D.A.V PUBLIC SCHOOL, S.P. MINES(ECL),CHITRA JHARKHAND SUMMER VACATION HOME ASSIGNMENT

Class - IX

SUBJECT - CHEMISTRY

Full Marks:20

Q.1) Give reason for the following:

(a) Camphor disappears if kept in open air for a few days.

(b) Wet clothes do not dry easily on a rainy days.

(c) We sweat more on humid days.

Q.2) Give reason for the following:

(a) Why does ice floats on water.

(b) Why does a gas fill completely the vessel in which it is kept?

(c) Latent heat of evaporation of two liquids A and B is 100j/kg and 150j/kg respectively, Which one can produce more cooling effect and why?

Q.3) Describe an activity with labelled diagram to illustrate the effect of increase of temperature on ice.

Q.4)(a) Define matter. Name the state of matter in which the forces between the constituent particles are:

(i) Strongest (ii) weakest

(b) Give reason for the following:

(i) A liquid generally flows easily.

(ii) Ice at 0 degree Celsius appears colder to the mouth than water at o degree celsius. Why?

(iii) Doctors advise to put strips of wet cloth on the forehead of a person having high temperature.

Q.5)(a) Define latent heat of fusion. Why is it called latent heat?

(b) How does the presence of impurities affect the boiling and freezing point of a substance?

(c) What is dry ice? How is it stored?

Q.6) (a)List any four properties of a colloid and mention any two properties to which colloids differ from suspension.(b) State what is Tyndall effect? Which of the following solution will show tyndall effect? Starch solution, sodium chloride solution, Tincture iodine, air.

Q.7) (a) How much water should be added to 15 g of salt to obtain 15% solution?

(b) What is the main difference between aqueous and non-aqueous solution?

(c) Why does solution of sodium chloride not show Tyndall effect where as the mixture of water and milk shows?

Q.8) (a) Write one difference between concentration and solubility?(b) What id the effect of temperature on the rate of solubility?

Q.9) List threee difference between metals and non-metals?

Q.10) (a) Give any one point of difference between true solution, colloidal solution and suspension. (b) 20 g of solution chloride is dissolved inn 100 ml of water. How will you test whether the given solution is saturated or unsaturated at the given temperature.

(c) Suggest any one method by which we can increase the solubility of saturated solution.

SUBJECT - BIOLOGY

1 Define a cell.

2. Differentiate between prokaryotic and eukaryotic cell.

3. Draw and label a plant cell.

4. Explain different types of meristematic tissues in plants.

5. Differentiate three types of muscles in animals with diagram.

J.K.Mahanta

SUBJECT - PHYSICS

- 1. Write diff. b/w speed and velocity.
- 2. What is acceleration. Draw a graph b/w velocity and time for different stage cases.
- 3. State and prove the equation of motion.
- 4. To solve exercise of the motion for chapter from NCERT books.
- 5. State and the Newton's law of motion. Write application of Newton's law o motion.
- 6. To solve exercise of the Law of motion chaptper from NECRT.
- 7. What is acceleration due to gravity. Discuss on variation of 'g'.
- 8. Write Archimedes principle and Law of floatation. Write its application.

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Subject - Social Science (Economics)

- 1. Is it important to increase the area ' under irrigation? Why?
- 2. Why are the wages for farm labourer in Palampur less than minimum wages.
- 3. What are the different ways of increasing production on the same piece of land? Use examples to explain.
- 4. How do the median and large farmers obtain capital for farming? How is it different from the small farmers.
- 5. On what terms did Savita get a loan from Tejpal Singh? Would Savita's Condition is different if She could get a loan from the bank at a low rate of interest?

Activity :-

In your region, talk to two labourers Choose either form labourers os labourers working at construction sites. What wages do they get? Are they paid in cash or Kind. Do they get work regularly. Are they in debt?

