SHARDA VIDYALAYA, RISALI SECTOR BHILAI SESSION: 2023-24 VACATION HOMEWORK CLASS – IX

S_NO	SUBJECT	VACATION HOMEWORK
1	ENGLISH	 Write short answer questions from the lesson 'The fun they had' and 'The lost child' Prepare the Tense table with two examples for each type of it. Write a diary entry to express your view on summer camp held in the school. Note: Assignment should be done in the notes copy.
2	HINDI	 अपने क्षेत्र में पेड़-पौधों के अनियंत्रित काय की रोकने के लिए वन विभाग के सचिव को पत्र लिखिए। पुस्तक विक्रेता या प्रकाशक से बी.पी.पी. दुद्वारा वसंत भाग-2 और 3 को पुस्तकें मँगवाने के लिए पत्र लिखिए। अपनी रचना प्रकाशित करवाने हेतु 'आज तक' समाचार-पत्र के संपादक को पत्र लिखिए। डेंगू की रोकथाम हेतु स्वास्थ्य अधिकारी को पत्र लिखिए। आपके क्षेत्र में कोई भी अस्पताल नहीं है, इसलिए अपने क्षेत्र में एक अस्पताल बनवाने की माँग हेतु अपने क्षेत्र के जिलाधिकारी को पत्र लिखिए। बिजली के बिल में गड़बड़ी की जानकारी देते हुए बिजली दफ्तर के अधिशासी अभियंता को पत्र लिखिए। " महँगाई और पिसता आम आदमी विषय पर समाज के दो सामान्य व्यक्तियों के बीच का संवाद लिखिए। मोबाइल फोन से बच्चों की पढ़ाई प्रभावित हो रही है इस विषय पर दो महिलाओं में हो रहे परस्पर संवाद को लिखिए। बैडमिंटन खेल पर दो छात्राओं के मध्य संवाद लेखन कीजिए। आतंकवाद पर चिंता प्रकट करते हुए दो मित्रों के मध्य संवाद लेखन कीजिए।
3	MATHS	Portfolio : -To prepare a portfolio on the topic "polynomials". 1) Express $1.32323232-\cdots+0.3535-\cdots$ in p/q form where p and q are integers and $p \neq 0$. 2) Simplify: $\sqrt{45} - 3\sqrt{20} + 4\sqrt{5}$ 3) Write the following rational numbers in decimal form: (i) $327/500$ (ii) $2/13$ (iii) $1/5$ (iv) $5/6$ 4) If $p(x)=x^2-2\sqrt{2}x+1$, then find the value of $p(2\sqrt{2})$ 5) If $(x-2a)$ is a factor of $2x^4-4ax^3+7x^2-13ax-18$, find the value of a. 6) Find the value of p for which $x+p$ is a factor of $x^2+px+3-p$? 7) The coefficient of x^2 in the polynomial $5x^3+3x^2-2x+7=0$? 8) The value of polynomial $5x^3-2x^2+3x-2$ at $x=1$ is ? 9) Divide $6\sqrt{27}$ by $2\sqrt{3}$. 10) On adding $2\sqrt{3}$ and $3\sqrt{2}$, we get ?
4	SCIENCE	Physics:
		Q.1 Write difference between Speed and Velocity? Q.2 Velocity time graph for the motion of an object in a straight path is a straight

line parallel to the time axis.

- a) Identify the nature of motion of the body.
- b) Find the acceleration of the body.
- c) Draw the shape of distance-time graph for this type of motion.
- Q.3 During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light, that is 3×108 m s⁻¹.
- Q.4 An athlete completes one round of a circular track of diameter 200 m in 40 s. What will be the distance covered and the displacement at the end of 2 minutes 20 s?
- Q.5 Joseph jogs from one end A to the other end B of a straight 300 m road in 2 minutes 30 seconds and then turns around and jogs 100 m back to point C in another 1 minute. What are Joseph's average speeds and velocities in jogging (a) from A to B and (b) from A to C?

Chemistry:

Long Answer Type

Question 1.

Describe these

a.Sublimation b.Diffusion c.Plasma d.Brownian motion e.Effect of pressure

Question 2.

What is latent heat? Describe its type with example?

Question 3.

What is evaporation? Describe with example? What are the factors influencing evaporation?

Short Answer Type

Question 4.

Give reasons-

a. The water kept in earthen pot (matka) remain cool?

b.Smell of perfume is spread all over the room.

c.If we put acetone or spirit in our palm feel cool.

d.Gases fill their container completely.

e.An iron almirah is said to be solid.

Question 5.

