



DAV Public Schools, Bhagalpur
Home Assignment for summer vacation (2019-20)
Class : X

Subject: English

1. Write the summary of the poem 'Dust and Snow' and 'Fire and Ice'.
2. Write an article on 'Racial discrimination', based on your reading the chapter 'Nelson Mandela'
3. Combine the following sentences using relative pronoun.
 - a. I bought a pen.
It was stolen.
 - b. My mother is a very good cook.
She has been awarded by Sanjeev Kapoor.
 - c. I reached the railway station .
My pocket was picked there.
 - d. Mr R.Gupta is a very good teacher .
His contribution in the field of education can't be forgotten.
 - e. Ram is my brother .
He lives in America.

Project: Write a descriptive report on world-wide struggle against apartheid.

Subject: Hindi

परिभाषा एवं भेद उदहरण सहित

1. संज्ञा
2. सर्वनाम
3. क्रिया
4. विशेषण
5. क्रिया विशेषण

निबंध -

क) कटते वन: घटते जन

ख) स्वच्छ पेयजल की आवश्यकता

पत्र- क्षेत्र की गंदगी के संबंध में स्वास्थ्य अधिकारी को पत्र
परियोजना कार्य:-

बच्चों की दुनिया- पहले की और आज की

Subject: Mathematics

Project - Discuss the three conditions for consistency by making a proper table. Consider three equations of each type and draw their graphs as intersecting parallel and coincident lines.

HHW - Solve Ex-2.4 and Ex-3.7 from your text book.

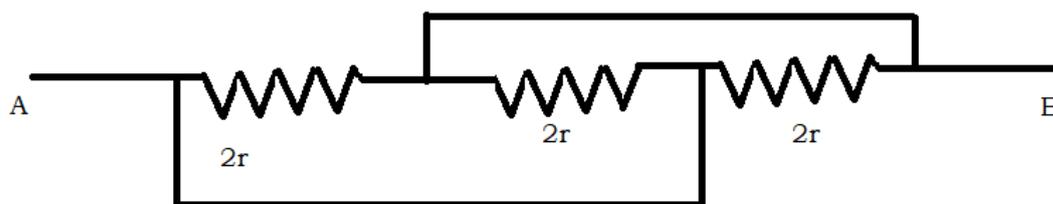
Extra Questions

- Find the largest positive integer that will divide 122, 150 and 115 leaving remainders 5, 7, 11 respectively.
- Prove that $\sqrt{11}$ is irrational number. Use it to prove $3 - \frac{7}{2\sqrt{11}}$ irrational.
- Check whether 18^n can end with the digit 0 for any natural number n .
- If $p = a^3b^2$ and $q = ab^3c^2$, a, b, c being prime numbers, then find HCF and LCM of p and q .
- Express 37.28642 in the form of $\frac{p}{q}$.
- If the HCF of 65 and 117 is expressed as $65m - 117$, find m .
- Show that one and only one out of $n, n+4, n+8, n+12$ and $n+16$ is divisible by 5 when n is any positive integer.
- Give an example of a pair of irrational numbers whose
 - Sum is rational
 - Difference is rational
 - Product is rational
 - Quotient is rational
- Obtain all the other zeroes of $x^4+x^3-16x^2-4x+48$ if two of its zeroes are 2 and 4.
- If one zero of $(9+5)x^2 + 13x + 6a$ is reciprocal of the other, find the value of a . *Type equation here.*
- If α and β are zeroes of $3x^2-2x-7$ then evaluate $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$
- Find a quadratic polynomial with zeroes $3+\sqrt{2}$ and $3-\sqrt{2}$
- If $6x^4 + 8x^3 + 17x^2 + 21x + 7$ is divided by $3x^2+4x+1$, the remainder is $9x + b$, find a and b .
- Find if $x^4 + 10x^3 + 25x^2 + 15x + k$ is exactly divisible by $x + 7$.
- If α, β and γ are the zeroes of $x^3 - px^2 + qx - r$, then evaluate $\frac{1}{\alpha\beta} + \frac{1}{\beta\gamma} + \frac{1}{\gamma\alpha}$
- If sum of the zeroes of $24x^3 - 2ax^2 + 2ax - 6$ is $\frac{23}{12}$, then find the value of a .
- Solve $4x - 3y = 6$ and $7x + 3y = 27$ graphically. Find the coordinate of the vertices of triangular region formed by these lines and (i) y -axis (ii) x -axis. Calculate their areas and compare them.
- Solve for x and y :
$$\frac{3(a+b)}{x+y} - \frac{2(a-b)}{x-y} = 1$$
$$\frac{8(a+b)}{x+y} + \frac{7(b-a)}{x-y} = 1$$
- In a bag containing white and red balls, half the number of white balls is equal to one third of the number of red balls. Twice the total number of balls exceeds three times the number of red balls by 8. How many balls of each type does the bag contain?
- Find the value of K for which the pair of linear equations $(3k+1)x + 5y - 2 = 0$ and $(k^2 + 1)x + (k-2)y - 5 = 0$ have no solution.
- Solve for x and y :-
$$a(x+y)+b(x-y)-(a^2-ab+b^2)=0$$
$$a(x+y)-b(x-y)-(a^2+ab+b^2)=0$$
- Solve for x and y :-
$$17x + 31y = 127$$
$$31x + 17y = 113$$
- Solve by cross multiplication method:
$$3x + 5y - 12 = 0 \text{ and } 3x - 5y + 18 = 0$$

