

SACRED HEART SCHOOL

# Jhumri Telaiya, Koderma

<sup>1997</sup>ASSIGNMENTS FOR SUMMER VACATION (2025-26)

# Class - IX

#### Note: All holiday homework should be done neatly in the subject notebooks.

#### SUBJECT- ENGLISH

#### **Reading Skill**

- 1. Write 10 homophones as well as write its synonyms and antonyms with sentence which is used in daily conversation.
- 2. Read English newspaper articles twice a week, cut and paste one articles and write your opinion.
- 3. Write the biography of Robert Frost.

#### Writing Skill

- 4. Write a paragraph (150 words) on the topic "The Importance of Time Management.
- 5. Grammar Practice for Do the exercise questions for Tense in your grammar notebook.

#### SUBJECT-HINDI

प्रश्न -1 रसखान ने अपने सवैया में ब्रज और गोकुल की चर्चा की है। पता कीजिए कि ब्रज और गोकुल किस राज्य में है? वहां के मुख्यमंत्री कौन हैं? उस राज्य में कौन-कौन से ऐतिहासिक धरोहर है? किसी एक के बारे में अनुच्छेद लिखें। प्रश्न -2 "दो बैलों की कथा" में हीरा और मोती ने अन्याय और शोषण के विरुद्ध संघर्ष किया। आज के समय में यदि किसी छात्र के साथ विद्यालय में अन्यायपूर्ण व्यवहार होता है, तो वह किन नैतिक मूल्यों और दृष्टिकोणों को अपनाकर इस स्थिति का सामना कर सकता है? अपने उत्तर में कहानी की घटनाओं और पात्रों से संबंधित उदाहरणों का उल्लेख करते हुए स्पष्ट कीजिए।

प्रश्न -3 पाठ में लेखक ने तिब्बती समाज की सादगी और अतिथि सत्कार की भावना का वर्णन किया है। आज के शहरी जीवन में, जहाँ लोग एक-दूसरे से दूर होते जा रहे हैं, हम इस भावना को कैसे पुनः जागृत कर सकते हैं? अपने उत्तर में पाठ के उदाहरणों का उल्लेख करते हुए स्पष्ट कीजिए।

### SUBJECT- PHYSICS

- 1. Define these physical quantities--Distance, Displacement, Speed, Velocity, uniform Motion, and acceleration.
- 2. Solve equation of motion by graphical methods.
- 3. Varun is riding his motorcycle with certain speed. he sees a child in the middle of the road moving all alone. Varun immediately applies breaks of his motorcycle and save the child. a. Draw velocity time graph of the motorcycle.
  - b. What qualities of Varun would you appreciate?

### SUBJECT- CHEMISTRY

- 1. Prepare a concept map of matters in our surroundings and is matters around us pure in interleaf copy.
- 2.Record a video of tyndal effect and diffusion with explanation. experiment and observation in school uniform.

### SUBJECT- BIOLOGY

- In bacteria a nucleus is not observed but do have genetic material. They do not contain membrane covered cell organelles but carry out all the cellular activities like the cells of higher organisms. Some bacteria have photosynthetic pigments but chloroplasts do not occur. A cell wall occurs on the outside but it does not contain cellulose. Flagella can be present but they are quite different from flagella of other organisms.
  - i) What is the name of genetic material contained in bacteria?
  - ii) Where are photosynthetic pigments located in photo- autotrophic bacteria?

- iii) Bacterial cell wall is formed of which kind of substance?
- iv) Bacteria belong to prokaryotes. Justify it.
- 2. Two beakers A and B contain plain water and concentrated sugar solution respectively. Equal number of dried raisins are kept in them for a few hours and then taken out.
  - a) Explain the reason for difference in the physical appearance of raisins which were taken out of the two beakers.
  - b) On the basis of above observation, categorise the two solutions as hypotonic and hypertonic.
- 3. To prepare stained temporary mount of onion peel and to record observation and draw their labelled diagram. (Do in practical copy)
- 4. A person takes concentrated solution of salt. After some time, he starts vomiting. What is the phenomenon responsible for such a situation? Explain.
- 5. Write a short biography about famous scientist Rudolf Virchow, who expanded the cell theory in 200 words.

# SUBJECT- MATH

# **Chapter 1: Real Numbers - Application Based Questions**

1. Planning a Family Event:

Your family is planning a celebration. There are 120 sweets and 90 snacks to be packed in boxes such that each box has equal number of both items with nothing left. **Q:** What is the maximum number of boxes that can be made? (Hint: Use HCF)

 Morning Routine Alarm: An alarm rings every 45 minutes and a school bell rings every 60 minutes. Both rang at 6:00 a.m.

Q: When will they ring together again? (Hint: Use LCM)

- Number Puzzle: Show that the square of any odd number is always of the form 8k + 1, where k is an integer.
   Q: Try with 3, 5, and 7 to verify your result.
- Euclid's Lemma in Real Life: A ribbon is 108 cm long and another is 144 cm long. They have to be cut into equal Pieces with no ribbon left.

**Q:** What is the greatest length of each piece?

# **Chapter 2: Polynomials - Application Based Questions**

- 5. Designing a Garden:
  A rectangular garden has a length of x + 3 m and breadth x 2 m.
  Q1: Find the polynomial for the area.
  Q2: Find the area when x = 5.
- 6. Shopping at a Stationery Shop:
  Cost of one pen is ₹x, and cost of a notebook is ₹x + 10.
  Q: Write a polynomial for total cost of 3 pens and 2 notebooks. Find total cost if x = 20.
- 7. Building a Toy Box: Length of the box = x, width = x - 2, height = x + 1.
  Q: Find the volume as a polynomial. Calculate when x = 4.
- 8. Travel Expense:

If a cab charges ₹2x + 5 per km,

Q1: Write a polynomial for the cost of a 10 km ride.

**Q2**: Calculate the total cost when x = 3.

# SUBJECT- HISTORY

- 1. Investigate how the ideas of Enlightenment philosophers influenced the French Revolution. Choose any two philosophers and explain their impact.
- 2.Compare the Declaration of the Rights of Man and Citizen with any modern-day

constitution (e.g., Indian or American). What similarities or differences do you find?

3.Research the role of women during the French Revolution. How were their contributions recognized or ignored?

### SUBJECT- GEOGRAPHY

1. Discuss about the need to Shift to Renewable Energy.

- \* Types of Renewable energy sources
- \* Policies and Incentives to Promote Renewable energy.

#### **SUBJECT- CIVICS**

1. Throw light upon "The Rise of Aatma nirbhar Innovation in National Security - India's growing technological self-reliance".

### SUBJECT- ECONOMICS

- 1. Visit a nearby village to you and write a report on economic activities and development of that village as (Village Palampur)
- 2. Make a project on income and expenditure of your family
- 3. Watch the movie named "HICHKI" and explain the character of teacher "Naina Mathur"

#### SUBJECT- IT

- 1. In the era of digital India, market of online shopping is growing fast. Why people are preferring online shopping more than traditional shopping? Explain with examples.
- 2. How do you see the future of offline shopping?
- 3. How does communication skills play important role in your practical life?