Subject - Civics

- 1.define the term democracy.(1).
- 2. What does referendom mean? (1)
- 3. What was anc? (1)
- 4. What does appartheid mean? (1)
- 5. Who was nelson mandela? (1)
- 6. Give arguments against democracy. (3)
- 7. Why is democracy considered as best form of government ?(3)
- 8.Describe the significance of the preamble of indian constitution.(4)
- 9. What is constitution? Why do we need a constitution ?(5)

Subject - History

- 1. Which ruler came to power in France in 1774 ?(1)
- 2. What was marseilles ?(1)
- 3. What was duma ?(1)
- 4. What was the new name of saint Petersburg ?(1)
- 5. Who were Bolsheviks ?(2)
- 6. What was Lenins april thesis ?(2)
- 7. Describe the France division of society.(3)
- 8. Which period of france was known as 'the reign of terror' and why?(4)
- 9. Highlight the contribution of french philosophers in the outbreak of the french revolution in 1789.(5)

Project work (history) (05marks)

In a chart paper, make a flow chart of the french society during the late 18th century.

SUBJECT - GEOGRAPHY

CLASS-IX

<u>FM-20</u>

(1 mark question)

- Q.1 Explain the latitudinal and longitudinal extent of India.
- Q.2 Which canal was constructed in 1869?
- Q.3 Which longitude is known as the Standard Meridian of India?
- Q.4 Name the island lying in the South east and South Western part of India?
- Q.5 What is the bhabar? Define.

(2 marks question)

- Q.6 Define a drainage basin and Water Divide.
- Q.7 Differentiate between the Himalayan and Peninsular Rivers.
- Q.8 Write two differences between Western Ghats and Eastern Ghats.
- Q.9 Write a short note on northern planes of India.
- Q.1 O Explain some economic benefits of rivers and lakes.

(2.5 marks question)

- Q.11 Describe different drainage patterns.
- Q.12 Explain the Himalayan Mountainin brief.

Sub:- MATHS

- 1. Find three rational number between -2 and 6.
- 2. Express in decimal form by long division method (a) $\frac{7}{2}$ (b) $\frac{2}{11}$
- 3. Express 0.99999..... in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
- 4. Prove that $\sqrt{3}$ is an irrational number.
- 5. Represent $\sqrt{9.3}$ on the number line. 6. Prove that $\frac{a^{-1}}{a^{-1}+b^{-1}} + \frac{a^{-1}}{a^{-1}-b^{-1}} = \frac{2b^2}{b^1-a^2}$
- 7. If $= 3 + \sqrt[2]{2}$, then find the value of $\sqrt{x} \frac{1}{\sqrt{x}}$.
- 8. If $x^4 + \frac{1}{x^4} = 47$. Find the value of $x^3 + \frac{1}{x^5}$.
- 9. Factorize each of the following expression (a) $(x^2 - 4x)(x^2 - 4x - 1)$ (b) $(x^2 + \sqrt[3]{3x} + 6)$

10. If $a^2 + b^2 + c^2 = 250$ and ab + bc + ca = 3 find a + b + c

- 11. Find the remainder when $p(y) = y^3 + y^2 + 2y + 3$ is divided by y+2.
- 12. Find the value of a, if x-a is a factor of $x^3 a^2x + x + 2$.
- 13. Factorize $x^3 + 13x^2 + 32x + 20$, if it is given that x+2 is its factor.
- 14. Define the following terms.
 - (i) Line segment
 - Concurrent lines (ii)
 - Parallels line. (iii)
 - (iv) Half line.
- 15. Find the measure of an angle which is complement of itself.
- 16. Prove that if a ray stands on a line then the sum of the adjacent angle so formed 180° .

17. In fig of $\frac{y}{x} = 5$ and $\frac{z}{x} = 4$ then find the value of x



- 18. If two parallel line intersected by a transversal prove that the bisectors of the two pairs of interior angle enclose a rectangle.
- 19. In given fig. of PQ perpendicular PS, PQ||SR, $\langle SQR=28^{\circ}$ and $\langle QRT=65^{\circ}$ then find the value of x and y.



