



**St. Mary's School, Dwarka**  
**Holiday Homework**  
**Std. IX**  
**Week 1**  
**Worksheet 1**

**Subject: English**

**General Instructions:**

- 1) The work should be done neatly and in a systematic way.
- 2) The given questions are to be done in the English notebook.
- 3) Attempt all questions.

**Q1. Read the following passage.**

**(1x5=5)**

The solar system is incredible as it has a vast collection of celestial objects. It consists of the sun, eight planets, their moons, asteroids, comets, and other smaller bodies. The sun, located at the center of the solar system, is the heart of the solar system. It is a gigantic ball of hot gas that provides heat and light to all the planets. In order of their distance from the sun, the eight planets in the solar system are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

Each planet in the solar system has its unique characteristics. Mercury, the closest planet to the sun, is rocky and has a very thin atmosphere. Venus, often referred to as Earth's twin, has a dense atmosphere with a greenhouse effect that makes it the hottest planet in the solar system. Earth, the third planet from the sun, is the only known planet to support life.

Mars, often called the "Red Planet," has a reddish appearance due to the iron oxide present on its surface. It has polar ice caps and a thin atmosphere. Jupiter, the largest planet, has a prominent system of rings. Saturn also known for its beautiful ring system, is also a gas giant. Uranus and Neptune are known as ice giants due to their composition of icy materials.

Apart from the planets, the solar system also includes numerous moons. Earth has one moon, while other planets have multiple moons. Moons are natural satellites that orbit around planets.

In addition to the planets and moons, the solar system is home to a multitude of smaller celestial bodies that play significant roles in shaping its dynamics. One such group of objects is asteroids, which are rocky remnants left over from the early formation of the solar system. These rocky bodies vary in size, ranging from small boulders to dwarf planet-sized objects. They primarily orbit the Sun in the asteroid belt, a region located between the orbits of Mars and Jupiter. Asteroids have been a subject of great interest for scientists, as they hold valuable information about the formation and evolution of the solar system.

The solar system is a fascinating subject of study, and scientists continue to explore and learn more about its wonders. Through space missions and telescopic observations, we gain insights into the mysteries of the solar system and the vastness of the universe. An exploration of space through sophisticated telescopes and space probes has allowed us to study exoplanets, planets that orbit stars other than the

Sun. With each new discovery, we broaden our perspective on planetary systems and the potential for life elsewhere in the universe.

**Based on your understanding of the passage, attempt the questions given below.**

- i. The Sun is also known as the heart of the solar system, as \_\_\_\_\_.
- ii. The unique characteristic of Mars is that it \_\_\_\_\_.
  - a) is often referred to as the Earth's twin
  - b) has polar ice caps and a thin atmosphere
  - c) is rocky and has a very thin atmosphere
  - d) is a natural satellite that orbits the earth
- iii. Give any one reason why Mars is called the "Red Planet".
- iv. Which of the following statements is **NOT TRUE**?
  - a) Uranus and Neptune are known as ice giants because of the beautiful rings.
  - b) Jupiter is the largest planet of the solar system and has a prominent system of rings.
  - c) Venus, also known as Earth's twin, has a dense atmosphere with a greenhouse effect.
  - d) Earth, the third planet from the sun, is the only known planet to support life.
- v. Suggest a suitable title for the above passage.

**Answer questions 2 to 4 in 20-40 words.**

- Q2. How did Tommy and Margie's school differ from the schools in the past? (2)
- Q3. Does the lost child express his desire for the things he saw at the fair? Why or Why not? (2)
- Q4. What does the speaker mean by the phrase "the road less travelled"? (2)

**Answer question 5 in 100-120 words.**

**Q5. "The duties of a teacher are neither few nor small, but they elevate the mind and give energy to the character." - Dorothea Dix**

How did Ron Forbes teach Evelyn to respond to different sounds? (3)

**Q6.** Draw a picture related to the poem 'The Road Not Taken' or 'Wind' and write a message below the picture. (5)

**Q7. Read the following conversation between Rita and Sara. Complete the sentence by reporting Rita's reply in reported speech.** (2)

Rita: Did you watch the new movie that everyone is talking about?

Sara: No, I couldn't find any tickets for it.

Rita: Where did you look for the tickets?

Sara: I checked online and also called the local theater, but they were all sold out.

Rita asked Sara (a) \_\_\_\_\_ everyone was talking about. Sara replied that (b) \_\_\_\_\_ any tickets for it. Rita further asked (c) \_\_\_\_\_ Sara replied that (d) \_\_\_\_\_, but they were all sold out.

