

2026

Holiday Home work

Class-IX

Subject-Sanskrit

(1) सान्यं शिवं सुन्दरं संस्कृतम् पश्चाः-

(क) संपदं उन्नतं लिखत-

(ख) संस्कृतं कस्याः साधकम् ?

(ग) सर्वदा संस्कृतं कस्य सन्वीह्यम् ?

(घ) संस्कृतं कस्य प्रेरणादायकम् ?

(ङ) संस्कृतं कस्याः परितोषकम् ?

(च) कस्य विस्तारकं संस्कृतम् ?

(2) (क) — सम्पादकं संस्कृतम्

(ख) — दर्शकं संस्कृतम्

(ग) — संस्कारकं संस्कृतम्

(घ) —

(ङ) कर्मदं — भविष्य संस्कृतम्

(च) सान्यनिष्ठं — संस्कृतम्

(ज) शब्दलालित्यं — संस्कृतम्

(3) व्याकरणं- शब्द रूप, धातु रूप

शब्द रूप - अकारान्त शब्द, धातु-इति
आकारान्त शब्द, पा, राम्, पठ्
जी, स्था

CLASS -IX

- 1 . Do white flowers contain any pigment? Give reasons.
- 2 . Draw a well-labelled schematic diagram of a plant or an animal cell using
 - (i) Nucleus appears as a dark and round body inside the cell.
 - (ii) ER spreads like a network of extended nuclear envelope.
 - (iii) Mitochondria and chloroplasts are rod shaped.
- 3 . Differentiate between the following pairs of terms based on the clues
 - I) Cell membrane and cell wall (permeability)
 - (ii) RER and SER (structure)
 - (iv) Chloroplasts and chromoplasts (pigments)
4. The cell membrane of a cell is made up of proteins and lipids. Which cell organelles help in the synthesis of cell membrane? Write the path of these compounds from their site of synthesis to the cell membrane and show this through a labelled diagram.
5. Differentiate between mitosis and meiosis.
6. What outcome do you expect, if all the mitochondria are removed from a eukaryotic cell?
7. Which phenomenon inhibits the formation of tumors in the human body? Can plants also develop tumors? Explain.
8. Draw the periodic table and write the list of metals, non metals and metalloid.
9. If 10 g of salt is dissolved in 90 g of water, calculate by mass percentage of the solution formed ?
10. 5 g of glucose is dissolved in water to make 100 mL of solution, calculate its concentration in mass by volume percentage ?

KENDRIYA VIDYALAYA GUNUPUR

SUBJECT: MATHEMATICS
SUMMER HOLIDAY HOME WORK

CLASS: IX
SESSION: 2026-27

Instructions

- Write all answers neatly in your Mathematics holiday homework notebook.
- Show complete steps in all calculation-based questions.
- Draw figures wherever required using pencil and ruler.
- Attempt all questions yourself.
- Keep the work clean, well-organised, and properly labelled.

Section A: Number Systems

1. Express 3.8 in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
2. Express -1.6 in the form $\frac{p}{q}$.
3. Can 0 be expressed in the form $\frac{p}{q}$? Explain.
4. Mention a rational number that has no reciprocal.
5. Find one rational number between 3 and 4.
6. State whether the following are true or false:
 - Every whole number is a rational number.
 - Every integer is a rational number.
 - 0 is a whole number, but it is not a rational number.
7. Meena says that $\frac{22}{7}$ is a rational number because it is a fraction, while Veena disagrees. Who is correct? Give reason.
8. Identify whether 25.252525... is rational or irrational. Justify your answer.
9. Classify the following as rational or irrational: $\sqrt{225}$, $-\frac{7}{6}$, 19.45, $\sqrt{5}$, 1.01001000100001...
10. From the following data, identify rational and irrational numbers: 120, 80.50, 12.75, 54, 1.75555..., 2.3482731632...
11. Classify the given decimal numbers into terminating, non-terminating recurring, and non-terminating non-recurring decimals.
12. Write any five rational numbers between $\frac{1}{8}$ and $\frac{1}{16}$.

