Class IX
ग्रीष्मकालीन अवकाश कार्य
HINDI

आप अनुपमा अनुपम हैं। आपके क्षेत्र को मुख्य सड़क से जोड़ने वाली सड़क पर लाइटें ख़राब हो गईं हैं, जिससे दुर्घटना की आशंका बढ़ गई है। इस ओर ध्यान आकर्षित कराते हुए सार्वजनिक लोक निर्माण विभाग को लगभग 100 शब्दों में पत्र लिखिए।
आप अनुपमा / अनुपम हैं। आपने विद्यालय की भाषण प्रतियोगिता में प्रथम स्थान प्राप्त किया है। अपने दादाजी को विद्यालय की भाषण प्रतियोगिता की संपूर्ण जानकारी देते हुए लगभग 100 शब्दों में पत्र लिखिए
निम्नलिखित तीन विषयों संकेत बिन्दुओं के आधार पर लगभग 120 शब्दों में दो पर अनुच्छेद लिखिए :
(क) जल बचाओ, पृथ्वी बचाओ , जल के बिना जीवन असम्भव, जल संरक्षण का महत्त्व, जल संरक्षण के उपाय|
(ख) जंक फूड और युवा पीढ़ी, जंक फूड क्या है ?, जंक फूड का बढ़ता चलन, स्वास्थ्य पर दुष्प्रभाव||
(ग) समाचार पत्र के नियमित पठन का महत्त्व , ज्ञान का भंडार, पढ़ने की आदत का विकास, जागरूकता|
पांच प्रमुख महिला कहानीकारों के नाम (सचित्र)और उनकी प्रसिद्ध कहानियों के नाम भी लिखिए।
निम्नलिखित उपसर्गों से दो-दो शब्दों की रचना कीजिए
अति …… ……
उप …… ……
प्रति …… ……
सम …… ……
परि …… ……
6. निम्नलिखित प्रत्ययों से दो-दो शब्दों की रचना कीजिए
आई …… ……
ता …… ……
दार …… ……
ईय …… ……
त्व …… ……

ENGLISH

Section A: Reading Skills
Read any 3–4 chapters from your Kaveri textbook.
For each chapter, write:
Title
Author/Poet
Main Characters
Summary (120–150 words)
Theme/Message
Section B: Writing Skills
1. Paragraph Writing (any 3)
(120–150 words each)

Importance of Discipline
Social Media: Boon or Bane
A Visit to a Historical Place
My Favourite Teacher
Environmental Pollution
2. Article Writing
Write an article (150–180 words) on:
“Importance of Time Management for Students”
3. Letter Writing (Formal)
Write a letter to the Principal requesting:
“Permission to organize a cleanliness drive in your school”
4. Diary Entry
Write a diary entry about:
“An unforgettable day during your summer vacation”
Section C: Grammar Practice
1. Tenses
Write 5 sentences each in:
Present Tense
Past Tense
Future Tense
2. Active and Passive Voice
Change into passive voice:
She wrote a poem.
They are playing cricket.
He will complete the work.
3. Direct and Indirect Speech
Change into indirect speech:
He said, “I am happy.”
She said, “I have finished my homework.”
4. Modals
Fill in the blanks using suitable modals (can, could, must, should, may):
You ___ respect your elders.
___ I come in?
We ___ finish our work on time.
Section D: Creative Work
1. Poster Making
Make a poster on:
Save Water
OR
Say No to Plastic
2. Story Writing
Write a story based on the idea:
“Where there is a will, there is a way”

3. Vocabulary Enhancement
Learn and write 20 new words
Include meanings and sentences
Section E: Speaking & Listening
Prepare a speech (2–3 minutes) on:
Importance of Education
OR
Role of Youth in Nation Building

MATHS

Instructions for Submission:
Use Maths Notebook for solving H.W. and don't write solutions from the google/internet.
Graphs must be drawn on proper graph paper (if required).
Submission Date: First day after summer vacation.
All work must be handwritten.
If any question is not clear students can leave that question or ask to me on WhatsApp.
Chapter 1: Number Systems
Write 5 rational and 5 irrational numbers. Prove why each number is rational or irrational.
Express the following in decimal form and say what kind of decimal expansion they have:
⅞, 23/99, ⅓, 22/7
Simplify:
√2×√8 (√5+√3)2
4. Write five rational numbers between:
(a) 1 and 2
(b) –1 and 0
5. Represent √5 and √6 on the number line using geometrical construction. (Use compass and scale.)
6. Write the decimal expansions of:
(a) 18 (b) 227 (c) 13
And State whether the decimals are terminating or non-terminating recurring.
7. Represent √3.5 on number line and write steps.
8. True or False (with reason):
(a) √2 is a rational number.
(b) Every real number is either rational or irrational.
(c) The product of two irrational numbers is always irrational.
9. Express the following as a rational number in pq form:
(a) 0.666...
(b) 1.272727...

