### VIDYASAGAR SCHOOL, INDORE SUMMER ASSIGNMENT-2025-26 Class- IX

# English

#### Read the questions and answer in details with reference to the text you have read.

Q1.Learning on a virtual platform can impart information but a school environment imbibes value with knowledge. Write in about 150-200 words the difference between the education system of Margie and that in which you go.( Refer the type of books, homework, teachers and school.)

Q2.Prepare a project on the life and achievements of a famous personality who chose a different path to pursue and proved to be the best.(Like Dr.Kalam, Mary Kom, Vedant Madhavan, Mahendra Singh Dhoni).**Paste pictures of the person you have written. Make an album of his achievements also.** Write atleast about four things necessary to achieve success in life.

Q3.Write a Diary entry about your excitement when your summer vacation started. Mention your feelings and your plans you have stored to spend the vacation. [120-150 words]

# Hindi

1) प्राचीन एवं नवीन ग्रामीण जीवन में आए परिवर्तनों को चित्रों द्वारा स्पष्ट कीजिए (दोनों के पाँच - पाँच चित्र कुल 10 चित्र)

2) डायरी लेखन- ग्रीष्मकालीनअवकाश में बिताएं कोई भी अविस्मरणीय 5 दिन डायरी शैली में लिखें।

# Maths

1. Define rational and irrational numbers with some examples.

2. What are the decimal expansions of rational and irrational numbers.

3. Write 5 rational and 5 irrational numbers between 23 and 35.

4. Convert the following in p/q form.

(i) 0.47 (ii) 2.3<sup>‡</sup> (iii) 14.70<sup>‡</sup>

5. Rationalize:  $2 + \sqrt{34} - 3\sqrt{2}$ .

6. Represent  $\sqrt{2}$  and  $\sqrt{3}$  on the same number line.

7. Represent  $\sqrt{5}$  on the number line.

8. Simplify: 125-13 [12513-12523].

9. Simplify:  $\sqrt{814} - 8\sqrt{2163} + 15\sqrt{325} + \sqrt{225}$ .

10. Find the value of a and b if  $\sqrt{7} - 1\sqrt{7} + 1 - \sqrt{7} + 1\sqrt{7} - 1 = a + b\sqrt{7}$ .

# Write following Maths Lab Activities in Maths Practical file.

- 1. To divide a line segment of length 14 cm in 9 equal parts.
- 2. To draw a square root spiral upto  $\sqrt{8}$ .
- 3. To obtain a mirror image of a plane figure in X- axis and Y- axis.
- 4. To verify side property of a parallelogram.

5. To verify diagonal property of a parallelogram.

- 6. To verify the following factorizations by activity:
- (i)  $x^2 + 5x + 6$  (ii)  $x^2 5x + 6$
- 7. To verify by activity: (a + b)3 = a3 + b3 +3ab(a + b)

#### **ART – INTEGRATED ACTIVITY:**

**1.** Draw square root spiral upto  $\sqrt{8}$  and represent it artistically.



# Science - (Physics)

Write the two following experiment in practical file from science lab manual

1. To determine the density of a solid (denser than water) by using a spring balance and a measuring cylinder.

2. To establish the relation between the loss in weight of a solid when fully immersed in (i) tap water(ii) strongly salty water, with the weight of water displaced by it by taking at least two different solids.

Under the following points

- a) Aim of the experiment
- b) Material and apparatus required
- c) Theory
- d) Diagram (on left page)
- e) Observations and calculations
- f) Results
- g) Precautions

# Science - (Biology)

Q.1 Write an experiment for the Preparation of stained temporary mounts of onion peel under following headings-

Aim of experiment (ii) Material Required (iii) Theory (iv) Procedure (v) observation /Comments (vi) Labelled diagram (vii) Result (viii) precautions

(This activity should be written in practical record file)

# Science - (Chemistry)

Select the correct option from given below; (MCQ) Solve this worksheet in your class work note book.

1. In all the three states of water, (i.e. ice, liquid and vapour) chemical composition of water

(a) Is very different (b) remains same (c) sometimes same and sometimes different

(d) None of the above.