Section B: Patterns and Arithmetic Progression

13. Observe a pattern where each term increases by the same number. Write the next three terms if the first terms are 23, 21, 19, ...
14. In a flower bed, there are 23 plants in the first row, 21 in the second row, and 19 in the third row. Find the number of plants in the 4th, 5th, and 10th rows.
15. Identify the common difference in the pattern 23, 21, 19, ...
16. Mala saved Rs. 20 in the first week and increased her savings by Rs. 5 every week. Write the first six terms of the pattern.
17. In which week will Mala save Rs. 45?
18. Draw or describe a matchstick pattern that forms an A.P. Write its first term and common difference.
19. How many matchsticks will be needed to make 10 such figures in your pattern?

Section C: Coordinate Geometry

20. If you move from 0 to 4 on a number line, how far do you travel and in which direction?
21. The school garden is 6 steps forward and 4 steps right from the gate. Represent its location as an ordered pair.
22. Name the horizontal and vertical axes of the Cartesian plane.
23. What is the point of intersection of the two coordinate axes called?

24. Define abscissa and ordinate.
25. The equipment room is at (3, 4), the starting line is at (-2, 0), the medical tent is at (-4, -3), and the water station is at (2, -5). Which facility lies in Quadrant III?
26. Does the point (-2, 0) lie in a quadrant or on an axis? Name the axis.
27. If a student moves from the origin to (3, 4), how many units right and how many units up does the student travel?
28. Write the coordinates of the point obtained by reflecting (2, -5) across the x-axis.
29. Identify the quadrant in which the point (-2, 7) lies.
30. What is the y-coordinate of any point lying on the x-axis?
31. Plot A(1, 4), B(-2, 4), and C(0, -5) on graph paper.
32. Plot A(-3, 2) and B(5, 2). Find the length of line segment AB by counting grid units.
33. Plot A(1, 2), B(4, 2), and C(4, 6). Identify the type of figure formed.
34. Plot A(1, 2), B(5, 6), and C(9, 2). Identify the type of figure formed.

Section D: Lines and Angles

35. Observe objects around you and list any two examples of intersecting lines.
36. List any two examples of parallel lines from daily life.
37. Name the different types of angle pairs formed when a transversal cuts two parallel lines.
38. Shreyash ordered a pizza. If $\angle BOC = 36^\circ$, find the measures of $\angle FOG$, $\angle COF$, and $\angle GOB$.
39. Lines XY and MN intersect at O. If $\angle POY = 90^\circ$ and the marked angles a and b are each 23 degrees, find angle c .
40. In the given figure of intersecting lines, if one angle is 72 degrees and another is 36 degrees, find the remaining marked angles.
41. Design a simple room using parallel and perpendicular lines, and label at least four angles formed.

Section E: Triangles and Congruence

42. What are congruent figures?
43. Write the full forms of ASA, AAS, SAS, SSS, and RHS congruence rules.
44. State the condition for SAS congruence.
45. State the condition for SSS congruence.
46. State the condition for RHS congruence.
47. In quadrilateral ACBD, $AC = AD$ and AB bisects angle A. Is triangle ABC congruent to triangle ABD? Give reason.
48. If triangle ABC is congruent to triangle ABD, what can you say about BC and BD?
49. Why are triangular trusses used in bridges and towers?
50. Draw two congruent triangles and mark all corresponding equal sides and angles.

Section F: Quadrilaterals

51. Differentiate between convex and concave quadrilaterals.
52. Name any five convex quadrilaterals.
53. What is a trapezium?
54. What is an isosceles trapezium?
55. What is a kite?
56. What is a parallelogram?
57. What is a rhombus?
58. State any three properties of a parallelogram.
59. State any two properties of a rhombus.
60. State any two properties of a rectangle.
61. Why is a square also a rectangle and a rhombus?
62. State whether true or false:
 - All rectangles are squares.