(c) 0.818181...
10. Construct *square root spiral* for √5 on number the line.
Chapter 2: Polynomials
11. Find values of the polynomials
i) 3x-4 at x=-4
ii) 2y2 +5x+3. at y=4 ,x=-3
12. Find zeros of
4u+8
2x2+5x+3

Chapter 3: Coordinate Geometry

1. Plot the points on a graph:
A (2, 3), B(-1, -4), C(0, 5), D(-3, 0)
Name the quadrants in which the following points lie:
P(5, -3), Q(-2, 4), R(-3, -2), S(6, 7)
Write the coordinates of the origin and points on x-axis and y-axis.

Chapter 4: Linear Equations in Two Variables

Write four solutions of the linear equation:
2x+3y=12
Draw the graph of: x+y =5, and find area between line and axes.
If x=2, find the value of y in equation 4x−y =10

SCIENCE

Section A: Multiple Choice Questions (1 Mark Each)

1. **Which organelle is known as the "Powerhouse of the cell"?**

a) Golgi Apparatus
b) Nucleus
c) Mitochondria
d) Ribosomes

2. **The cell wall of plants is mainly composed of:**
○ a) Chitin
○ b) Cellulose
○ c) Proteins
○ d) Lipids
3. **Who first discovered free-living cells in pond water?**
○ a) Robert Hooke
○ b) Purkinje
○ c) Antonie van Leeuwenhoek
○ d) Robert Brown
4. **A cell placed in a solution swells up. The solution is:**
○ a) Hypertonic
○ b) Isotonic
○ c) Hypotonic
○ d) None of the above

5. **Which cell organelle is involved in the formation of lysosomes?**
○ a) Endoplasmic Reticulum
○ b) Golgi Apparatus
○ c) Mitochondria
○ d) Vacuoles

Section B: Assertion and Reasoning

Direction: In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as:
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is NOT the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
6. **Assertion (A):** Lysosomes are known as the "suicide bags" of a cell. **Reason (R):** Lysosomes contain digestive enzymes that can digest their own cell if it gets damaged.
7. **Assertion (A):** Plant cells have a very large central vacuole. **Reason (R):** Vacuoles provide turgidity and rigidity to the plant cell.

Section C: Very Short Answer Questions (2 Marks Each)

8. Define **Plasmolysis**.
9. Why is the Plasma Membrane called a **selectively permeable membrane**?
10. Name the two organelles that contain their own genetic material (DNA) and ribosomes.
11. What would happen if the organization of a cell is destroyed due to some physical or chemical influence?

Section D: Short Answer Questions (3 Marks Each)

12. **Differentiate** between Prokaryotic and Eukaryotic cells (list at least 3 points).
13. State the functions of:

○ Rough Endoplasmic Reticulum (RER)
○ Smooth Endoplasmic Reticulum (SER)
14. Draw a neat, labeled diagram of a **Plant Cell**.

Section E: Long Answer Questions (5 Marks Each)

15. **The Nucleus:**
○ Describe the structure of the nucleus.
○ What is the role of the nucleoid in bacteria?
○ Explain the importance of chromosomes in a cell.

16. **Osmosis vs. Diffusion:**
○ Explain the difference between diffusion and osmosis.
○ Describe an experiment (e.g., using raisins or an egg) to demonstrate osmosis.

Section F: Case-Based Question

Read the following passage and answer the questions:
Cells are the basic structural and functional units of life. Different organelles perform specific functions. For example, some organelles are involved in manufacturing substances (like proteins and lipids), others in packaging and dispatching (like Golgi), and some in generating energy (like Mitochondria). This division of labor allows the cell to survive and perform all its

functions efficiently.
1. Which organelle is responsible for protein synthesis?
2. What is the full form of **ATP**?
3. Why do specialized cells like muscle cells have more mitochondria than skin cells?

SOCIAL SCIENCE

1. Make a project on any one of the following disaster management topic.
(a) drought
(b) cyclone
(c) land degradation
(Do this in a project file,15-16 pages on A4 sheets.)
2. Make and write ten questions and answers of one mark (one word or one sentence) of each lesson completed.
3. Learn and revise all the completed chapters and also complete your CW and HW copy.
4. Make mind maps on completed chapters.
5. Do map practice of History and Ge

AI

You have to make one project file containing information about following topics with examples :
Introduction to python
Why is A.I using Python ?
Python Features
Python Identifiers
Python Numbers
Python Strings
Decision making statements