर्वन्ति येन सन्देशप्रेषणे अधिकतमा सुविधा स्यात्। चलभाषित्रयन्त्रम् (मोबाइल) तादृशम् एव लोकप्रियं यन्त्रम्। बालाः, वृद्धाः, युवकाः, पुरुषाः, महिलाः, नागरिकाः, ग्रामीणाः वा, सर्वेषाम् एव एतत् कर्णभूषणं जातम्। यानानि आरूढाः, कार्यालयेषु कार्यं कुर्वन्तः, मार्गेषु चलन्तः, सभागारेषु प्रवचनं शृण्वन्तः जनाः अस्य ध्वनिं श्रुत्वा वार्तामग्नाः भवन्ति। अविवेकपूर्णः अस्य प्रयोगः कार्येषु व्यवधानं करोति। मार्गेषु दुर्घटनाः भवन्ति। सभागारेषु, कक्षासु, अन्यसभासु वा अव्यवस्था भवति। सत्यम् अस्ति यत् आविष्कारः कदापि हानिकरः न, परन्तु तस्य दुष्प्रयोगेण जीवनस्य शान्तिः नश्यति। वस्तुतः वयं यन्त्रस्य अधीनाः न स्याम अपितु यन्त्रम् अस्माकम् अधीनं स्यात्। ते एव बुद्धिमन्तः ये विज्ञानस्य सदुपयोगं कुर्वन्ति।

**अ. एकपदेन उत्तरत -**

- (क) वर्तमानकाले किं लोकप्रियं सञ्चारसाधनम् अस्ति ?  
 (ख) यन्त्रस्य दुष्प्रयोगेण कस्य शान्तिः नश्यति ?  
 (ग) यन्त्रस्य कीदृशः प्रयोगः कार्येषु व्यवधानं करोति ?  
 (घ) वयं कस्य अधीनाः न स्याम ?

**आ. पूर्णवाक्येन उत्तरत -**

- (क) के खलु बुद्धिमन्तः सन्ति ?  
 (ख) चलभाषित्रयन्त्रस्य ध्वनिना कक्षासु किं भवति ?  
 (ग) वैज्ञानिकाः सञ्चारसाधनेषु किमर्थं नवीनतमान् आविष्कारान् कुर्वन्ति ?  
 (घ) चलभाषित्रयन्त्रं कीदृशं साधनम् अस्ति ?

**इ. गद्यांशस्य समुचितं शीर्षकं लिखत।**

**ई. यथानिर्देशं उत्तरत -**

- (क) 'सन्देशप्रेषणे अधिकतमा सुविधा स्यात्।' अत्र किं विशेषणपदं प्रयुक्तम् ?  
 (ख) 'तस्य दुष्प्रयोगेण जीवनस्य शान्तिः नश्यति।' अत्र कर्तृपदं किं प्रयुक्तम् ?  
 (ग) 'आकर्ष्य' इति अर्थे गद्यांशे किं पदं प्रयुक्तम् ?  
 (घ) 'व्यवस्था' इति पदस्य किं विलोमपदम् अत्र प्रयुक्तम् ?



## अष्टमः अभ्यासः

# अशुद्धिसंशोधनम्

### 1. अधोलिखितानि वाक्यानि ध्यानेन पठत -

- (क) सः बालिका अस्ति ।  
(ख) तौ बालकाः क्रीडन्ति ।  
(ग) शिक्षकः सूचनां वदन्ति ।  
(घ) श्वः कार्यक्रमः अभवत् ।  
(ङ) त्वं पाठं पठति ।  
(च) क्रीडकः कन्दुकं क्रीडति ।  
(छ) माता बालकं मोदकं ददाति ।

वयं पश्यामः यत् उपरितन-वाक्येषु रेखाङ्कितानि पदानि शुद्धानि न सन्ति । यदि ध्यानेन पश्यामः तर्हि अवगम्यते यत् एतेषु लिङ्ग-वचन-लकार-पुरुष-विभक्ति-दृष्ट्या दोषाः सन्ति । अतः सर्वदा अपि वाक्यनिर्माण-सन्दर्भे एते अंशाः अनिवार्यतया अवधातव्याः ।

### 2. अधुना उपरितन-वाक्यानां शुद्धरूपाणि पश्यामः -

- (क) सा बालिका अस्ति । (लिङ्गसम्बद्धः)  
(ख) ते बालकाः क्रीडन्ति । (वचनसम्बद्धः-विशेषण-विशेष्यम्)  
(ग) शिक्षकः सूचनां वदति । (कर्तृक्रियात्मकः वचनसम्बद्धः)  
(घ) ह्यः कार्यक्रमः अभवत् । (लकारसम्बद्धः)  
(ङ) त्वं पाठं पठसि । (पुरुषसम्बद्धः)  
(च) क्रीडकः कन्दुकेन क्रीडति । (विभक्तिसम्बद्धः)  
(छ) माता बालकाय मोदकं ददाति । (विभक्तिसम्बद्धः)