- All rhombuses are parallelograms.
- All squares are rhombuses and also rectangles.
- All squares are not parallelograms.
- All kites are rhombuses.
- All rhombuses are kites.
- All parallelograms are trapeziums.
- All squares are trapeziums.

63. Identify all quadrilaterals that have four sides of equal length.

64. Identify all quadrilaterals that have four right angles.

65. Name the quadrilaterals whose diagonals bisect each other.

66. Name the quadrilaterals whose diagonals are perpendicular bisectors of each other.

67. Name the quadrilateral whose diagonals are equal.

68. Explain why a rectangle is a convex quadrilateral.

69. Can a trapezium have all angles equal? Explain.

70. Can a trapezium have all sides equal? Explain.

71. State whether true or false with reason:

- A quadrilateral whose diagonals are equal and bisect each other must be a square.
- A quadrilateral having three right angles must be a rectangle.
- A quadrilateral whose diagonals bisect each other must be a parallelogram.
- A quadrilateral whose diagonals are perpendicular to each other must be a rhombus.
- A quadrilateral in which the opposite angles are equal must be a parallelogram.
- A quadrilateral in which all the angles are equal is a rectangle.
- Isosceles trapeziums are parallelograms.

Section G: Circles, Arcs, Sectors and Segments

72. What is an arc of a circle?

73. Differentiate between major arc, minor arc, and semicircular arc.

74. What is a sector of a circle?

75. Differentiate between major sector and minor sector.

76. Write the formula for the length of an arc.

77. Write the formula for the area of a sector.

78. A minute hand of length 12 cm moves for 5 minutes. Find the area swept by the minute hand.

79. The minute hand of a wall clock is 12 cm long. Find the distance covered by its tip in 15 minutes.

80. A circular park has a radius of 20 m. Find the area of a sector of angle 90 degrees.

81. How can the area of a segment be found?

82. Why are arcs used in sports fields such as football grounds?

Section H: Surface Area and Volume

83. What is a net of a cuboid?

84. How many faces, edges, and vertices does a cuboid have?

85. Write the formula for the total surface area of a cuboid.

86. Write the formula for the lateral surface area of a cuboid.

87. What is the volume formula for a cuboid?

88. A cuboid has dimensions 80 cm, 40 cm, and 20 cm. Find its capacity in cubic centimetres and litres.

89. If the side of a cube is doubled, what happens to its surface area?

90. If the side of a cube is doubled, what happens to its volume?

91. Calculate the cost of painting a box of length 10 m, breadth 5 m, and height 2 m at the rate of Rs. 5 per square metre.

92. A cube-shaped gift box has side 12 cm. Find its total surface area.

93. How much decorative paper is needed for 25 such gift boxes?
94. Find the volume of one cube-shaped gift box of side 12 cm.
95. An aquarium is 80 cm long, 40 cm wide, and 50 cm high. Find its capacity in litres.
96. Find the area of glass needed to make the aquarium open at the top.
97. If water is filled up to 40 cm height in the aquarium, find the volume of water in litres.
98. A decorative fountain is cube-shaped with side 2.5 m. Find its volume.
99. If tiles are fixed on all outer faces of the fountain, how much area will be tiled?
100. If tiling costs Rs. 250 per square metre, find the total cost of tiling the fountain.
101. A school water tank is 4 m long, 3 m broad, and 2 m high. Find its total surface area.
102. If the inside walls and base of the tank are to be painted, find the area to be painted.
103. Find the capacity of the tank in cubic metres.
104. A chocolate box measures $20\text{ cm} \times 10\text{ cm} \times 5\text{ cm}$. Find its volume.
105. Find the total surface area of the chocolate box.
106. If wrapping paper costs Rs. 5 per 100 square cm, find the cost to wrap the box.
107. A cuboid container measures $12\text{ m} \times 4\text{ m} \times 3\text{ m}$. Find its volume.
108. How many cube-shaped cartons of side 1 m can be loaded into the container?
109. Find the total surface area of the container.
110. If only the four side walls are painted, find the painted area.
111. A storage box is 1.5 m long, 1 m wide, and 0.8 m high. Find its volume.
112. If it is open from the top, find the area of material required to make it.
113. If paint costs Rs. 120 per square metre, find the cost to paint its outer surface excluding base.
114. A solid cube of side 2 m is cut into smaller cubes of side 0.5 m. How many smaller cubes are formed?
115. Compare the volume of the original cube with the total volume of all smaller cubes.
116. Find the surface area of the original cube.
117. Find the total surface area of all the smaller cubes together.
118. Explain why the surface area changes but the volume remains the same when a solid is cut into smaller pieces.