**Q8. Complete the given sentence, by filling in the blank with the correct option:** (2)

i. We will meet you after you \_\_\_\_\_ your presentation.

(a) had completed (b) will have completed (c) have completed (d) will complete

**ii. Fill in the blank by using the correct form of the word in the bracket.**

They are excited about \_\_\_\_\_ (visit) the museum tomorrow.

**Q9. Write a descriptive paragraph, in about 100-150 words, on 'My Loving Sister'. Take the information given below.**

strong and caring sister — currently staying with her friend's family pursuing an advanced academic programme — tries to find time in her busy schedule to talk to you daily —understanding, intelligent, funny, and charismatic brings solutions to every problem. (3)

**Q10. You recently visited the 24th Crafts Mela at Suraj Kund, Faridabad. It was Mini India assembled at one place. Write a diary entry of what you saw and experienced there. (4)**

## Subject: Hindi

No. of Questions : 10

M.M: 25

सामान्य निर्देश: सभी प्रश्नों के उत्तर A4 शीट में लिखिए।

प्रश्न 1 निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए :

(1X5=5)

ईश्वर का नाम लेकर उस पर विश्वास कर हम मन में शक्ति का एकीकरण कर कार्यरत होते हैं। हमारा विश्वास मजबूत होता है कि हमारे साथ ईश्वर है। हम इस कार्य में सफल होंगे। आत्मविश्वास को दृढ़ बनाने के लिए ईश्वर का अस्तित्व बनाया गया है। इसके साथ-साथ 'ईश्वर' की कल्पना मनुष्य को भयभीत भी करती है। एकांत में भी मनुष्य कोई पाप या गलत काम न कर सके, इसी आधार पर उसे सर्वव्यापी, सर्वद्रष्टा बतलाया गया है। कण-कण में उसका निवास माना गया है। मनुष्य पर नियंत्रण रखने के लिए किसी न किसी शक्ति की आवश्यकता तो है ही। इसी आधार पर ईश्वर की संकल्पना की गई और इसी प्रकार असफलताओं को रोकने के लिए, अपने दोष पर परदा डालने के लिए 'भाग्य' भी कल्पना की गई। हम स्वयं अपने भाग्य विधाता हैं। जैसा कार्य करेंगे, वैसा फल पाएंगे। अतएव भाग्य को आप दोष न दें। चींटी को देखो वह कितनी बार चढ़ती-गिरती है। अगर वह भाग्यवादी होती तो फिर चढ़ ही न पाती। निरंतर प्रयास करके ही वह सफल होती है। वह भाग्य पर निर्भर नहीं, कर्म करके दिखलाती है। इसी तरह आप भी लगातार कार्य में लगे रहें। सफलता हाथ आए या फिर असफलता। आप सफलता पर प्रसन्न होकर अपनी प्रगति धीमी न करें और असफलता पर निराशा होकर या घबराकर मैदान छोड़कर न भागें। अपना कार्य बराबर आगे बढ़ाते रहें। जो उद्यम करते हैं, परिश्रमरत रहते हैं, निरंतर अपने कदम का ध्यान रखते हैं, वे अवश्य ही जो भी इच्छा करते हैं उसे पा लेते हैं।

(क) ईश्वर का अस्तित्व किसलिए बनाया गया है ?

1

- 1 कमजोर आत्मविश्वास के लिए
- 2 अच्छा जीवन जीने के लिए
- 3 दृढ़ आत्मविश्वास के लिए
- 4 संस्कारी जीवन जीने के लिए

(ख) ईश्वर का निवास किसमें माना गया है?

1

- 1 कण - कण में
- 2 आसमान में
- 3 धरती पर
- 4 स्वर्ग में

(ग) सफलता पर प्रसन्न होकर अपनी प्रगति कैसी नहीं करनी चाहिए ?

1

- 1 तेज़
- 2 धीमी
- 3 मंद

4 मध्यम

- (घ) गद्यांश में किसका उदाहरण दिया गया है ? 1
- 1 देवता का
  - 2 हाथी का
  - 3 शेर का
  - 4 चींटी का

- (ङ) 'भाग्यवादी' शब्द में कौन-सा मूल शब्द व प्रत्यय सही है ? 1
- 1 भाग्यवाद और ई
  - 2 भाग्यवाद और इ
  - 3 भाग्यव और आदि
  - 4 भाग्यवा और दी

- प्रश्न 2 रेलगाड़ी तेज़ चलती है। उपर्युक्त वाक्य में रेखांकित 'तेज़' क्या है? 1
- 1 शब्द
  - 2 संज्ञा
  - 3 पद
  - 4 अर्थ