Differentiate between-

a.Boiling point and melting point

b.Diffusion in solid and diffusion in liquid

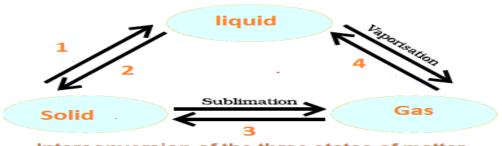
c.Boiling and evaporation

Question 6.

Write the characteristics of particle of matter? Describe any two of it with example and activity?

Question 7.

Write the terms for numbers in the below figure



Interconversion of the three states of matter

a) Convert 35°C to °F and K b) Convert 77°F to °C and K

Question 8. MCQ

- 1.Ravi visited a Natural Gas Compressing Unit and found that the gas can be liquefied under specific conditions of temperature and pressure. The specified conditions are
- (a) Low temperature, low pressure
- (b) High temperature, low pressure
- (c) High temperature, high pressure
- (d) Low temperature, high pressure
- 2. Which is of these is correct?
- a. 1 atmosphere = $1.01 \times 1051.01 \times 105$ Pa.
- b. 1 atmosphere =1.01×10-51.01×10-5 Pa.
- c. 1 atmosphere =1.01×1041.01×104 Pa.
- d. 1 atmosphere =2.01×1052.01×105 Pa.

Question 9.

Assertion (A): In solids, molecules are tightly packed.

Reason (R): Force of attraction between molecules in solids is very weak.

Question 10.

- i) A bowl of water and a bowl of ethanol are kept inside a room. Which bowl will get empty first?
- ii) "Evaporation is a surface phenomenon." Explain.

Biology:

- 1. Draw a neat labeled diagram of compound microscope. Write the function of each part.
- 2. Draw a diagram of- a) Plant cell b) Animal cell c) Prokaryotic cell.
- 3. Difference between:
 - i.Prokaryotic cell and Eukaryotic cell
 - ii.Diffusion and Osmosis
 - iii.Plant Cell and Animal Cell

		 4. If you are provided with some vegetables to cook, you generally add some salt into the vegetables during cooking process. After adding salt, vegetables release water. Explain the mechanism responsible for this. 5. Prepare a model of plant cell or animal cell using common household items. (Use internet for ideas.)
5	SOCIAL STUDIES	 I.). Very Short Answer Type Questions:- 1. In which Hemisphere India is located? 2. What is the Latitudinal extent of India? 3. Which is the Largest and the Smallest State of India area wise. 4. From where does Standard Meridian pass in India?
		 What is responsible government? What dirty practices were used by PRI to win the election in Mexico? What do you understand by room for correction? What are the main activities of the people of village Palampur? Define Working Capital. Give examples. Farmers of which states were the first to use modern farming method in India. II.). Short Answer Type Questions:- Why 82*30' has been selected as the Standard Meridian of India? How has India benefitted from the opening of the Suez Canal? What is the significance of India's central location? What do you understand by principle of Universal Adult Franchise? How does it ensure political equality in a country? Explain with an example hoe popular governments can be undemocratic and popular leaders can be autocratic. Mention three instance which are exceptions of the principle of "one person, one vote, one value."
		7. What can be done so that more non-farm production activities can be started in village? 8. What is land? State any three ways to sustain land. 9. Explain two merits and three demerits of Green Revolution. 10. How can you say that the distribution of land is unequal in Palampur? III.). Long Answer Type Questions: 1. India has had strong Geographical and Historical links with her neighbours. Explain. 2. Mention the Time lag between Arunachal Pradesh and Gujarat? How is a uniform time set for all? 3. How is democracy better than other form of government? Explain giving at least five arguments in favour of democracy. 4. China's famine of 1958-61 was a result of government policies. Elucidate.

		 5. Distinguish between Traditional farming method and Modern farming method. 6. What is the aim of production? State any four requirements for production. 7. What is meant by Green Revolution? Mention some of its features. 8. Green Revolution is associated with loss of soil fertility. In the light of the statement, mention five problem caused by the Modern farming. IV.). Project Work On "Disaster Management"
6	AI	 In OpenOffice Writer, prepare a document on types of effective Communication Skills. To be done in practical file: Prepare a collage by taking colorful pictures of AI enabled devices in daily life by writing few lines about it. Also prepare a document showing the contribution of Kerala and C.G. state in the field of AI.
7	IT	 In OpenOffice Writer, prepare a document on types of effective Communication Skills. To be done in practical file: Prepare a collage by taking colorful pictures of IT applications/ areas and show the difference between IT culture of KERALA state and C.G. state. Also write few lines on it.
8	MARKETING	Project on concept of Market.