Section I: Statistics

119. Find the mean of the numbers 3 and 9. What do you observe?
120. Shivam's number of bounces in 7 attempts are 6, 2, 10, 5, 18, 6, 3. Find the average number of bounces.
121. Arrange Shivam's data in ascending order and find the median.
122. Find the median of 4, 11, 7, 14, 12, 8.
123. Shirt sales for one week are 8, 22, 32, 37, 6 for sizes 90 cm, 95 cm, 100 cm, 105 cm, 110 cm respectively.
Which size is most popular?
124. Which shirt size is least popular?
125. Define mode of a set of observations.

Activity-Based Questions

127. Prepare any recipe at home and write the quantity of each ingredient in rational number form.
128. Measure any three objects at home and classify their measurements as integers, decimals, or fractions.
129. Draw a 5×5 parking grid and mark coordinates of any three parked vehicles.
130. Make a paper model or rough sketch showing one trapezium, one kite, one parallelogram, one rhombus, and one rectangle.
131. Observe a room in your house and identify examples of parallel lines, perpendicular lines, and angles.
132. Collect data from 10 family members or neighbours on one topic such as age, height, shoe size, or daily study time, and find the mean, median, and mode.

कक्षा 9: हिंदी व्याकरण महा-अभ्यास

संपूर्ण व्याकरण महारत | बोर्ड परीक्षा की तैयारी



"व्याकरण चुनौती" (Grammar Challenge)

यह कार्य विशेष रूप से उन छात्रों के लिए है जो व्याकरण में 100% अंक लाना चाहते हैं। इसमें लिखने का काम बहुत अधिक है।

भाग 1: शब्द निर्माण का विशाल अभ्यास

1. उपसर्ग (Prefix) - 150 शब्द

हिंदी, संस्कृत और उर्दू के 15 मुख्य उपसर्ग चुनें और प्रत्येक से 10-10 शब्द बनाएँ। मूल शब्द और उपसर्ग को अलग-अलग तालिका में लिखें।

2. प्रत्यय (Suffix) - 150 शब्द

कृत प्रत्यय और तद्धित प्रत्यय के 15-15 प्रकार चुनें और प्रत्येक से 5-5 शब्द बनाकर उनका वाक्यों में प्रयोग करें।

3. समास का महा-चार्ट (Mega Samas Chart)

6 समासों के 30-30 उदाहरण (कुल 180 शब्द) विग्रह सहित लिखें। विशेष रूप से कर्मधारय और बहुव्रीहि के अंतर को 10 उदाहरणों से समझाएँ।

भाग 2: वाक्य एवं अर्थ विचार

4. अर्थ के आधार पर वाक्य भेद (200 वाक्य)

विधानवाचक, निषेधवाचक, आज्ञावाचक, प्रश्नवाचक, इच्छावाचक, संदेहवाचक, विस्मयादिवाचक और संकेतवाचक। प्रत्येक भेद के 25-25 वाक्य लिखें।

5. अलंकार विवेचन (75 उदाहरण)

अनुप्रास, यमक, श्लेष, उपमा, रूपक, उत्प्रेक्षा और मानवीकरण के 10-10 प्रसिद्ध काव्य पंक्तियाँ ढूँढकर लिखें और स्पष्ट करें कि वहाँ कौन सा अलंकार क्यों है।