### 3. अधोलिखितानि वाक्यानि संशोध्य लिखत - ( लिङ्गसम्बद्धानि वाक्यानि )

- (क) उत्तमा बालकः तत्र अस्ति । .....  
(ख) अद्य मम मित्रः गृहम् आगच्छति । .....  
(ग) सुन्दरः वातावरणम् अस्ति । .....  
(घ) विशाला जलधिः अस्ति । .....  
(ङ) वृक्षं छायां फलं च ददाति । .....

#### 4. वचनसम्बद्धानि वाक्यानि -

- (क) सुन्दरी बालिकाः वार्ता कुर्वन्ति।  
(ख) युवां पाठं पठसि।  
(ग) तत्र निपुणः क्रीडकौ क्रीडतः।  
(घ) अहं श्लोकान् स्मरामः।  
(ङ) कार्यक्रमः उत्तमः अभवन्।

#### 5. लकारसम्बद्धानि वाक्यानि -

- (क) श्वः परीक्षा अभवत्।  
(ख) अहं परह्यः विदेशं गच्छामि।  
(ग) त्वं ह्यः कुत्र गमिष्यसि।  
(घ) पुरा श्रीरामः अयोध्यायाः राजा अस्ति।  
(ङ) राघवः परश्वः वेदपारायणम् अकरोत्।

#### 6. पुरुषसम्बद्धानि वाक्यानि -

- (क) यूयं लेखम् अलिखन्।  
(ख) सः कार्यं कुरु।  
(ग) वयं सर्वे संस्कृतेन सम्भाषणं कुर्वन्ति।  
(घ) क्रीडकाः तत्र क्रीडत।  
(ङ) भवन्तौ कस्य देशस्य नागरिकौ स्थः ?

#### 7. विभक्तिसम्बद्धानि वाक्यानि -

- (क) कृषकः ग्रामेण नगरं गच्छति।  
(ख) राघवेन्द्रः लेखन्याः लिखति।  
(ग) गणेशं मोदकं रोचते।  
(घ) बालाः जन्तुशालायां जन्तवः पश्यन्ति।  
(ङ) छात्रः विद्यालये गच्छति।