- प्रश्न 3 वर्णों के सार्थक समूह से क्या बनता है? 1
- 1 शब्द
  - 2 व्यंजन
  - 3 पद
  - 4 स्वर

- प्रश्न 4 अनुस्वार युक्त उचित शब्द कौन-सा है ? 1
- 1 वशं
  - 2 जगंम
  - 3 कंचन
  - 4 कदंबं

- प्रश्न 5 अनुनासिक युक्त सही विकल्प कौन-सा है ? 1
- 1 पाँच
  - 2 राँग
  - 3 मँच
  - 4 हँट

- प्रश्न 6 अनुस्वार युक्त सही विकल्प कौन-सा है ? 1
- 1 बंदर
  - 2 कांटा
  - 3 पांच
  - 4 ऊंट

- प्रश्न 7 'दुख का अधिकार' पाठ के द्वारा लेखक समाज को क्या सीख देना चाहते हैं? (3×1= 3)

- प्रश्न 8 कवि रैदास के अनुसार ईश्वर की क्या विशेषताएँ हैं? (3×1= 3)

- प्रश्न 9 निम्नलिखित प्रश्नों के उत्तर लगभग 20 से 25 शब्दों में लिखिए।

- (क) लेखिका ने गिल्लू का उपचार किस प्रकार किया ? (2×1=2)

- (ख) लेखिका ने कौए को एक साथ समादरित और अनादरित क्यों कहा है? (2×1= 2)

- प्रश्न 10 संकेत बिंदुओं के आधार पर 'भारतीय चिकित्सा व्यवस्था' विषय पर 80 से 100 शब्दों में एक अनुच्छेद लिखिए— (5×1= 5)

भारतीय चिकित्सा व्यवस्था —

- 1 भूमिका
- 2 सेवाभाव
- 3 अस्पतालों की स्थिति
- 4 निष्कर्ष

## **Subject: Mathematics**

### **General Instructions:**

- 1) The work should be done neatly and in a systematic way.**
- 2) The given questions are to be done in the Math practice notebook.**
- 3) Attempt all questions.**

- Q1. Find five rational numbers between  $\frac{3}{5}$  and  $\frac{4}{5}$ . (2)
- Q2. Locate  $\sqrt{3}$  on the number line. (2)
- Q3. Show that  $0.33\dots$  can be expressed in the form  $\frac{p}{q}$ , where  $p$  and  $q$  are integers and  $q \neq 0$ . (2)
- Q4. Express  $0.437437\dots$  in the form  $\frac{m}{n}$ . (2)
- Q5. Represent 4.862 on number line (2)
- Q6. Prove that the sum of a rational number and an irrational number is an irrational number. (3)
- Q7. Find three irrational numbers between 3 and 4. (3)
- Q8. Simplify    a)  $\sqrt[3]{2} \times \sqrt[3]{32}$                       b)  $\sqrt[3]{18} \times \sqrt[3]{3}$  (3)
- Q9. Which is greater  $\sqrt[3]{15}$  or  $\sqrt[4]{20}$  ? (3)
- Q10. Find  $\sqrt{x}$  on number line, where  $x$  is any positive real number (3)

## Subject: Science

### Objectives:

- Revision of concepts
- Application of the concepts to real life situations.
- Skills to carry out research work and develop scientific aptitude.

### Instructions:

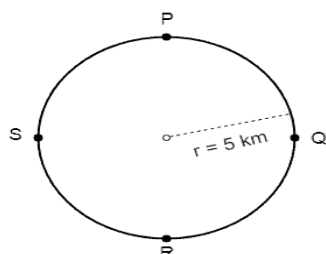
- Neatly write all the answers in your respective subject notebooks.
- Attempt the questions keeping in mind the weightage of each question

Q1. Suppose a ball is thrown vertically upwards from a position P above the ground. It rises to the highest point Q and returns to the same point P. What is the net displacement and distance travelled by the ball? (1)

Q2. A motorcycle rides from point P to Q to R to S and finally to P in a circular path as shown in the figure given below. Find (1)

a) The distance travelled by the motorcycle.

b) The displacement.