भाग 3: शब्द भंडार का महा-कोश

6. पर्यायवाची और विलोम

प्रतिदिन 15 पर्यायवाची और 15 विलोम शब्द लिखें।
60 दिन में कुल 900+900 शब्द तैयार करें।

7. मुहावरे और लोकोक्तियाँ

200 मुहावरों का अर्थ लिखकर उनका ऐसे वाक्यों में प्रयोग करें जिससे अर्थ पूरी तरह स्पष्ट हो जाए।

8. श्रुतिसम भिन्नार्थक और अनेक शब्दों के लिए एक शब्द

100 जोड़े (200 शब्द) भिन्नार्थक शब्दों के और 150 'अनेक शब्दों के लिए एक शब्द' अपनी अभ्यास पुस्तिका में लिखें।

विशेष लेखन कार्य (Extra Writing)

- प्रतिदिन 2 पेज हिंदी सुलेख (Handwriting) लिखें।
- कक्षा 9 की व्याकरण पुस्तक के अंत में दिए गए सभी 'अभ्यास प्रश्न पत्रों' (Sample Papers) को हल करें।

"व्याकरण भाषा की आत्मा है। जिसने इसे जीत लिया, उसने भाषा को जीत लिया।"

- शुभ ग्रीष्मकालीन अवकाश! -

General Instructions:

- All Questions are compulsory
- Marks are indicated against each question.
- Please check this question paper contains 6 printed pages only.

INSTRUCTIONS:

Part A: Reading: 10 marks,

Part B: Writing & Grammar: 12 marks

Part C: Literature: 18 marks

Part A: Reading (10 Marks)

1. Read the passage given below and answer the questions that follow-

1. Caged behind thick glass, the most famous dancer in the world can easily be missed in the National Museum, Delhi. The Dancing Girl of Mohenjo – Daro is that rare artifact that even school children are familiar with. Our school textbooks also communicate a wealth of our 5000 years heritage of art. You have to be alert to her existence there, amid terracotta animals to rediscover this bronze image.

2. Most of us have seen her only in photographs or sketches, therefore the impact of actually holding her is magnified a million times over. One discovers that the dancing girl has no feet. She is Wall, a little over 10 cm tall, the length of a human palm, but she surprises us with the power of great art, the ability to communicate across centuries.

3. A series of bangles of shell or ivory or thin metal clothes her left upper arm all the way down to her fingers. A necklace with three pendants bunched together and a few bangles above the elbow and wrist on the right-hand display almost modern art.

4. She speaks of the undaunted, ever hopeful human spirit. She reminds us that it is important to visit museums in our country to experience the impact that a work of art leaves on our senses, to find among all the riches one particular vision of beauty that speaks to us alone.

On the basis of your understanding of the passage, choose the correct option of any five of the following questions . (1 x 5=5)

1. The Dancing Girl belongs to:

(i) Mohenjo-daro (ii) Greek culture (iii) Homo sapiens (iv) Tibet

2. In the museum she's kept among:

(i) dancing figures (ii) bronze statues (iii) terracotta animals (iv) books

3. Which information is not given in the passage?

(i) The girl is caged behind glass (ii) She is a rare artifact

(iii) School books communicate the wealth of our heritage (iv) She cannot be rediscovered as she's bronze

4. 'Great Art has power because:

(i) It appeals to us despite a passage of time (ii) It is small and can be understood .

(iii) It is seen in pictures and sketches (iv) It's magnified a million times

5. The jewelry she wears:

(i) consists of bangles of shell or very or this metal.

(ii) is a necklace with

(iii) Both (i) and (ii) are correct

(iv) Neither (i) nor (ii) is correct

6. She reminds us;

(i) of the never-say-die attitude of humans

(ii) why museums in our country are exciting

(iii) why she will make us come into money

(iv) of dancing figures

2. Read the passage given below and answer the questions that follow-

On June 24, 1859, Emperors Napoleon III and Franz Joseph I engaged in the Battle of Solferino, commanding a combined total of about 270,000 troops onto the field for a single day of battle. Nearly 40,000 were either dead, injured, or missing, many of whom were simply left to die on the battlefield. Later, spectators crowded the fields, looking for loved ones, searching for items they could sell, or simply taking in the horrors of the battle .A Swiss businessman and social activist Jean Henri Dunant, who was traveling in Solferino witnessed all this.