24. A motor boat takes 6 hours to cover 100km downstream and 30 km up stream. If the motor boat goes 75 km downstream and returns back to the starting point in 8 hrs, find the speed if the boat is still water and the speed of the stream.
25. The population of a town is 50,000. In a year the males increased by 5% and the females increased by 3% and the population increased to 52020. Find the number of males and females in the town a year ago.

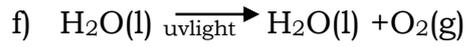
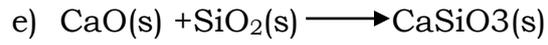
HHW/Summer vacation/SCIENCE/Physics/2019-20

1. State and Explain Ohm's laws. Plot a graph between V-I for calculating resistance.
2. State and prove Joules law of heating. Write any three appliances which is based on applications of heating effect of current.
3. Two wires of Copper (Cu) and Aluminium (Al) have the same lengths and resistances. Given relative densities of Cu and Al as 8.9 and 2.7. The resistivities of Cu and Al are 1.7×10^{-8} ohm meter and 2.6×10^{-8} ohm meter respectively. Compare the masses of Cu and Al respectively.
4. Two room heaters are marked 220 V, 500 W and 220 V and 800 W. If the heaters are connected in series and the combination is connected to 220 V dc supply. Out of these two heaters which one will produce more heat and why?
5. What is the equivalent resistance between points A and B in the given figure.



HHW/Summer vacation/SCIENCE/Chemistry/2019-20

1. What happens when zinc granules are treated with dilute solution of H_2SO_4 , HCl and O_3 $NaCl$ and also write the chemical equation involved if reactions occur.
2. Balance the following Chemical Equations and Identify the type of chemical reaction.
 - a) $H_2O(s) \xrightarrow{\text{Heat}} H_2(g) + O_2(g)$
 - b) $HgO(s) \xrightarrow{\text{Heat}} Hg(l) + O_2(g)$
 - c) $Na(s) + S(s) \longrightarrow Na_2S(s)$
 - d) $TlCl_4(l) + Mg(s) \longrightarrow Tl(s) + MgCl_2(s)$



3 Define corrosion . what name is given to corrosion of iron? name the colour of coating on silver and copper articles when exposed to air.

HHW/Summer vacation/SCIENCE/Biology/2019-20

1. Explain the process of digestion of food in mouth, stomach and small intestine in human body.
2. Draw the respiratory system of the human being and describe the mechanism of breathing in human.
3. Name the respiratory organs in the following
Fish, bird and earth worm
4. What is stomata. Mention the distribution of stomata in dicots, monocots and submerged aquatic plants
5. Write the function of following in digestive system: Bile and HCl
6. Experiment to show that human breath CO_2

विषय: – संस्कृतम्

1. पाठ— 1 तः 3 पर्यन्तं सर्वाणि पाठ्यक्रमस्थितानि व्यंजनसन्धियुक्तानि पदानि, प्रश्ननिर्माणानि, तत्पुरुष-बहुव्रीहियुक्तानि समस्तपदानि च चित्वा लिखत।

