



KRISHNA PUBLIC SCHOOL, DURG

Summer Vacation Homework - 2020-21

Class - X

Subject : English

A. Answer the following questions in 30-40 words -

1. "The only thing the earth needed was a downpour." Why was a rain so much expected by Lencho ?
2. Except a rain, everything went well with Lencho. What all went well with Lencho.
3. How did Lencho feel when it began to rain ?
4. What went against Lencho's calculations.
5. Was Lencho surprised to find a letter for him with money in it .
6. What promise does Mandela make in the beginning of opening of his oath taking speech ?
7. What did freedom mean to Mandela in his Childhood ?
8. What do you understand by Apartheid ?
9. What does Mandela think about the oppressor and the oppressed.
10. What mood of the poet is reflected in the poem ? "The Dust of Snow".
11. What does the poet want to convey through the poem "Dust of snow".
12. "And saved some part of a day. I had rued". Explain.
13. What message does the poet want to convey through the poem "Dust of Snow".
14. Where was the poem and what happened to him ?

B. Letter Writing -

- a) You are Rajesh/Rashmi of 114, Raj Nagar Heights Jaipur. Write a letter to the Director of M/S Capital Tours and Travels making an inquiry about a one week long tour to the religious places of south India that you wish to go on with your family.
- b) You are Mahima/Mohan of Sector 26, Chandigarh. Write a letter to the Editor of the newspaper complaining about the nuisance of stray dogs in your locality.

Subject : Hindi

1. अनुच्छेद लिखिए -
 - क) ग्लोबल वार्मिंग मनुष्यता के लिए खतरा
 - ख) नर हो न निराश करो निराश करो मन को
 - ग) मधुर वाणी
2. सूचना लिखिए -
 - क. गाँधी जयंती के अवसर पर आपके विद्यालय में स्वच्छता अभियान चलाने का निर्णय लिया है। इसकी सूचना आलेख तैयार कीजिए।
 3. प्रतिदिन 5 मुहावरे लिखकर अर्थ व वाक्य में प्रयोग कीजिए।
 4. अपने जीवन का उद्देश्य व प्राप्त करने के प्रयास लिखिए।

Subject : Sanskrit

ACTIVITY - Prepare a project on "Euclid" under the following subheadings.

- * Euclid's Picture
- * Euclid's contributions
- * Euclid's elements
- * Conclusion.
- * Euclid's biography
- * Euclid's Achievements
- * Euclid Quotes

Subject : Social Studies

Very Short Answer Questions -

1. Who wrote the book 'Small is Beautiful'?
2. In which part of India excessive irrigation is a major cause of land degradation?
3. What is the importance of Rundtland commission report ?
4. Mention the reason due to which red soils look red.
5. Where was the first international earth summit held ?
6. What is meant by HDI rank ?
7. Why is per capita income calculated in the US dollars ?
8. Why do different people have different development goals ?
9. What are the development goals of prosperous farmers from Punjab ?
10. Which organization publishes the Human Development Report ?
11. What are leguminous crops ?
12. Name any two crops that are grown on shifting cultivation.
13. Which crop is used as food and fodder ?
14. Name the three cropping seasons of India.
15. Of which crop India is the largest producer as well as the largest consumer ?
16. Fishing is a primary activity. Give reason.
17. Why tertiary sector is also termed as service sector ?
18. Mention the advantage of accounting final goods in calculation of GDP.
19. Which sector of economy in India bears most of the workforce?
20. What are intermediate goods ?

Short Answer Questions -

1. Explain the interdependent relationship between nature, technology and institutions.
2. List the problems caused due to the indiscriminate use of resources by human being.
3. Suggest some ways to solve the problems of land degradation.
4. Explain any three limitations of per capita income.
5. How are countries classified by World Development Report ?
6. What are the efforts made by the government to modernize agriculture in India?
7. What are the four important fibre crops of India ? Describe any one of them.
8. Why are only final goods and services included while calculating national income ?
9. How can more employment be created in rural areas ? Suggest some measures.
10. How are the three sectors of economy interdependent ?

Long Answer Questions -

1. Explain the classification of resources.
2. Distinguish between developed countries and developing countries.
3. Explain the favourable temperature, rainfall and soil conditions required for the growth of tea and coffee. Name the leading tea and coffee producing states.

4. Explain the features of organized and unorganized sector.
Read thoroughly the chapter of History 'Nationalism in India'
Map Work - On an outline political map of India, mark the following -
1. Indian National Congress Sessions : (History)
 - a) Calcutta (Sep.1920)
 - b) Nagpur (1920)
 - c) Madras (1927)
 2. Major Soil Types (Geog. Ch.1)
 3. Major areas of Rice and Wheat (Geog. Ch.4)
 4. Largest/Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute (Geog. CH.4)

NOTE - Do in four separate maps.

