

**GREEN MOUNT GLOBAL SCHOOL, Bhimtal**  
**HOME WORK FOR SUMMER BREAK (2024-25)**

**Class- IX**

**ENGLISH**

- 1 You found a book from the school library lying on one of the tables of your classroom at the end of the day. You gave it to the class monitor to hand it over to the class teacher. However, he has misplaced it and is unable to return it. Discuss with your partner  
- What you and the monitor will need to do?  
- How you will resolve the situation?
- 2 **Ethical Dilemma**  
You witness a classmate cheating during an exam. What are the ethical considerations involved in deciding whether to report the cheating or not? How might your decision impact your relationship with your classmate and the integrity of the academic environment?
- 3 **Leadership Address**  
You have been elected as the class captain. Give a speech outlining your vision for the class, including ideas for improving academic performance, fostering teamwork and organizing extracurricular activities.
- 4 Your friend has not done well as he or she expected to do in his or her exams. She or he is upset now and now blames the teacher for her performance. Explain what would you do  
- to help her get over her disappointment and to move forward  
- to help her think about ways to improve her grades in future and not blame others.
- 5 **Dramatization of the story**  
**The Lost Child**  
Read this text from your book and adapt it into a play.  
Life skills- communication, problem-solving, resilience, empathy  
Attitude- concern, empathy to frustration and impatience, relief and joy.  
Values- compassion, responsibility, family bond, gratitude.  
Make a film by illustrating different stages of story using colors and pictures and then answer the following questions.  
a) What festival were the people going to celebrate? How were the people dressed for the festival ?  
b) Mention the kind of laughter of people enjoying the roundabout in the story 'The Lost Child' ?  
c) What bold request the child made to his parents at the fair ?  
d) What was the condition of the child's clothes while he was trying to find out his parents in all directions ?  
e) Why did the lost child shut his ears with his fingers ?  
f) What kind of a lady was his mother ?  
According to you, why was the child happy when he was on the way to fair? Was it the attraction of the fair or the natural beauty that he enjoyed on the way ?

**MATHEMATICS**

- 1 **Case Study 1**  
One day a math teacher taught students about the number system. He drew a number line on the green board and represented different types of numbers such as natural number, integers, rational number etc.  
A number of the form  $\frac{p}{q}$  is said to be a rational number, if  $q \neq 0$ , and  $p$  is an integer.  
On the basis of above information, solve the following question.  
a) Write the five rational number between  $\frac{1}{3}$  and  $\frac{1}{7}$ .  
b) Write the decimal number  $1.555555\dots$  in the form of  $\frac{p}{q}$   
c) An irrational number between  $\sqrt{3}$  and  $\sqrt{5}$  is  
i) 2.1                      ii) 2                      iii)  $\sqrt{3.5}$                       iv)  $\sqrt{7}$   
d) A terminating and repeating decimal number is a/an  
i) Rational                      ii) irrational                      iii) rational or irrational                      iv) whole number
- 2 **Case Study-2**  
Mr. Praveen lives in an undeveloped area where there is no facility of proper education, but one thing is available in that area i.e. Network is available. Since he was very keen to take education. So he decided to complete her education through e-learning.  
One day he was studying number system where he learns the rational number, irrational number, and decimal number etc.  
a) On the basis of above information solve the following question.  
i) Convert the rational number  $\frac{2}{15}$  into decimal form.  
ii) Write five irrational number between 2.365 and 3.125.  
iii) If  $x + \sqrt{2} = 3$  then find the value of  $\frac{1}{x}$ .  
iv) Find the product of two irrational number  $(7 + 3\sqrt{2})$  and  $(7 - 3\sqrt{2})$ .

### 3 Assertion–Reason

The following question consist of two statements Assertion (A) and Reason (R). Choose one of the correct option from those given below to answer each question.

- If both Assertion (A) and Reason (R) are true and the Reason is the correct explanation of Assertion.
- If both Assertion (A) and Reason (R) are true but Reason is not the correct explanation of the Assertion.
- If the Assertion (A) is true but the Reason (R) is false.
- If the Assertion (A) if false but the Reason (R) is true.
  - Assertion (A) : Three rational number between  $\frac{2}{5}$  and  $\frac{3}{5}$  are  $\frac{9}{20}$ ,  $\frac{10}{20}$  and  $\frac{11}{20}$ .  
Reason (R) : A rational number between two rational number 'p' and 'q' is  $(p+q)/2$ .
  - Assertion (A) :  $\sqrt{5}$  is an irrational number.  
Reason (R) : Square root of a positive integer which is not a perfect square is an irrational number.