### मिश्रितप्रश्नाः

#### 1. अधोलिखितवाक्येषु रेखाङ्कितशुद्धपदाय उचितं पदं चित्वा वाक्यानि पुनः लिखत -

- (क) भारति! तव अयं कोशः अपूर्व विद्यते।

(i) अपूर्वः

(ii) अपूर्वा

(iii) अपूर्वाः

(iv) अपूर्वाणि

(ख) नास्ति रागसमानि दुःखम् ।

(i) रागसमः (ii) रागसमा (iii) रागसमम् (iv) रागसमे

(ग) बोधिसत्त्वः शिवीनां राजा अभवम् ।

(i) अभवः (ii) अभवत् (iii) अभवम् (iv) अभवन्

(घ) राज्ञः नेत्रदाननिश्चयं ज्ञात्वा अमात्याः अवदत् ।

(i) अवदत् (ii) वदिष्यति (iii) अवदम् (iv) अवदन्

(ङ) अहम् अपि तत् नेत्रं यथास्थानम् अस्थापयत् ।

(i) सः (ii) त्वम् (iii) आवाम् (iv) ते

## 2. अधोलिखितानि वाक्यानि त्रुटियुक्तानि सन्ति, भवन्तः एतानि संशोध्य लिखन्तु -

(क) भूयः प्रीताः शक्रः वरम् अयच्छत् ।

(ख) सरस्तीरे राजहंसः हंसी च विहरन्ति ।

(ग) सः कथं माम् अपि अधिक्षिपसि ।

(घ) मम केकारवं श्रुत्वा कोकिलः अपि लज्जामहे ।

(ङ) युवां न तावत् कलहेन समयं वृथा यापयेत ।

## 3. अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितं पदं चिनुत -

(क) कस्मिंश्चित् नगरे चन्द्रो नाम भूपति प्रतिवसतः स्म ।

(i) प्रतिवसति (ii) प्रतिवससि (iii) प्रतिवसामि (iv) प्रतिवसन्ति

(ख) सूपकाराणां मेषेण सह एषः कलहः नूनं भवतां विनाशकारणं भवति ।

(i) अभवत् (ii) भवतु (iii) भविष्यति (iv) भवेत

(ग) यूथपः सर्वान् कपीन् आहूय रहसि अवदम् ।

(i) वदति (ii) वदिष्यन्ति (iii) अवदन् (iv) अवदत्

(घ) कपयः प्रहस्य अवदाम ।

(i) अवदत् (ii) अवदम् (iii) अवदन् (iv) वदिष्यन्ति

(ङ) ऊर्णाप्रचुरः मेषौ दाहवेदनया भूमौ लुठति ।

(i) मेषम् (ii) मेषः (iii) मेषेण (iv) मेषेस्य

## 4. एतानि त्रुटियुक्तानि वाक्यानि यूयं संशोध्य पुनः लिखत -

(क) चञ्चलः हि मनः कृष्ण ।

(ख) मनं दुर्निग्रहं चलं च भवति ।

(ग) अयं पुरुषः पापं चरसि ।

(घ) अग्निः इव दहन्ति मामयं शोकः ।

(ड) नकुलः तव सारथिः भव ।

5. अधोलिखितवाक्येषु रेखाङ्कितानि पदानि अशुद्धानि सन्ति, विकल्पेभ्यः उचितं शुद्धं विकल्पं चिनुत -

(क) मन्ये ते ब्रह्मास्त्रप्रयोगं न करिष्यति ।

(i) सः (ii) त्वम् (iii) अहम् (iv) तौ

(ख) रे दुष्ट भीम! त्वम् अद्य वध्योऽस्मि ।

(i) वध्योऽस्ति (ii) वध्योऽसि (iii) वध्यः सन्ति (iv) वध्यः स्मः

(ग) युधिष्ठिरार्जुनौ रथारोहणं नाटयति ।

(i) नाटयन्ति (ii) नाटयथः (iii) नाटयतः (iv) नाटयामः

(घ) न जानाति भवान् द्रौणेः चपलं प्रकृतिम् ।

(i) चपलाम् (ii) चपला (iii) चपलया (iv) चपलायाः

(ङ) प्रच्छन्नभाग्यस्य भार्या बुद्धिमान् आसीत् ।

(i) बुद्धिमन्तः (ii) बुद्धिमन्तौ (iii) बुद्धिमती (iv) बुद्धिमत्यः

6. अधोलिखितवाक्येषु काश्चन अशुद्धयः सन्ति । ताः अपाकृत्य वाक्यानि संशोध्य लिखत -

(क) परद्रव्ये अनासक्तः सा न्यवेदयत् ।

(ख) अहो विचित्रः स्वप्नं मया दृष्टः ।

(ग) दुष्टबुद्धिः क्षेत्रं गता ।

(घ) वाक्पटुः धैर्यवती मन्त्री न परिभूयते ।

(ङ) वयं स्वागतं कुर्वन्ति ।

7. अधोलिखितवाक्येषु रेखाङ्कितशुद्धपदाय उचितं पदं चिनुत -

(क) कृष्ण! मनः हि चञ्चलः ।

(i) चञ्चलम् (ii) चञ्चला (iii) चञ्चल! (iv) चञ्चलानि

(ख) सः शस्यक्षेत्रे हलकार्यं कर्तुम् आरभे ।

(i) आरभन्त (ii) आरभध्वम् (iii) आरभेताम् (iv) आरभत

(ग) 'साडकेन' एकम् अन्यत् पर्व सन्ति ।

(i) अस्मि (ii) अस्ति (iii) असि (iv) स्तः

(घ) अहं जानासि इदं स्थानम् ।

(i) जानाति (ii) जानन्ति (iii) जानामि (iv) जानीमः

(ङ) कालः भूतं वर्तमानं भविष्यदपि च वीक्षमाणं जगतः विकासस्य साक्षी भवति ।

(i) वीक्षमाणानि (ii) वीक्षमाणा (iii) वीक्षमाणाः (iv) वीक्षमाणः



**PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR**  
**HOLIDAY HOMEWORK – ARTIFICIAL INTELLIGENCE (CLASS X)**  
**SESSION: 2026–27**

**Instructions:**

- Complete all experiments neatly in your **AI Practical Notebook**.
- Write **Aim, Code/Steps, Output, and Conclusion** wherever applicable.
- Maintain proper **date and teacher’s signature column**.
- Diagrams/charts should be drawn neatly or printed and pasted.
- For any further help:- [click here](#)