Subject : Science

1. List some of the characteristics of a balanced chemical equation ?
2. What do you mean by a balanced chemical equation ? Write the steps in balancing of a equation ?
3. How can you make a chemical reaction more informative ?
4. How many types of chemical reaction are there explain them in brief and give examples for each ?
5. How many types of decomposition reaction are there ? Explain them with the help of reactions and draw figure also ?
6.
 - a) What is a precipitation reaction, give some examples.
 - b) Define endothermic and exothermic reaction ? Give some examples also.
7. What is a redox reaction ? Explain how oxidation and reduction takes place with the help of an example and mention the oxidising and reducing agents involved ?
8.
 - a) What is rancidity ? Write some steps to prevent rancidity ?
 - b) What do you mean by corrosion ?
 - c) Why chips packets are flushed with nitrogen gas ?
9. **A) Balance the following equation -**

a) $CO_2 + H_2O \rightarrow C_6H_{12}O_6 + O_2$	b) $SiCl_4 + H_2O \rightarrow H_4SiO_4 + HCl$
c) $Al + HCl \rightarrow AlCl_3 + H_2$	d) $Na_2CO_3 + HCl \rightarrow NaCl + H_2O + CO_2$
e) $C_7H_6O_2 + O_2 \rightarrow CO_2 + H_2O$	f) $Fe_2(SO_4)_3 + KOH \rightarrow K_2SO_4 + Fe(OH)_3$
g) $Ca(PO_4)_2 + SiO_2 \rightarrow P_4O_{10} + CaSiO_3$	h) $KClO_3 \rightarrow KClO_4 + KCl$
i) $Al_2(SO_4)_3 + Ca(OH)_2 \rightarrow Al(OH)_3 + CaSO_4$	j) $H_2SO_4 + HI \rightarrow H_2S + I_2 + H_2O$

B) Balance the following equations after writing them as molecular equations

- a) Sodium + Nitrogen -> Sodium nitride
- b) Aluminum + Chlorine -> Aluminum chloride
- c) Iron (III) oxide + Hydrogen -> Iron + Water
- d) Phosphorous + oxygen -> Phosphorus pentoxide

C) State what type of reaction the following are -

- a) Splitting of water into hydrogen and oxygen
- b) burning of hydrogen in air
- c) Action of iron with copper sulphate solution
- d) Action of heat on calcium carbonate
- e) Treating silver nitrate with hydrochloric acid

10. A) Write balanced equation by predicting the products of the following reactions Include the physical state of each element or compound.
- Phosphorus burn in chlorine to form phosphorus pentachloride.
 - A single - displacement reaction of calcium metal with a nitric acid solution
 - Burning of natural gas.
 - The process of respiration.
 - When a green iron salt is heated strongly, its color finally changes to black and odour of burning sulphur is given out

B. Balance the following equations

- | | |
|---|---|
| i) $KClO_3 \rightarrow KCl + O_2$ | ii) $H_2SO_4 + NaOH \rightarrow Na_2SO_4 + H_2O$ |
| iii) $H_2O_2 \rightarrow H_2O + O_2$ | iv) $Na_2CO_3 + HCl \rightarrow NaCl + NaOHCO_3$ |
| v) $Mg + N_2 \rightarrow Mg_3N_2$ | vi) $Fe + H_2O \rightarrow Fe_3O_4 + H_2$ |
| vii) $MnO_2 + Al \rightarrow Mn + Al_2O_3$ | viii) $Si_2H_6 + H_2O \rightarrow Si(OH)_4 + H_2$ |
| ix) $NH_3 + O_2 \rightarrow NO + H_2O$ | x) $B_4H_{10} + O_2 \rightarrow B_2O_3 + H_2O$ |
| xi) $Al + CuCl_2 \rightarrow AlCl_3 + Cu$ | xii) $Ca(OH)_2 + H_3PO_4 \rightarrow H_2O + Ca_3(PO_4)_2$ |
| xiii) $Na_2O_2 + H_2O \rightarrow NaOH + O_2$ | xiv) $BF_3 + H_2O \rightarrow HF + H_3BO_3$ |
| xv) $NH_3 + CuO \rightarrow Cu + N_2 + H_2O$ | xvi) $Ca(OH)_2 + H_3PO_4 \rightarrow H_2O + Ca_3(PO_4)_2$ |
| xvii) $Na_2O_2 + H_2O \rightarrow NaOH + O_2$ | xviii) $BF_3 + H_2O \rightarrow HF + H_3BO_3$ |
| xix) $NH_3 + CuO \rightarrow Cu + N_2 + H_2O$ | xx) $NH_4NO_3 \rightarrow N_2O + H_2O$ |
| xxi) $P_4O_{10} + H_2O \rightarrow H_3PO_4$ | xxii) $HIO_3 \rightarrow I_2O_5 + H_2O$ |
| xxiii) $As + Cl \rightarrow AsCl_5$ | |

c) Write the balanced chemical equation of the following and identify the type of reaction in each case :