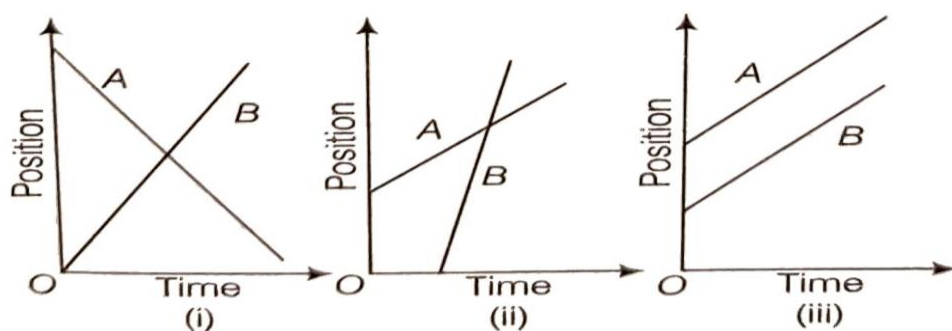


Q3. Convert the following temperatures to Celsius scale: (2)

- (i) 243K    (ii) 525K

Q4. Do you agree “A cell is the structural and functional unit of life”. If yes, explain why? (2)

Q5. The position-time graphs of two objects A and B in three different situations for a particular duration are shown in the figure given below: (3)



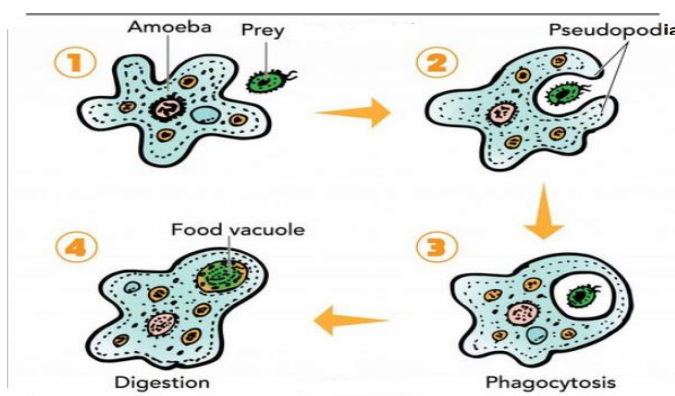
- (i) In which situation the distance between them will remain same?
- (ii) In which situation they are moving in opposite directions?
- (iii) Is the velocity of object A positive or negative in situation (ii)?

Q6. Write three important differences between evaporation and boiling. (3)

Q7. Observe the diagram carefully and explain how flexible nature of plasma membrane is

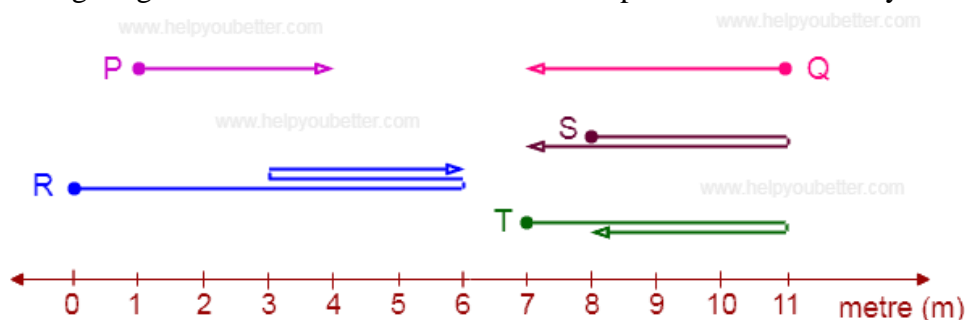
useful for amoeba? Name this process.

(3)



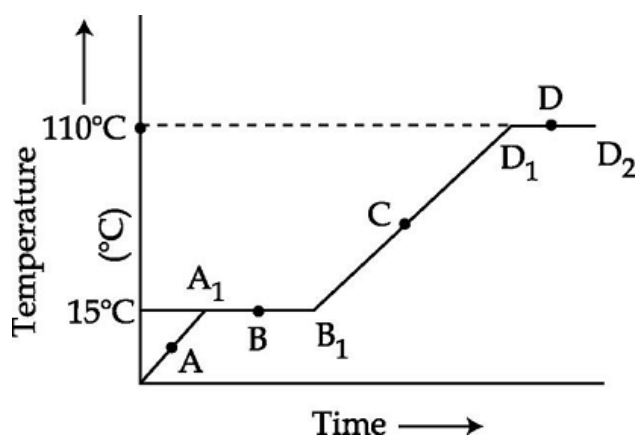
**Q8.** The movement of objects P, Q, R, S and T is marked on a scale as shown in the figure given below. Find the distance and displacement covered by each object.

(5)



**Q9.** The temperature-time graph given below shows the heating curve for pure wax. From the graph answer the following:

(5)



- What is the physical state of the substance at the points A, B, C and D?
- What is the melting point of the substance?
- What is its boiling point?
- Which portions of the graph indicate that change of state is taking place?
- Name the terms used for heat absorbed during change of states involved in above processes.