<b>Exp. No.</b>	<b>Experiment Name</b>
1	Write a Python program to print your Bio-Data
2	Write a Python program to convert Celsius to Fahrenheit
3	Write a Python program to check whether a number is even or odd
4	Write a Simple Menu-Driven Calculator Program
5	Python programs using operators, data types, and control statements (Level 1)
6	Python programs using NumPy, Pandas, and Scikit-learn (Level 2)
7	Create an Empathy Map for a given scenario
8	Project Abstract Creation using Design Thinking Framework
9	Python programs to calculate mean, median, mode, standard deviation, and variance
10	Python programs to visualize line graph, bar graph, histogram, scatter plot, and pie chart using matplotlib
11	Calculation of Pearson Correlation Coefficient in MS Excel
12	Demonstration of Linear Regression using MS Excel / Python
13	Demonstration of k-Nearest Neighbour using Python
14	Demonstration of k-Means Clustering using Python
15	Practice sample programs for regression, classification, and clustering (dataset provided)
16	Create a chatbot for ordering ice-creams (using any platform)
17	Create chatbot using Google Dialogflow
18	Python program to demonstrate working of a chatbot
19	Python program to summarize given text
20	Summarize insights from the video “Humans Need Not Apply”
21	Comparative study of AI policies by different organizations
22	Understanding ethical dilemma using Moral Machine

**SUMMER BREAK  
HOLIDAY HOME  
WORK 2026-27  
CLASS XII**

PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR

Class XII – English Core

Summer Vacation Holiday Homework (2026)

Theme: “Literature through Art & Culture”

General Instructions

The project must be creative, well-presented, and handwritten.

Use an A4 file/folder with proper indexing.

Integrate art forms (painting, sketching, collage, digital art, craft, etc.).

Avoid excessive writing; focus on quality and originality.

Include self-reflection at the end.

PART A: ART-INTEGRATED PROJECT (Compulsory)

Project Title: “Exploring Human Emotions through Literature and Art”

Instructions:

Choose any TWO chapters from the following:

Flamingo (Prose)

The Last Lesson

Lost Spring

Deep Water

The Rattrap

Flamingo (Poetry)

My Mother at Sixty-Six

Keeping Quiet

A Thing of Beauty

Vistas

The Third Level

Journey to the End of the Earth

The Tiger King

Task 1: Artistic Representation

For each selected chapter:

Create one artwork representing:

Theme / emotion / message

Possible formats:

Painting / sketch / poster

Digital illustration

Collage using magazines/newspapers

Task 2: Creative Expression (Art + Writing)

Attach a short write-up (100–120 words each):

Explain your artwork

Highlight:

Theme of the chapter

Emotional connection

Relevance in today's world

Task 3: Cultural Integration

Connect the chapter with any Indian art form or culture, such as:

Madhubani painting

Warli art

Folk theatre (Nukkad Natak)

Classical dance/music

Write a brief note (80–100 words):

How the story/theme can be expressed through that art form

PART B: LANGUAGE & SKILL ENRICHMENT

1. Diary Entry (Creative Writing)

Write ONE diary entry (150 words) from the perspective of:

Franz (The Last Lesson) OR

Charley (The Third Level)

Focus on emotions and personal reflection.

## 2. Letter to the Editor

Topic (choose one):

Importance of preserving cultural heritage

Rising stress among students

(Word limit: 120–150 words)

## 3. Vocabulary Journal

Select 10 new words from your chosen chapters

Write:

Meaning

Sentence

Synonym

## PART C: MULTI-DISCIPLINARY CONNECTION

Activity: Literature Meets Real Life

Choose one topic:

Child labour (Lost Spring)

Environmental issues (Journey to the End of the Earth)

Fear and courage (Deep Water)

Task:

Create a poster or infographic

Add a short slogan/message

## PART D: READING ACTIVITY

Independent Reading

Read any one short story or article (non-textbook)

Write:

Title & Author

Summary (100 words)

Your opinion (80 words)

## PART E: TECHNOLOGY INTEGRATION (Compulsory)

(Students will choose ANY ONE activity)

Option 1: Digital Storytelling (Highly Recommended)

Create a 3–5 minute video based on any one chapter:

The Last Lesson, Deep Water, The Third Level, etc.

Guidelines:

Include:

Narration (your voice)

Images/artwork (your own or sourced responsibly)

Background music (optional)

You may use apps like:

Canva

InShot

Kinemaster

Focus:

Theme, emotions, and message of the chapter

Creative storytelling—not just summary

Option 2: Podcast / Audio Story

Record a 2–4 minute podcast episode

Topic ideas:

“Fear and Courage in Deep Water”

“Escapism in The Third Level”

Tools:

Anchor

Audacity

Include:

Introduction

Main discussion

Personal opinion

Option 3: Digital Poster / Infographic

Create a digital poster on:

Child labour (Lost Spring)

Environment (Journey to the End of the Earth)

Tools:

Canva

Microsoft PowerPoint

Requirements:

Use minimal text + strong visuals

Add slogan and key message

Option 4: Blog Writing (Creative Expression)

Write a blog post (200–250 words)

Suggested Themes:

“Lessons from The Rattrap in Modern Life”

“Why Silence Matters: Insights from Keeping Quiet”

Optional Platforms:

Google Docs

WordPress

**SUBMISSION FORMAT (IMPORTANT)**

Submit digital work via:

Pen drive / email / Google Drive link

Attach a QR code printout of your work in your project file

**PART F: SELF-REFLECTION**

Write a short paragraph (100 words):

What did you learn?