Q.2 Which of the following cannot be considered a form of matter?

(a) Atom (b) Water (c) Humidity (d) Electron

Q.3 which of the following is a characteristic property of solids?

A) Definite shape and volume B) Indefinite shape and volume

C) Indefinite shape but definite volume D) Definite shape but indefinite volume

Q.4 The process of conversion of a solid into a gas without passing through the liquid state is called A) Evaporation B) Condensation C) Sublimation D) Fusion

Q.5 When a gas jar full of air is placed upside down on a gas jar full of bromine vapours, the red-brown vapours of bromine from the lower jar go upward into the jar containing air. In this experiment?(a) Air is heavier than bromine (b) Both bromine and air have the same density

(c) Bromine is heavier than air

(d) Bromine cannot be heavier than air because it is going upwards against gravity

Q.6 Seema visited a Natural Gas Compressing Unit and found that the gas can be liquefied under specific conditions of temperature and pressure. While sharing her experience with friends she got confused. Help her to identify the correct set of conditions

(a) Low temperature, low pressure (b) High temperature, low pressure

(c) Low temperature, high pressure (d) High temperature, high pressure

Q.7 On converting 25°C, 38°C and 66°C to kelvin scale, the correct sequence of temperature will be (a) 298 K, 311 K and 339 K (b) 298 K, 300 K and 338 K

(c) 273 K, 278 K and 543 K (d) 298 K, 310 K and 338 K

Q.8 Choose the correct statement of the following

a) Conversion of solid into vapours without passing through the liquid state is called sublimation.

(b) Conversion of vapours into solid without passing through the liquid state is called vapourisation (c) Conversion of vapours into solid without passing through the liquid state is called freezing.

(d) Conversion of solid into liquid is called sublimation.

Q.9 n which of the following conditions, the distance between the molecules of hydrogen gas would increase?

(i) Increasing pressure on hydrogen contained in a closed container

(ii) Some hydrogen gas leaking out of the container

(iii) Increasing the volume of the container of hydrogen gas

(iv) Adding more hydrogen gas to the container without increasing the volume of the container

(a) (i) and (iii) (b) (i) and (iv) (c) (ii) and (iii) (d) (ii) and (iv)

Q.10 The property to flow is unique to fluids. Which one of the following statements is correct?

(a) Only gases behave like fluids (b) Gases and solids behave like fluids

(c) Gases and liquids behave like fluids (d) Only liquids are fluids

Assertion and Reason Questions for Class 9 Science Chapter 1 Matter in Our Surroundings

Directions: In each of the following questions, a statement of Assertion is given, and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as: (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.

Q.11 Assertion : A gas can easily be compressed by applying pressure.

Reason : Since the inter-particle spaces between gases are very large, they can decrease by applying pressure.

Q.12 Assertion : It is easier to cook food at sea level as compared to higher altitudes. Reason : The boiling point of water increases at high altitudes.

Q.13 Assertion : The boiling point of water is 100 C. Reason : The boiling point of water increases at higher altitudes.

Q.14 Assertion : lce floats on water. Reason : Liquids have lower density than solids.

Q.15 Assertion : The rate of evaporation increases with increase in temperature. Reason: Increase in temperature decreases the kinetic energy of the particles.

# So-Science

Make a project of disaster management taking help of disaster management book under the following points-

- 1) Introduction Meaning of disaster management, causes, effects( General)
- Case study Man made disaster (any one) complete information, occurrence, devastation causes, paste the pictures.

3) Relief and Rehabilitation – survival skills Role of government, Role of community
4) Conclusion

TOPICS(Any one) —-Chemical spill, Structural collapse, Transport Disaster, Mining Accidents, Explosion and fires, Nuclear and radiation accidents, oil spill, Terrorism, Pollution panic, Overcrowding, Stampedes.

(Use A-4 size paper, total 15 pages, hand written)

#### **A.I.**

Q-1 Create power point presentation on communication skills and green skills