Jean Henri Dunant witnessed the atrocities of war as well as the countries not prepared or equipped to ease the suffering of those who had been injured in the Battle of Solferino. Dunant organized a group of volunteers to help bring water and food to the injured, to assist with medical treatment, or write letters to the families of

those who were dying and he urged the public to create an organization which would assist the wounded, regardless of which side they fought for during times of war. After that moment, he wrote the book, A Memory of Solferino, which urged the public to create an organization which would assist the wounded, regardless of which side they fought for during times of war. His writing inspired countless others to rally behind him in the creation of the International Federation of the Red Cross.

The modern-day Red Cross began by devoting itself largely to disaster relief and epidemic treatment. This effort continues to this day. One of the easiest ways you can help the Red Cross is to make sure you are able to donate blood and make an appointment at the Red Cross website. But, donating blood isn't the only way you can help out—the Red Cross also encourages donating your time if you can. This is what the Red Cross wants everyone to know.

On the basis of your understanding of the passage, answer any five of the following questions (1 x 5=5)

1. How many soldiers fought in the battle of Solferino on June 24? (MCQ)

- i. 270,000 ii. 40,000 iii. 230,000 iv. 23,000

2. What is the correct order of the information given below:(MCQ)

I. Dunant organized a camp of volunteers.

II. Emperor Napoleon III and Franz Joseph I fought a battle.

III. The book 'A Memory of Solferino' was written.

IV. Dunant traveled to Solferino.

- (a) IV, III, II, I (b) I, II, III, IV (c) II, I, IV, III (d) II, IV, I, III

3. The writer of 'A Memory of Solferino' was:(MCQ)

- a. Emperor Napoleon III b. Franz Joseph I c. Jean Henri Dunant d. International Red Cross

4. The modern day Red Cross does not deal with:(MCQ)

- a. Blood donation b. Disaster Relief c. Epidemic Treatment d. Writing a book

5. You can donate your blood and your _____ to the Red Cross. (Fill in The Blank)

6. Jean Henri Dunant participated in the war.(True/ False)

Part B: Writing & Grammar (12 Marks)

3.The given statistics display the spendings of the income of an average household in the UK. Display the important points in an analytical paragraph. (1x6=6 Marks)

(OR)

Indian weddings are matchless in grandeur, glamor and luxury. They are matchless in wastage, extravagance and vulgar display of money and wealth. Record your experience of such marriages in your diary. (1x6=6 Marks)

4. Complete the paragraph given below by filling in the blanks choosing the correct option from those that follow; (4 x 1/2=2 Marks)

Elephants (a) _____ the largest land mammals. Three species of elephants (b) _____ living today. Elephants (c) _____ other Elephantidae were once classified with other thick skinned . The elephant's gestation period is 22 months, (d) _____ longest for any land animal.

(a) (i) is (ii) are (iii) was (iv) were

(b) (i) are living (ii) have been living (iii) had been living (iv) will be living

(c) (i) with (ii) also (iii) and (iv) but

(d) (i) a (ii) an (iii) which (iv) the

5. The following paragraph has not been edited. There is one error in each line. Write the incorrect word and the correction in your answer sheet against the correct blank number. (4x1= 4 Marks)

Error Correction

Tsunami is a series in waves

(a) _____

generated in a body from water

(b) _____

through an impulsive disturbance

(c) _____

causing damage to property or loss of life.

(d) _____



KENDRIYA VIDYALAY GUNUPUR

SESSION - 2026-27

SUMMER HOLIDAYS HOMEWORK

CLASS - VI to X

Note - Write all the answer in your HW notebook.