Which activity did you enjoy most?

How did art help you understand literature better?

## ASSESSMENT CRITERIA

Creativity & originality

Integration of art and literature

Presentation & neatness

Expression and clarity

Relevance to theme

Submission Date:

First week after reopening of school

Clearly mention:

Name

Class & Section

Chapter chosen

**PMSHRI KV KARIMNAGAR  
BIOLOGY HOLIDAY HOME WORK**

**I. WRITING THE PRACTICAL RECORD-**

- INSTRUCTIONS-*
- 1. WRITE THE EXPERIMENTS IN THE GIVEN SEQUENCE ONLY*
  - 2. DO NOT PUT THE DATES NOW.*
  - 3. WRITE EACH EXPERIMENT SEPARATELY. DO NOT WRITE TWO DIFFERENT EXPERIMENTS ON THE SAME PAGE.*
  - 4. DRAW THE DIAGRAM/OBSERVATION TABLE ON THE OPPOSITE PLAIN SIDE OF THE PAGE ON WHICH EXPERIMENT IS WRITTEN.*

**SEQUENCE OF EXPERIMENTS TO BE WRITTEN IN BIOLOGY RECORD**

**UNIT - REPRODUCTION**

1. Prepare a temporary mount to observe pollen germination
2. Flowers adapted to pollination by different agencies (wind, insects, birds).
3. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
4. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
5. T.S. of blastula through permanent slides (Mammalian).
6. Controlled pollination - emasculation, tagging and bagging.

**UNIT- GENETICS AND EVOLUTION**

7. Prepare a temporary mount of onion root tip to study mitosis.
8. Meiosis in onion bud cell or grasshopper testis through permanent slides.
9. Mendelian inheritance using seeds of different colour/sizes of any plant.
10. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
11. Flash cards models showing examples of homologous and analogous organs.

**UNIT-HUMAN HEALTH AND DISEASES**

12. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.

**UNIT- BIOTECHNOLOGY**

13. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

**UNIT-ECOLOGY**

14. Study the plant population density by quadrat method.
15. Study the plant population frequency by quadrat method.
16. Models specimen showing symbolic association in root modules of leguminous plants, Cuscuta on host, lichens.

**II. Answer the given monthly test three practice question papers in your note book.**

# Class 12 summer home work

**Sub : chemistry**

## **Individual Investigatory project**

1. Study of quantity of casein present in different samples of milk
2. Comparative study of rate of fermentation in different materials – wheat flour, potato, gram flour and rice flour
3. To study common food adulterants – fat, oil, butter, sugar, turmeric powder, chilli powder and pepper
4. Preparation of soyabean milk and its comparison with the natural milk
5. Extraction of essential oils
6. Study of oxalate ion content in guava
7. Contents of soft drinks
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## **Exercise problems from electro chemistry**

2.1 to 2.5

## **Holiday Homework Physics**

1. **Class 12** : completion of NCERT examples and exercise questions of completed chapters, completion of Investigatory project , last 5 year board question basing on 1st chapter and electric potential

*Note:- all students of 12 classes should come at least with one science project and one idea for both RSBVP and INSPIRE MANAK programmes. Its compulsory for all the students and they will be awarded internal assessment marks for them*

**PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR**  
**HOLIDAY HOMEWORK – COMPUTER SCIENCE (XII)**  
**TOPIC: COMPUTER NETWORKS**

---

**SECTION A**

1. Define Computer Network
  2. What is Internet?
  3. Define Network Topology
  4. What is LAN?
  5. What is WAN?
  6. What is IP Address?
  7. What is Bandwidth?
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  9. Write two advantages and two disadvantage of Computer Network
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  15. Explain these **network devices**:
    - Hub                      Switch                      Router                      Modem                      NIC                      Getaway                      Bridge
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**SECTION B – INTERNET & WEB**

21. Explain HTTP and HTTPS
  22. What is FTP, TELNET, PPP, VOIP?
  23. What is SMTP and POP3?
  24. Define:(a) URL                      (b) Web Server                      (c) Domain Name
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**SECTION C – DATA COMMUNICATION**

26. Define Data Communication & its components
  27. What are characteristics of Data Communication?
- 

**SECTION E PROJECT (Design a Network)**

- Choose: School / Office / Hospital
- Write:
  - Type of Network you will choose
  - Which Topology you will Use
  - Which Devices you Required
- Draw Cable Layout diagram

[Click here for the reference...](#)

**PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR**  
**HOLIDAY HOMEWORK**  
**CLASS: XII (ARTIFICIAL INTELLIGENCE)**  
**SESSION: 2026–27**