20. The enterior angle obtained on producing the base of a triangle both ways are 104^{0} nand 136^{0} . Find all the angles of the triangle.

Project work

- (a) History of the numbers π .
- (b) History of development of number system.

SUBJECT - ENGLISH

- A. Answer the following questions.
 - 1. Why was Margie doing badly in geography?
 - 2. When wars Evelyn's deafness first noticed ?
 - 3. Why did Bismillah Khan refuse to start a Shehnai School in the USA?
 - 4. How is a Shehnai different from a pingi?
 - 5. Why does the lost child lose interest in the things that he had wanted earlier.
 - 6. When does the child realise that he has lost has way? How has his anxiety and insecurity been described?
- B. Read the following extracts carefully and answer the questions that follow:
 - 1. I shall be telling this with a sigh

Somewhere ages and ages hence ;

Two roads diverged in a wood, and I

- I took the one less travelled by,

And that has made all the difference.

- (a) What does the poet tell with a sigh?
- (b) Pick out the phrase from the stanza that conveys 'future time'.
- (c) What do the last two lines convey?
- (d) Why did the poet choose the road less travelled by?

C. Fill in the blanks with the correct form of the verbs given in brackets.

1. Once when I (a) (cross) the road, I (b) (see) a small boy who

(c). (look) quite lost. I (d) (ask) him the name of his parents but he (e) (can) not answer. After waiting for a little while, I (f). (bring) him home and (g) (feed) him.

- 2. I (a) (feel) very sorry to see the pathetic condition of the slums. Children
 - (b) (be) shabbily dressed and were running all over the place. A small girl
 - (c) (get) it from her father. Her father
 - (e) (be) a poor labourer. Her mother always (f)

3. As per the prediction of the Met. Department, it (a). (rain) tomorrow. On hearing this,

the farmers (b) (start) dancing. There (c) (be) no rains in their area for a long time. This weather prediction (d)..... (make) everybody happy.

कक्षा-नौवीं

<u>विषय-हिंदी</u>

1-प्रेमचंद, राहुल सांकृत्यायन, कबीर तथा माखनलाल चतुर्वेदी व्यक्तित्व एवं कृतित्व सचित्र लिखें। (2)

2-छोटी बच्ची को बैलों के प्रति प्रेम क्यों उमड़ आया? (2)

3- किस घटना से पता चलता है कि हीरा और मोती में गहरी दोस्ती थी?(2)

4- लेखक लंकोर के मार्ग में अपने साथियों से किस कारण पिछड़ गए?(2)

5- रस्सी यहां किसके लिए प्रयुक्त हुआ है और वह कैसी है?(2)

6- किस शासन की तुलना तम के प्रभाव से की गई है?(2)

7- अलंकार किसे कहते हैं? अलंकार के कितने भेद हैं? उदाहरण के साथ लिखें।(4)

8- समास किसे कहते हैं? समास के कितने भेद हैं? उदाहरण के साथ लिखें।(4)

SUBJECT - SANSKRIT

- P.S. chille much Vacation How Sud: Sansknit 3. एनेको प्रदनानाम उत्तराषि पूर्णवान्त्रेन लिखन् (ड) कविः कीगा पाहि क्यभति ग एन निर्धनाभाः वहाभाः हा सा रामरणानी न्यभ डरिम कीर्डी f. Ja अक्तिमार नाम नगर कुल विमादि 10.1 (3.) - स्तिदेन रि विन्दार्घ जीम्रावाहन अभिवित्रवान आ वि प्रति उप एवं अनु उप प्रत्रोग करंदी दे दी दावद बनाएं (2.) 31 पोंची ' लखारी' में सिरिवर 1 (3) 46 44 3 र्भाजना जाय एवं लभए प्रसम् dral 31 70- 10 2164 -112 442 30