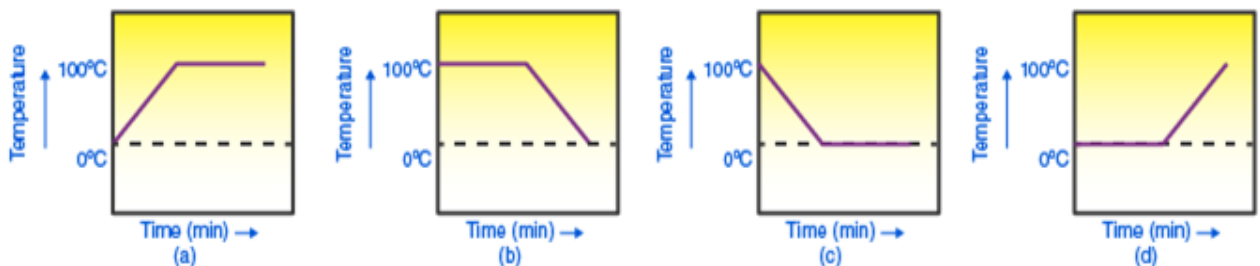
### Activity

Verify the identity  $(a + b)^2 = a^2 + 2ab + b^2$

Using appropriate craft material.

### SCIENCE

- Alka was making tea in a kettle. Suddenly she felt intense heat from the puff of steam gushing out of the spout of the kettle. She wondered whether the temperature of the steam was higher than that of the water boiling in the kettle. Comment.
  - A student heats a beaker containing ice and water. He measures the temperature of the content of the beaker as a function of time. Which of the following (Fig.) would correctly represent the result? Justify your choice.



- Write the difference between Isotopes and Isobars.
- Draw well labelled diagram of ultra structure of plant cell .
- You must have seen your mother preparing pickle using carrot, turnip and cauliflowers. Based on your observation answer the following questions
  - Why did your mother cut the vegetables into small pieces and put them in the sun few hours ?
  - Why did she add common salt in the cut vegetables and heated it ? Name the phenomenon involved.
- Define
  - Plasmolysis
  - PPLO
  - GERL system
- Differentiate between distance and displacement, Speed and Velocity.
- Define-
  - Uniform Motion
  - Average Speed
  - Acceleration
- A boy first runs a distance of 100 metres in 50 seconds in going from his home to the shop in the East direction, and then runs a distance of 100 metres again in 50 seconds in the reverse direction from the shop to reach back home from where he started .
  - Find the speed of the boy.
  - Find the Velocity of the boy.
  - A boy is sitting on a merry-go-round which is moving with a constant speed of 10m/s. This means that the boy is
    - at rest
    - moving with no acceleration
    - in accelerated motion
    - moving with uniform velocity
  - In which of the following cases of motion, the distance moved and the magnitude of displacement are equal ?
  - A particle is moving in a circular path of radius r. The displacement after half a circle would be

### SOCIAL SCIENCE

- Define the terms
  - Livers
  - Chateau
  - Gorge
  - Fold mountains
  - Referendum
- Make a project report comparing old and modern farming tools and techniques.
- Makea 3D model representing physical features of India.

#### 4 **Read and answer the following questions.**

The Green Revolution in the late 1960s introduced the Indian farmer to cultivation of wheat and rice using High Yielding Varieties (HYVs) of seeds. Compared to the traditional seeds, the HYV seeds promised to produce much greater amounts of grain on a single plant. As a result, the same piece of land would now produce far larger quantities of food grains than was possible earlier. HYV seeds, however, needed plenty of water and also chemical fertilizers and pesticides to produce best results.

Higher yields were possible only from a combination of HYV seeds, irrigation, chemical fertilisers, pesticides, etc. Farmers of Punjab, Haryana and Western Uttar Pradesh were the first to try out the modern farming method in India.

The farmers in these regions setup tubewells for irrigation and made use of HYV seeds, chemical fertilizers and pesticides in farming. Some of them bought farm machinery, like tractors and threshers, which made ploughing and harvesting faster. They were rewarded with high yields of wheat.