---

**GENERAL INSTRUCTIONS:**

- All students must complete the following experiments in their **AI Practical Notebook**.
  - Write **Aim, Theory, Procedure, Code, and Output** for each experiment.
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**S.No Name of Experiment**

- 1 Program to check whether the required libraries are installed
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**PMSHRI KV KARIMNAGAR  
BIOLOGY HOLIDAY HOME WORK**

**I. WRITING THE PRACTICAL RECORD-**

- INSTRUCTIONS-*
- 1. WRITE THE EXPERIMENTS IN THE GIVEN SEQUENCE ONLY*
  - 2. DO NOT PUT THE DATES NOW.*
  - 3. WRITE EACH EXPERIMENT SEPARATELY. DO NOT WRITE TWO DIFFERENT EXPERIMENTS ON THE SAME PAGE.*
  - 4. DRAW THE DIAGRAM/OBSERVATION TABLE ON THE OPPOSITE PLAIN SIDE OF THE PAGE ON WHICH EXPERIMENT IS WRITTEN.*

**SEQUENCE OF EXPERIMENTS TO BE WRITTEN IN BIOLOGY RECORD**

**UNIT - REPRODUCTION**

1. Prepare a temporary mount to observe pollen germination
2. Flowers adapted to pollination by different agencies (wind, insects, birds).
3. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
4. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
5. T.S. of blastula through permanent slides (Mammalian).
6. Controlled pollination - emasculation, tagging and bagging.

**UNIT- GENETICS AND EVOLUTION**

7. Prepare a temporary mount of onion root tip to study mitosis.
8. Meiosis in onion bud cell or grasshopper testis through permanent slides.
9. Mendelian inheritance using seeds of different colour/sizes of any plant.
10. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
11. Flash cards models showing examples of homologous and analogous organs.

**UNIT-HUMAN HEALTH AND DISEASES**

12. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.

**UNIT- BIOTECHNOLOGY**

13. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

**UNIT-ECOLOGY**

14. Study the plant population density by quadrat method.
15. Study the plant population frequency by quadrat method.
16. Models specimen showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens.

**II. Answer the given monthly test three practice question papers in your note book.**

# Class 12 summer home work

## Chemistry

**A. Individual Investigatory project - Assigned as per the roll numbers**

- 1. Study of quantity of casein present in different samples of milk**
- 2. Comparative study of rate of fermentation in different materials - wheat flour ,potato,gram flour and rice flour**
- 3. To study common food adulterants- fat ,oil,butter,sugar,turmeric powder, chilli powder and pepper**
- 4. Preparation of soyabean milk and it's comparison with the natural milk**
- 5. Extraction of essential oils**
- 6. Study of oxalate ion content in guava**
- 7. Contents of soft drinks**
- 8. Determination of caffeine in tea and coffee samples**
- 9. To study the digestion of starch by salivary amylase and the effect of pH and temperature on it**
- 10. Comparison of the citric acid concentration in 3 different samples of fruit juices**
- 11. Comparative study of commercial antacids**
- 12. Presence of pesticides in fruits and vegetables**
- 13. To study the effect of potassium bisulphite as a food preservative under various conditions**

**B. Electrochemistry NCERT textbook question - 2.1- 2.5**

**C. Solve both the sets of April monthly question paper in homework notebook**

**D. Revise 11th Class Organic Chemistry**

PM SHRI KENDRIYA VIDYALAYA KARIMNAGAR

Class XII – English Core

Summer Vacation Holiday Homework (2026)

Theme: “Literature through Art & Culture”

General Instructions

The project must be creative, well-presented, and handwritten.

Use an A4 file/folder with proper indexing.

Integrate art forms (painting, sketching, collage, digital art, craft, etc.).

Avoid excessive writing; focus on quality and originality.

Include self-reflection at the end.

PART A: ART-INTEGRATED PROJECT (Compulsory)

Project Title: “Exploring Human Emotions through Literature and Art”

Instructions:

Choose any TWO chapters from the following:

Flamingo (Prose)

The Last Lesson

Lost Spring

Deep Water

The Rattrap

Flamingo (Poetry)

My Mother at Sixty-Six

Keeping Quiet

A Thing of Beauty

Vistas

The Third Level

Journey to the End of the Earth

The Tiger King

Task 1: Artistic Representation

For each selected chapter:

Create one artwork representing:

Theme / emotion / message

Possible formats:

Painting / sketch / poster

Digital illustration

Collage using magazines/newspapers

Task 2: Creative Expression (Art + Writing)

Attach a short write-up (100–120 words each):

Explain your artwork

Highlight:

Theme of the chapter

Emotional connection

Relevance in today's world

Task 3: Cultural Integration

Connect the chapter with any Indian art form or culture, such as:

Madhubani painting

Warli art

Folk theatre (Nukkad Natak)

Classical dance/music

Write a brief note (80–100 words):

How the story/theme can be expressed through that art form

PART B: LANGUAGE & SKILL ENRICHMENT

1. Diary Entry (Creative Writing)

Write ONE diary entry (150 words) from the perspective of:

Franz (The Last Lesson) OR

Charley (The Third Level)

Focus on emotions and personal reflection.