- Potassium bromide (aq) + Barium iodide (s)
 - Zinc carbonate (s) \rightarrow Zinc oxide (s) + Carbon dioxide (g)
 - Magnesium (s) + hydrochloric acid (aq) \rightarrow Magnesium chloride (aq) + Hydrogen (g)
- Name the steps involved in various phases of photosynthesis.
 - How does a saprophyte obtains its food, define nutrition.
 - a) How is food ingested in amoeba, mention steps and draw a diagram in support of your answer ?
 - a) How amoeba and other unicellular organism get rid of their waste ?
b) What is the difference between autotrophic and heterotrophic mode of nutrition ?
 - Define the term anabolism, catabolism and metabolism ?
 - What do you mean by life processes. Mention the four basic life processes.
 - Draw well labelled diagram of (a) human alimentary canal (b) human respiratory system (c) human excretory system.
 - How many types of heterotrophic nutrition are there? Mention them in brief with examples.
 - Write an experiment to show that chlorophyll is necessary for photosynthesis, draw diagram in support of your answer ?
 - a) What is stomata, what is the role of opening and closing of guard cells in plants?

b) Explain the step by step process of digestion in human alimentary canal ?

Physics -

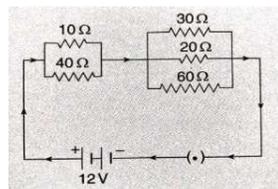
1. In an experiment to study the relationship between the Potential Difference across the resistor and the current through it, a student recorded the following observation

V	2	3	4.5	5	6
I	0.08	0.12	0.15	0.20	0.24

Find in which of the following sets of reading, the trends is different from others and must be corrected. Correct the reading and find the resistance and plot V-I graph for given set of values after correction.

2. In the circuit given 5 resistance of $10\ \Omega$, $40\ \Omega$, $30\ \Omega$, $20\ \Omega$, $60\ \Omega$ are connected as shown in figure to 12 V battery. Calculate

- (i) Total Resistance in circuit
- (ii) Total Current Flowing in the circuit

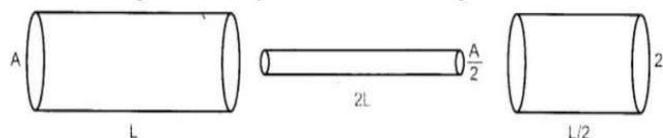


3. Draw the circuit diagram for a circuit consisting of a battery of 5 cells of each 2 volts, 5 ohms resistor, 10 ohms, 15 ohms and ammeter and plug key all connected in series. Also connect a voltmeter to record the potential difference across the 15 ohms resistor and calculate.

- i) The electric current passing through the above circuit
- ii) Potential difference across 5 ohms resistor when key is closed.

4. Which uses more energy a 250 W TV set in 1 hour or a 1200 W toaster in 10 minute ?

5. The figure shows the three copper conductors. Using the dimension given find in which these resistance will be highest



Subject : Computer

1. Write a short note on Wi-Fi.
2. What are different types of Networks? Explain with Diagram
3. What are Network topologies? Explain with diagram.
4. What are the types of Instant Messaging?
5. What are cookies in Computer system used for?
6. What are the different disabilities that effect computer usage?
7. Define the terms :
 - a) E- Commerce
 - b) Blog
 - c) Windows firewall

8. Make a power point presentation on Uses of Computer in Education sector with 15 slides in a presentation. Also use the power point tool to make the presentation more effective and attractive. You can take help of internet to support your presentation. It should be submitted in pen drive whenever school reopens.
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Note :-

1. There will be no online session from 1stMay 2020.
2. The school will reopen as per the Government directives.
3. All the summer vacation H.W. must be done in class work copy.
4. Be regular in your studies.
5. As the popular saying goes “Prevention is better that cure” so here is a list of preventive measures to keep you safe from Corona Virus
 - Wear face mask
 - Wash your hands regularly
 - Ignore handshake

Stay Safe Stay Healthy