- What method adopted by Indian farmers enabled them to grow more from same piece of land ?
- Green Revolution is beneficial for Indian farmers. Explain.
- Which modern implements and items were used by Indian farmers?

#### **Inter disciplinary project work**

##### **Group 1:**

The students will express how forest resources were classified and exploited by the colonial regime. Trace the forest rules and its impact on the forest dwellers Changes that took place in Java during colonial rule.

##### **Group 2:**

The Natural vegetation of India based on the geographical location and its characteristics features and the wild life associated with it.

##### **Group 3:**

The role of government in protecting the forest cover and the wildlife at present Trace, how tribal and other forest dwellers suffered and protested during colonial regime.

##### **Group 4:**

Commercial forestry or classification of forests supported the economy during the colonial period.

#### **HINDI**

- आप अनिल राज/अनीता राज हैं आपके क्षेत्र के बाजारों में प्लास्टिक प्रतिबंधित होने के बादजुद भी प्लास्टिक की थैलियों का उपयोग धडल्ले से हो रहा है। इससे पर्यावरण में होने वाली हानियों से लोगों को अवगत कराते हुए इसे रोकने के लिए सुझाव देते हुए नगर निगम अधिकारी को पत्र लिखिए।
- जीवन में साहस एवं लगन की भूमिका सफलता प्राप्त करने के लिए अत्यंत महत्वपूर्ण है। विषम परिस्थितियों के बावजूद एवरेस्ट विजेता प्रथम भारतीय महिला बर्चेद्री पाल ने एवरेस्ट पर जाकर भारत का ध्वज फहराया इससे संबंधित सुंदर चित्र बनाइए।
- आप सोनीपत में रहने वाले तुषार हैं। ग्रीष्मावकाश में आपके पर्वतीय शहर में रहने वाले मित्र नीरज ने आपको आमंत्रित कर अनेक दर्शनीय स्थलों की सैर कराई इसके लिए उसका आभार व्यक्त करते हुए धन्यवाद पत्र लिखिए।
- यदि आपने 'भगवाना' की माँ जैसी किसी दुखिया को देखा है तो उसकी कहानी लिखिए।
- 'ई' कचरा' विषय पर निम्न बिन्दुओं को स्पष्ट कीजिए।  
- कचरे से तात्पर्य - चिंता का कारण - निपटान के उपाय

#### **COMPUTER**

##### **1 Case Study:**

Tom and Jerry are two friends who live in different cities. They communicate regularly through emails and video calls. One day, Jerry sends an email to Tom inviting him to visit his city during the summer break. However, Tom doesn't respond to the email for several days. Jerry starts to worry if Tom received the email or if he's ignoring him. Eventually, Tom replies, apologizing for the delay and explaining that he was busy with exams. Jerry feels relieved and they make plans for Tom's visit.

- Identify the elements of the communication cycle in this case study.
- What barriers to communication did Tom and Jerry experience ?
- How could Tom and Jerry improve their communication in the future ?

##### **2 Case Study:**

Maria is a ninth-grade student who is struggling to manage her time effectively. She often finds herself procrastinating on assignments and studying at the last minute. As a result, her grades have started to decline, and she feels stressed and overwhelmed.

One day, Maria decides to take control of her situation and improve her self-management skills. She starts by creating a daily schedule, allocating specific time slots for studying, completing assignments, and taking breaks. She also sets realistic goals for herself, breaking down larger tasks into smaller, more manageable steps. To avoid distractions, Maria turns off her phone and other electronic devices while studying. She finds a quiet place to work where she can focus without interruptions. Additionally, she learns to prioritize her tasks, tackling the most important ones first.

As Maria implements these strategies, she notices a significant improvement in her productivity and overall well-being. She feels more confident and in control of her academic responsibilities. With better self-management skills, Maria is able to achieve her goals and excel in her studies.

- a) What are some common challenges students like Maria face when it comes to self-management ?
  - b) How do you think creating a daily schedule can help improve self-management skills ?
  - c) What strategies did Maria use to avoid distractions while studying ?
  - d) Why is it important for students to set realistic goals ?
  - e) How can improved self-management skills benefit students academically and personally ?
- 3 What is meant by encoding and decoding in communication ?
- 4 Can you describe a time when you had to overcome procrastination ? How did you do it ?
- 5 Can you discuss a situation where you had to make a difficult decision regarding your time management ? How did you handle it ?
- 6 How do you reflect on your progress and make improvements in your self-management skills over time ?