## 2. Letter to the Editor

Topic (choose one):

Importance of preserving cultural heritage

Rising stress among students

(Word limit: 120–150 words)

## 3. Vocabulary Journal

Select 10 new words from your chosen chapters

Write:

Meaning

Sentence

Synonym

## PART C: MULTI-DISCIPLINARY CONNECTION

Activity: Literature Meets Real Life

Choose one topic:

Child labour (Lost Spring)

Environmental issues (Journey to the End of the Earth)

Fear and courage (Deep Water)

Task:

Create a poster or infographic

Add a short slogan/message

## PART D: READING ACTIVITY

Independent Reading

Read any one short story or article (non-textbook)

Write:

Title & Author

Summary (100 words)

Your opinion (80 words)

## PART E: TECHNOLOGY INTEGRATION (Compulsory)

(Students will choose ANY ONE activity)

Option 1: Digital Storytelling (Highly Recommended)

Create a 3–5 minute video based on any one chapter:

The Last Lesson, Deep Water, The Third Level, etc.

Guidelines:

Include:

Narration (your voice)

Images/artwork (your own or sourced responsibly)

Background music (optional)

You may use apps like:

Canva

InShot

Kinemaster

Focus:

Theme, emotions, and message of the chapter

Creative storytelling—not just summary

Option 2: Podcast / Audio Story

Record a 2–4 minute podcast episode

Topic ideas:

“Fear and Courage in Deep Water”

“Escapism in The Third Level”

Tools:

Anchor

Audacity

Include:

Introduction

Main discussion

Personal opinion

Option 3: Digital Poster / Infographic

Create a digital poster on:

Child labour (Lost Spring)

Environment (Journey to the End of the Earth)

Tools:

Canva

Microsoft PowerPoint

Requirements:

Use minimal text + strong visuals

Add slogan and key message

Option 4: Blog Writing (Creative Expression)

Write a blog post (200–250 words)

Suggested Themes:

“Lessons from The Rattrap in Modern Life”

“Why Silence Matters: Insights from Keeping Quiet”

Optional Platforms:

Google Docs

WordPress

**SUBMISSION FORMAT (IMPORTANT)**

Submit digital work via:

Pen drive / email / Google Drive link

Attach a QR code printout of your work in your project file

**PART F: SELF-REFLECTION**

Write a short paragraph (100 words):

What did you learn?

Which activity did you enjoy most?

How did art help you understand literature better?

## ASSESSMENT CRITERIA

Creativity & originality

Integration of art and literature

Presentation & neatness

Expression and clarity

Relevance to theme

Submission Date:

First week after reopening of school

Clearly mention:

