ENGLISH

1. Watch English news daily in order to equip yourself with the information and facts to be used in as content in writing skills.

2. Smartphone is one of the most important means of communication today. But it has also become a nuisance for some. Write an article on the same in around 120 words. You are sneh/sneha of class X. You may take the help from the following inputs.

   > Important means of communication - connects a person socially - keeps people updated, has become a virtual companion - many disadvantages - disrupts peace of mind - a constant source of disturbance - excessive usage leads to mental health disorder - cause of deadly accidents on road - biggest distractoion for students - should be used wisely - use to be minimize

3. Write a story on the basis of the cue given below.
   It was karl's first day at the new school. He was feeling very nervous. He stood in a corner and watched the students laughing and talking excitedly. When he saw four senior students advancing towards him, he...

4. Describe the following words in 300 words.
   a. Apartheid (refer 'Nelson Mandela : A Long Walk To Freedom')
   b. Humanity as a religion (refer 'A Letter To God')
   c. Hatred and desire v/s Love and Compassion (refer 'Fire and Ice')

5. Maintain a dictionary by reading an English newspaper and watch your favorite show. Take note of the new Words (atleast 5) that you see and hear and copy those words down in your notebook. Refer to the internet and learn what those words means.

6. Make a collage using English Newspaper cuttings on any of the TWO followings topics :
   i. How to be healthy while being at home
   ii. How to keep yourself motivated during the pandemic
   iii. How social media is playing a vital role in our lives
   iv. Technological advances happening in the world

7. Write a detailed Movie review of any movie of your choice.

8. Solve Workbook Unit 1 and 2.

HINDI

प्रश्न 1. कबीर की साखी में 'कस्तूरी' का वर्णन किया गया है ।इसके विषय में जानकारी प्राप्त कीजिए तथा लिखिए।

प्रश्न 2. 'मीठी वाणी' का महत्व बताते हुए एक अनुच्छेद लिखिए।

प्रश्न 3. पढ़ाई और खेलकूद साथ-साथ चल सकते हैं - पाठ 'बड़े भाईसाहब' के आधार पर अपने विचार लिखिए।

प्रश्न 4. निंदक का महत्व स्पष्ट कीजिए।

प्रश्न 5. क्या कबीर दास एक समाज सुधारक थे? जानकारी प्राप्त कीजिए तथा लिखिए।

प्रश्न 6. हिंदी साहित्य के प्रसिद्ध लेखक प्रेमचंद की कहानियां 'मानसरोवर' के आठ भागों में संकलित हैं। उन कहानियों को पढ़िए तथा अपनी पसंद की किसी एक कहानी को लिखिए।

प्रश्न 7. रचना के आधार पर 10 सरल वाक्य लिखिए तथा उन्हें संयुक्त और मिश्र वाक्य में भी रूपांतरित कीजिए।

प्रश्न 8. भक्ति काल के कवि किन्हीं पांच कवियों जैसे - कबीर दास, मीराबाई, तुलसीदास आदि के विषय में जानकारी प्राप्त कीजिए तथा एक परियोजना (प्रोजेक्ट) तैयार कीजिए।

MATHS

1. If (x + a) is a factor of $2x^2 + 2ax + 5x + 10$. