

पीएम श्री केंद्रीय विद्यालय क्रमांक 2

शरदकालीन अवकाश गृह कार्य

कक्षा नवी

विषय हिंदी

अनुच्छेद

1.जान से प्यारा भारत हमारा

संकेत बिंदु-

- देश प्रेम की भावना
- अनुपम विशेषताएं
- एकता और अखंडता का प्रतीक

2.मन के हारे हार है मन के जीते जीत

संकेत बिंदु-

- संपूर्ण गतिविधियों का केंद्र बिंदु मन
- मनोबल की महत्ता सफलता का आधार

पत्र

1.विद्यालय के वार्षिकोत्सव में पुरस्कार प्राप्ति की प्रसन्नता का वर्णन करते हुए अपने पिता जी को पत्र लिखिए।

2.बिजली के संकट और उससे उत्पन्न कठिनाइयों का वर्णन करते हुए बिजली विभाग के नाम पत्र लिखिए।

संवाद

1 ग्लोबल वार्मिंग के बढ़ते खतरों के सम्बंध में दो छात्रों के मध्य हुए वार्तालाप को संवाद रूप में लिखिए।

2 पानी की बर्बादी रोकने के विषय में मालिक और नौकर के मध्य हुए संवाद को लिखिए।

लघुकथा

1 लालच का बुरा फल

2 नैतिक शिक्षा का महत्व

प्रश्न - अपने दैनिक जीवन से संबंधित अर्थ के आधार पर सभी भेदों के पांच पांच वाक्य बनाइए।

प्रश्न - अनुप्रास, यमक और श्लेष अलंकार के चार चार उदाहरण एवं समास के सभी भेदों के पांच पांच उदाहरण लिखिए।

प्रश्न - पी टी 2 के प्रश्न पत्र को उत्तर पुस्तिका में चिपकाकर हल कीजिए।

(नोट: यह संपूर्ण कार्य अपनी उत्तर पुस्तिका में करना है।)

HOLIDAY HOMEWORK FOR CLASS 9 (AUTUMN BREAK) ENGLISH

Exercise 1

Fill in the blanks with the correct form of the verb.

- 1) Each of the girls ____ her own dress. (has/have)
- 2) Five miles ____ long distance. (is/are)
- 3) Many a man ____ tried hard to climb the treacherous mountain range.
(have/has)
- 4) The furniture of the house ____ quite impressive. (is/are)
- 5) Few students ____ coming to the party. (is, are)
- 6) Uma, my childhood friend ____ leaving for Delhi next month. (is/are)
- 7) Most of my friends ____ government employees. (is/are)
- 8) The level of pain tolerance ____ from person to person. (vary/varies)
- 9) Either Tina or Rohit ____ telling lies. (is/are)
- 10) A number of people ____ reported to have fallen sick after drinking the water from the tubewell. (was/were)

Exercise no - 02

Change the following sentences from active voice to passive voice.

- 1) The dog chased the cat.
- 2) The dog bit the boy.

3. If one zero of the polynomial $x^2 + 4x - 5$ is 1, find the other zero.

4. Verify that $x = 3$ is a zero of the polynomial $x^3 - 3x^2 - 4x + 12$.
5. Divide the polynomial $x^3 + 2$ using the division algorithm. by $2x^3 + 3x^2 - x + 5$

Chapter 3: Coordinate Geometry

1. Find the distance between the points (3, 4) and (6,8).
2. Find the midpoint of the segment joining the points (1, 2) and (3, 4).
3. Find the coordinates of the point which divides the line joining (1, 2) and (3, 4) in the ratio 1:2.
4. What is the distance of the point (4, -3) from the origin?
5. Find the area of the triangle with vertices (1, 2), (3, 4), and (5, 6).

Chapter 4: Linear Equations in Two Variables

1. Find the solution of the system of equations:
 $2x + 3y = 12$ $3x - y = 5$
2. If the sum of two numbers is 12 and their difference is 4, form a pair of linear equations in two variables and solve them.
3. Draw the graph of the linear equation:
 $3x + 2y = 6$
4. A car rental company charges Rs. 200 per day and a one-time fee of Rs. 500. If a customer rents a car for 3 days, what will be the total cost? Form a linear equation in two variables and solve it.
5. Check whether the pair of equations $x + y = 7$ and $3x + 3y = 21$ are con

Chapter 5: Introduction to Euclid's Geometry

1. State Euclid's first axiom. Give an example to illustrate it.
2. Using Euclid's fifth postulate, prove that the sum of the angles of a triangle is 180° .
3. What is a line segment? Can a line segment be extended? Explain with an example.
4. Define a point, a line, and a plane. Illustrate each concept with an example.
5. State and explain Euclid's "parallel postulate."
How does it help in understanding geometry?

कक्षा ९ नवमी संस्कृत शरद-अवकाश गृहकार्य

- 1- पाठ्य पुस्तक से समास चुनकर लिखें
- 2- पाठ्य पुस्तक के अन्तर्गत आए श्लोक अन्वय सहित लिखें।
- 3- कोई दो चित्र बनाकर पांच- पांच वाक्य लिखें
- 4- एक औपचारिक तथा एक अनौपचारिक पत्र
- 5- कोई पांच श्लोक स्मरण कर लिखें।
- 6- अपनी दिनचर्या संस्कृत में लिखें।
- 7- पाठ्यक्रम में दिए गए शब्दरूप धातु रूप स्मरण कर लिखें।
- 8- पोर्टफोलियो कार्य पूर्ण करें।

Holiday Homework Autumn Break– Class 9 Science

1. Working Model on Health and Hygiene (class9B)

2.sustainable agriculture (class9A and 9C)

2. Projects and Models

(At least 2 models + 2 project files must be completed)

(a) Atom and Molecule

- 3D Molecular Model: Make molecules like H₂O, CO₂, NH₃ using thermocol balls/marbles and sticks.

- Project Report: "Laws of Chemical Combination with Simple Examples."

(b) Structure of Atom

- Bohr's Model of Atom: Use cardboard and beads to show electron orbits.

- Project File: "Discovery of Subatomic Particles – Electron, Proton, Neutron."

(c) Sound

- Model: String telephone (two cups and a thread to demonstrate sound transmission).

- Activity: Show how vibration produces sound using a stretched rubber band on a box.

- Project File: "Applications of Sound in Daily Life – Ultrasound, SONAR, Stethoscope."

(d) Improvement in Food Production

- Model: Hydroponics setup (growing plants without soil).

- Chart/Project: "Methods to Improve Food Production – Fertilizers, Manure, Bio-fertilizers, Animal Husbandry."

- Case Study: Success story of Green Revolution in India.

3. Suggested Submission Format

- Each model should have a short write-up (5–7 lines) explaining its principle and use.
- Project reports should be handwritten, neat, with diagrams, charts, and examples.

FORCE AND LAWS OF MOTION

Multiple Choice Questions (1 mark each)

1. When a net force acts on an object, the object will be accelerated in the direction of the force. This

acceleration is directly proportional to:

- (a) The mass of the object. (b) The inverse of the mass of the object.
(c) The velocity of the object. (d) The inverse of the velocity of the object.

2. A boy pushes a heavy box with a force of 50 N, but the box does not move. This is because:

- (a) There is no force acting on the box.
(b) The force applied by the boy is less than the inertia of the box.
(c) There is an equal and opposite frictional force acting on the box.
(d) The boy is not applying the force in the correct direction.

3. Consider a car moving at a constant velocity. According to Newton's First Law of Motion:

- (a) There must be a net external force acting on the car.
(b) The net external force acting on the car must be zero.
(c) The inertia of the car is constantly changing.
(d) The momentum of the car is zero.

4. A rocket expels hot gases downwards with a large force. According to Newton's Third Law of Motion,

the rocket moves upwards because:

- (a) The gases push against the ground.
(b) The upward force on the rocket is greater than the downward force of the expelled gases.
(c) There is an equal and opposite upward force exerted by the expelled gases on the rocket.
(d) The rocket has a large mass.

(d) The rocket has a large mass.

5. The momentum of an object is a measure of its:

- (a) Inertia. (b) Force. (c) Quantity of motion. (d) Acceleration.

Short Answer Questions (2 marks each)

6. Define inertia. Explain why a heavier object has more inertia than a lighter object.

7. State Newton's Second Law of Motion in terms of momentum. How is this form more general than the form relating force to mass and acceleration?

Assertion Reason Type Questions (1 mark each)

For each of the following questions, choose the correct option:

(a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.

(b) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

(c) Assertion is true, but Reason is false.

(d) Assertion is false, but Reason is true.

8. Assertion: It is easier to push an empty cart than a loaded cart.

Reason: The inertia of an object is directly proportional to its mass.

9. Assertion: When a horse pulls a cart, the force exerted by the horse on the cart is equal and opposite to the force exerted by the cart on the horse. Therefore, the cart does not move.

Reason: Newton's Third Law states that for every action, there is an equal and opposite reaction.

Long Answer Question (5 marks)

10. A block of mass 2 kg is placed on a horizontal surface. A horizontal force of 10 N is applied to the block for 3 seconds. (Take $g = 10 \text{ m/s}^2$)

(a) Draw a diagram of the block, showing all the forces acting on it. (1 marks)

(b) Find the distance travelled by the block in 5 seconds (2)

(c) Calculate the velocity after 5 seconds. (1)

(c) Determine the acceleration of the block. (1 marks)

Chapter – Gravitation

Multiple Choice Questions (1 mark each)

1. The pressure exerted by a liquid at a certain depth is:

(a) Directly proportional to the surface area of the container.

(b) Inversely proportional to the density of the liquid.

(c) Directly proportional to the depth of the liquid.

(d) Independent of the acceleration due to gravity.

2. The relative density of a substance is the ratio of its density to the density of:

- (a) Air (b) Any other substance
- (c) Water at 4°C (d) The densest substance known

3. According to Archimedes' principle, the buoyant force acting on an object submerged in a fluid is equal to:

- (a) The weight of the object.
- (b) The volume of the fluid displaced by the object.
- (c) The mass of the fluid displaced by the object.
- (d) The weight of the fluid displaced by the object.

4. If an object floats in a liquid, the buoyant force acting on it is:

- (a) Greater than the weight of the object. (b) Less than the weight of the object.
- (c) Equal to the weight of the object. (d) Zero.

5. A sharp knife cuts better than a blunt knife because, for the same applied force, the sharp knife has:

- (a) A larger surface area, resulting in greater pressure.
- (b) A smaller surface area, resulting in greater pressure.
- (c) A larger surface area, resulting in less pressure.
- (d) A smaller surface area, resulting in less pressure.

6. The density of a solid is twice the density of a liquid. If the solid is fully submerged in the liquid, the buoyant force acting on the solid will be:

- (a) Equal to the weight of the solid.
- (b) Half the weight of the solid.
- (c) Twice the weight of the solid.
- (d) Independent of the weight of the solid.

7. A hydrometer is an instrument used to determine:

- (a) Atmospheric pressure.
- (b) Density of liquids.
- (c) Humidity of air.
- (d) Depth of a submerged object.

Short Answer Questions (2 marks each)

8. Differentiate between density and relative density. State the SI unit for each.

9. Explain why a ship made of steel floats on water, even though steel is much denser than water.

Assertion Reason Type Questions (1 mark each)

For each of the following questions, choose the correct option:

- (a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.
- (b) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
- (c) Assertion is true, but Reason is false.
- (d) Assertion is false, but Reason is true.

10. Assertion: Diver's experience greater pressure at the bottom of a deep sea than at the surface.

Reason: Pressure in a liquid increase with depth.

11. Assertion: An iron nail sinks in water, but an iron ship floats.

Reason: The buoyant force depends only on the density of the liquid.

Long Answer Question (5 marks)

12. A solid block has dimensions $2\text{m} \times 0.5\text{m} \times 0.2\text{m}$ and a mass of 200 kg

- (a) Calculate the density of the block. (1 mark)
- (b) If this block is completely submerged in water (density = 1000 kg/m^3), calculate the buoyant force acting on it. (2 marks)
- (c) What will be the apparent weight of the block when submerged in water? (2 marks)

HOLIDAY HOMEWORK (AUTUMN BREAK)

SOCIAL SCIENCE

2025-26

Q1. Project Work: on Disaster Management (As per cbse Curriculum) A4 size – 15-20 pgs.

*Collect pictures and paste in file the different types of "NATURAL HAZARDS". Write preventive stapes and damage caused by each of the natural hazards.

(a) CYCLONES (b) FLOODS (c) DROUGHT (d) LAND SLIDE.

Or

*Collect pictures and paste in fill and explain Courses and Safety measures of the following:

(a) FIRE (b) RAIL ACCIDENTS (c) BOMB BLAST (d) CHEMICAL AND INDUSTRIAL ACCIDENT

Q2. Portfolio Work add these: -

From the start of the term, All the Worksheets, Class Tests, Assignments and projects that have been done till now. Their marks must be written in the portfolio file.

- Write two pages about NAZI Ideology and Hitler's Biography

Q3. MAP WORK:

* Chapter -2: Physical Features of India

Mountain Ranges: The Karakoram, The Zaskar, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats.

*Chapter -3: Drainage

Rivers: The Himalayan River Systems-The Indus, The Ganges, and The Saluja, The Peninsular Rivers-The Narmada, The Tapi, The Kaveri.

NOTE: - ALL THESE MAPS SHOULD BE MARKED IN POLITICAL MAP OF INDIA AND HAS TO BE PASTED IN YOUR FAIR NOTEBOOK.

Q4. NOTEBOOK WORK Writing:

- complete all extra questions and exercise that are given in classroom
- Chapter – history 3 and 4
- Chapter Geography 4 to 5
- Civics chapter 3 to 4

Q5. Activity Work: Inter Disciplinary project

Conduct a population survey of your locality and complete the following table (minimum five Houses).

SN	Name of family								
members	Age group								
10---15	Age group								
16----46	Age group								
47---64	Age group								
65---above	Income	Per capita Income of family							
	M	F	M	F	M	F	M	F	
1									
2									
3									
4									
5									

NOTE: - THE HOLIDAY HOMEWORK SHOULD BE COMPLETED PROPERLY AS YOU WILL BE MARKED ON IT IN INTERNAL ASSESSMENT.