Name

Class & Section

Chapter chosen

### HOLIDAY HOME WORK

1. Find the value of  $\tan(\cos^{-1} x)$  and hence evaluate  $\tan\left(\cos^{-1} \frac{8}{17}\right)$
2. Consider  $f: R_+ \rightarrow [4, \infty]$  given by  $f(x) = x^2 + 4$ . Show that  $f$  is invertible with inverse  $f^{-1}$  of  $f$  given by  $f^{-1}(y) = \sqrt{y-4}$ , where  $R_+$  is the set of all non-negative real numbers.
3. Consider  $f: R \rightarrow R$  given by  $f(x) = 4x + 3$ . Show that ' $f$ ' is invertible and also find the inverse of ' $f$ '.
4. If  $f(x) = \frac{4x+3}{6x-4}, x \neq \frac{2}{3}$ . Show that  $f \circ f(x) = x$  for all  $x \neq \frac{2}{3}$ . What is inverse of ' $f$ '
5. Evaluate  $\cos\left(\sin^{-1} \frac{1}{4} + \sec^{-1} \frac{4}{3}\right)$
6. Prove that  $2 \sin^{-1} \frac{3}{5} - \tan^{-1} \frac{17}{31} = \frac{\pi}{4}$ .
7. Prove that  $\cot^{-1} 17 + \cot^{-1} 18 + \cot^{-1} 18 = \cot^{-1} 3$
8. Solve for  $x$ :  $\tan^{-1} \left(\frac{1-x}{1+x}\right) = \frac{1}{2} \tan^{-1} x, x > 0$
9. Solve for the equation  $\sin^{-1} 6x + \sin^{-1} 6\sqrt{3}x = -\frac{\pi}{2}$ .
10. Find the real solution of the equation:  $\tan^{-1} \sqrt{x(x+1)} + \sin^{-1} \sqrt{x^2 + x + 1} = \frac{\pi}{2}$ .
11. Show that  $\tan^{-1} \frac{1}{2} + \tan^{-1} \frac{2}{11} = \tan^{-1} \frac{3}{4}$
12. Prove that  $\tan^{-1} x + \tan^{-1} \left(\frac{2x}{1-x^2}\right) = \tan^{-1} \left(\frac{3x-x^3}{1-3x^2}\right), |x| < \frac{1}{\sqrt{3}}$ .
13. Prove that  $2 \tan^{-1} \frac{1}{2} + \tan^{-1} \frac{1}{7} = \tan^{-1} \frac{31}{17}$
14. Find the value of  $\tan^{-1} \left(2 \cos \left(2 \sin^{-1} \frac{1}{2}\right)\right)$
15. Find the value of  $\tan^{-1} \left[\sin^{-1} \left(\frac{2x}{1-x^2}\right) + \cos^{-1} \left(\frac{1-y^2}{1+y^2}\right)\right], |x| < 1, |y| > 0$  and  $xy < 1$ .
16. If  $\sin\left(\sin^{-1} \frac{1}{5} + \cos^{-1} x\right) = 1$ , then find the value of ' $x$ '.
17. If  $\tan^{-1} \frac{x-1}{x-2} + \tan^{-1} \frac{x+1}{x+2} = \frac{\pi}{4}$ , then find the value of  $x$ .
18. Show that  $\sin^{-1} \frac{3}{5} - \sin^{-1} \frac{8}{17} = \cos^{-1} \frac{84}{85}$ .
19. Show that  $\sin^{-1} \frac{12}{13} + \cos^{-1} \frac{4}{5} + \tan^{-1} \frac{63}{16} = \pi$ .
20. Simplify  $\tan^{-1} \left[\frac{a \cos x - b \sin x}{b \cos x + a \sin x}\right]$ , if  $\frac{a}{b} \tan x > -1$ .
21. Solve  $\tan^{-1} 2x + \tan^{-1} 3x = \frac{\pi}{4}$ .
22. Show that  $\cos^{-1} \frac{12}{13} + \sin^{-1} \frac{3}{5} = \sin^{-1} \frac{56}{65}$ .
23. Show that  $\tan^{-1} \frac{1}{5} + \tan^{-1} \frac{1}{7} + \tan^{-1} \frac{1}{3} + \tan^{-1} \frac{1}{8} = \frac{\pi}{4}$
24. Prove that  $\cot^{-1} \left[\frac{\sqrt{1+\sin x} + \sqrt{1-\sin x}}{\sqrt{1+\sin x} - \sqrt{1-\sin x}}\right] = \frac{x}{2}, x \in \left(0, \frac{\pi}{2}\right)$
25. Write the matrix  $A = \begin{bmatrix} 5 & -1 & 2 \\ 3 & 7 & 6 \\ -5 & -4 & 2 \end{bmatrix}$  as sum of a symmetric and a skew-symmetric matrix.
26. Show that a matrix  $A = \begin{bmatrix} 1 & 0 \\ -1 & 7 \end{bmatrix}$  satisfy the matrix equation  $A^2 - 8A + 7I = 0$ , and hence find  $A^{-1}$ .
27. If  $A = \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix}$ , using mathematical induction prove that  $A^n = \begin{bmatrix} \cos n\theta & \sin n\theta \\ -\sin n\theta & \cos n\theta \end{bmatrix}$
28. If  $A = \begin{bmatrix} 2 & 0 & 1 \\ 2 & 1 & 3 \\ 1 & -1 & 0 \end{bmatrix}$  find the value of  $A^2 - 3A + 2I$ . (Ans  $\begin{bmatrix} 1 & -1 & -1 \\ 3 & -3 & -4 \\ -3 & 2 & 0 \end{bmatrix}$ )
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50. Prove that  $\tan^{-1}\left[\frac{\sqrt{1+x} - \sqrt{1-x}}{\sqrt{1+x} + \sqrt{1-x}}\right] = \frac{\pi}{4} - \frac{1}{2}\cos^{-1}x, -\frac{1}{\sqrt{2}} \leq x \leq 1$

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**HOLIDAY HOMEWORK**  
**CLASS: XII (ARTIFICIAL INTELLIGENCE)**  
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26. Define Data Communication & its components
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**SECTION E PROJECT (Design a Network)**

- Choose: School / Office / Hospital
- Write:
  - Type of Network you will choose
  - Which Topology you will Use
  - Which Devices you Required
- Draw Cable Layout diagram

[Click here for the reference...](#)