MUSIC / DANCE / ART

1. Write about the Devadasi and Gotipua dance traditions.
2. Design traditional dress of Maharashtra (on chart paper).
3. Describe briefly Indian and Western musical instruments.
4. Create a short musical composition using household items (record a video or audio clip).
5. Prepare a musical project of your choice (e.g., song, dance, or instrument).
6. Write the National Anthem (10 lines) neatly in a notebook.
7. Practice singing a simple song of your choice for 5–10 minutes daily.

HOLIDAY HOME WORK

SUBJECT: AI

CLASS:IX

Q1. A teacher explains a math problem, but the students look confused. The teacher asks, “Did you all understand?” Which element of the communication cycle is shown here?

Encoding

Feedback

Decoding

Channel

Q2. Which of the following is a method of non-verbal communication?

Email

Letter

Gesture

Telephone

Q3. Riya comes from a rural background and struggles to understand technical terms used by her city-based friends. Which factor is affecting her perspective in communication?

Age

Gender

Cultural and Educational background

Feedback

Q4. In the sentence “Riya sings beautifully,” the word “beautifully” belongs to which part of speech?

Adjective

Verb

Noun

Adverb

Q5. Artificial Intelligence (AI) is best defined as:

Machines designed only to store data

The simulation of human intelligence by machines

Writing computer programs for calculations only

Use of mobile phones and computers

Q6. Which of the following is an AI application in daily life?

Sending SMS manually

Using Google Maps for navigation

Watching TV channels

Reading a printed newspaper

Q7. An e-commerce website suggests products to customers based on their browsing history. This shows AI application in:

Healthcare

Recommendation systems

Education

Weather forecasting

Q8. A hospital uses AI to detect tumors in X-ray images. Which domain of AI is being applied?

Problem Solving

Computer Vision

Natural Language Processing

Robotics

Q9. A teacher is designing an AI chatbot to answer students' questions. The problem statement written is "The chatbot must answer students' queries in real-time using simple language." Which stage of the AI Project Cycle is this?

Problem Scoping

Data Acquisition

Modelling

Evaluation

Q10. Which of these ensures the AI solution meets expectations?

Modelling

Evaluation

Data Preparation

Problem Scoping

Q11. A school uses AI to monitor exam cheating. Students complain that it wrongly marks some as suspicious because of their eye movement. This is an example of:

Proper AI use

AI bias/error in judgment

Communication skill issue

Cultural difference

Q12. Which of these is an example of an ethical issue in AI?

AI playing music

AI being used for online exams

AI making unfair hiring decisions

AI suggesting songs based on mood

Section II – (2 mark each × 5 = 10 marks)

Q13. Differentiate between verbal and non-verbal communication with examples.

Q14. Riya is giving a presentation in class, but her classmates seem confused. She repeats her points slowly, uses gestures, and gives an example to make them understand. Which factor affecting communication perspective is visible here?

Q15. Explain with an example how "Data Collection" plays a role in the AI Project Cycle.

Q16. Differentiate between AI in daily life and AI in professional use with one example each.

Q17. A hiring company uses an AI system to shortlist candidates, but it favors only male applicants.

Identify the ethical issue in this scenario. (1)

Suggest one way to reduce such bias in AI systems. (1)

Section III – (4 mark each × 2 = 8 marks)

Q18. A farmer uses an AI-based app to predict weather conditions and suggest crop choices.

Identify the AI domain applied here. (1)

Mention one benefit and one limitation of using AI in agriculture. (2)

Suggest one other application of AI for farmers. (1)

Q19. A school plans to build an AI system to recommend library books to students based on their reading history.

Write a problem statement for this AI project. (2)

Identify any two stages of the AI Project Cycle that will be most important in this project and explain why. (2)

KENDRIYA VIDYALAYA, GUNUPUR, GUNUPUR-765022

HOLIDAY HOMEWORK 2026 (Summer Vacation)

CLASS-IX

SUBJECT: Social Sc.

1. What is social science?
2. What are the scope of social science?
3. What are the nature of social science?
4. Importance of social science?
- 5.

-----XXXXXXXX-----