2.पाठ – 1 शुचिपर्यावरणम् इति कवितां स्मृत्वा शुद्धरूपेण सुन्दरैः अक्षरैः लिखत।

3.मंजूषास्थितानां शब्दानां सहायतया पंच-पंचसंस्कृतवाक्यानि रचयत। (शीर्षकं दृष्ट्वा)

क. विषयः वृक्षा अस्माकं मित्राणि

मंजूषा-वृक्षाः, सत्पुरुषाः, परोपकारम्, पक्षिभ्यः वासः, फलानि, छाया, पुष्पाणि, गृहाणां कृते काष्ठम्, आतपं, सहन्ते, पथिकाः, विश्रामं, सम्यक् दृष्टिः, भूमेः संरक्षणम्

ख. विषयः -साक्षरतायाः लाभाः

मंजूषा- अक्षरज्ञानम्, जनानाम्, स्वहस्ताक्षरम्, आवेदपत्रम्, नियुक्तिपत्रम्, राशिपत्रम्, पठितुं शक्यते, कोऽपि, वंचितुं, समर्थः, सर्वकारसमर्थितं, जनान्दोलनम्, वर्तते, ज्ञानपूर्णग्रन्थाणां, पठने, चरित्रशिक्षणे, आदर्शशिक्षाग्रहणे।

4. संस्कृते अनुवादकार्यं कुरुत-

मैं पत्र पढ़ूंगा। वे सब गांव जाएंगे। सोहन राम के साथ विद्यालय गया। तुम कब घर जाओगे? सीता रोटी पकाएगी। हमलोग कल घर गये थे। तुमदोनों किस वर्ग में पढ़ते हो? राम आज विद्यालय जाएगा। बालक सब कल घूमने के लिए जाएंगे। तुम किस विद्यालय में पढ़ते हो? सभी छात्रों में राम श्रेष्ठ है। इस समय वायुमंडल प्रदूषित है। प्रकृति के निकट ही वास्तविक सुख है।

5.मतुप् ,ठक्,त्व प्रत्ययान् संयोज्य पंच-पंचवाक्यानि लिखत।

6. वाक्यानि शुद्धं कुरुत- अहं पत्रं लिखति।मोहनः ग्रामः गच्छति। छात्रौ भोजनं कुरुथः।ते विद्यालयं गच्छथ।वयं जलं पिबावः।बालिकाः गीतं गायति। आवाम् आम्राणि खादामः।सः कविता पठति। ताः फलस्य खादन्ति। सोहनं नगरं गच्छति। रमा लता पश्यति।

7.पाठ -3 इत्यस्य अन्वयं भावार्थं च स्मृत्वा लिखत।

8. सुश्रुतसंहिता विषये एकं निबन्धं लिखत।

GEOGRAPHY

1. Classify the resources and explain all.

2. Explain the different types of soil.
3. Explain the factors affecting the formation of soil.
4. What steps should be taken to control soil erosion.

ECONOMICS

1. What is mortality rate?
2. What is average income?
3. Why is sustainability important for development?

HISTORY

1. Explain following terms:
 - a. Absolutist
 - b. Utopian
 - c. Suffrage
 - d. Conservatism
 - e. Ideology
 - f. Allegory
 - g. Marianne
 - h. Germania
2. Short notes:
 - a. Giuseppe Mazzini
 - b. The Greek war of Independence
 - c. Frankfurt parliament
 - d. Romantic Imagination and National feelings
3. Briefly trace the process of:
 - a. German unification
 - b. Unification of Italy
 - c. Napoleonic code
4. Why did nationalist tension emerge in the Balkans.
5. What steps did the French revolutionaries take to create a sense of collective identity among the French?

CIVICS

1. Define the following:
 - a. Ethnic
 - b. Wallonia region
 - c. Majoritarianism
2. What was the act of 1956 of Sri Lanka?
3. Why is power sharing desirable?
4. What are different forms of power sharing?
5. What is coming together federalism?
6. What is holding together federalism?
7. How is federalism practiced in India?

Subject: **Computer**

1. Holiday Homework cum Project- Write the HTML code and its output (Page-125-130 any 10) in Computer Notebook. Printout of the output should be taken and pasted in Holiday Homework copy.

Note: Subjects Which are not in list updated , update shortly.