**Q10.** Tomato appears red and capsicum is green in colour. Which cell organelle is responsible for this? Differentiate the cell organelle based on the pigments and mention their functions.

(5)



## **Subject: Social Science**

### **General Instructions:**

- The work should be done neatly and in a systematic way.
- The given assignments are to be done in the respective notebooks.
- Mention the number of worksheets while doing the work.
- Write all the questions along with the answers.
- Maps and diagrams are to be pasted/done in the notebook.

- Q1. What did the French Revolution of 1789 stand for? 1
- Q2. What did the fall of Bastille signify? 1
- Q3. What is the name of the southernmost point of India? Why is it not visible today? 1
- Q4. Write any two features of democracy. 2
- Q5. Differentiate between democratic and non-democratic country. What values does a citizen expect from a democratic rule? 3
- Q6. What does this cartoon signify? Find out any two countries where this could apply. 3



- Q7. How can you say that the use of modern farming methods is beneficial for Indian farmers? 3
- Q8. What is meant by the Green Revolution? Mention some of its important features. 3
- Q9. Write the importance of Napoleon Bonaparte in the History of France and the world. 3
- Q10. Project work on Disaster Management 5

As students of social sciences and as conscious citizens, doing a project on disaster management is going to give you a first-hand experience and an opportunity to get yourself familiarise not only with the meaning, factors, etc. of disasters but also to learn the essentials of disaster preparedness and ways to collect relevant information pertaining to disasters and its effective dissemination.

- A. Make a project on earthquake prone areas in India – causes, impact on life and property, seismic zones, mitigation strategies used to reduce the impact in earthquake prone areas. (Roll No. 1-20)
- B. Collect information on areas prone to cyclones in India –warning systems, effects of cyclones, mitigation strategies to be used while constructing buildings (Roll. No. 21-40)

**GUIDELINES FOR THE PROJECT:** Kindly follow the format given below to compile the project:

- a. Project to be done on A-4 size sheet.
- b. Project should be handwritten and should not exceed more than 15- 20 pages.
- c. **COVER PAGE:** (On the first page, student's Performa to be written) This should mention the Name, Class, Roll Number, Name of the school, year of submission and topic.
- d. **CERTIFICATE OF AUTHENTICATION:** (to be written by the student in the format given below)

**I, (Name of the student) of class IX – (mention the section accordingly) hereby state that this project report has been prepared by me after completion of all tasks assigned as a part of this project.**

- e. Content or Index.
- f. At the last Bibliography or references.
- g. Newspaper cuttings, maps, diagram, illustrations are must.
- h. Project should be strictly based on India.
- i. Use your Disaster Management book for reference.

## **Subject: Artificial Intelligence**

### **General Instructions:**

- 1) **The work should be done neatly and in a systematic way.**
- 2) **The given questions are to be done in the Computer Science notebook.**
- 3) **Attempt all questions.**

### **I. Fill in the blanks:-**

**1x5=5**

1. The ..... is the key to achieve a higher level of confidence.
2. The ..... is the process for visualizing your ideal future and motivating yourself to turn into the reality.
3. The positive attitude like ..... makes an individual confident about solving the problems.
4. The examination of one's own mental and emotional processes is called .....
5. .... is called the state of occurring or existing beyond the expected time.

### **II. Tick the correct answer:-**

**1x5=5**

1. Which of the following is a self-management skill?
  - a) confidence building
  - b) leadership
  - c) socialising
  - d) All of these
2. Rishabh is a very shy person. He realised that he should build his self-confidence to overcome his problem of being shy. What can he do to build his confidence?
  - a) He should learn to be assertive.
  - b) He should not appreciate himself for his success.
  - c) He should feel good about himself
  - d) All of these
3. What can help you perform better at your work?
  - a) obsession
  - b) positive thinking
  - c) over confidence
  - d) stress
4. Which of the following statement is not related to personal grooming?
  - a) I never wear dirty clothes
  - b) I regularly trim my hair
  - c) I always try to prove myself as the best, by insulting others
  - d) I go to beauty salon regularly
5. The 'M' in SMART strategy stands for
  - a) monitoring
  - b) measurable
  - c) merit
  - d) mistake

**III. Answer the following questions:-**

**2x5=10**

1. What do you understand by the term interpersonal skills and intrapersonal skills?
2. Mention any four key skills required for self-management.
3. Differentiate between internal awareness and external awareness.
4. How the strength and weakness analysis through Johari window is helpful?
5. List out the three habits that should be acquired by self-controlled people.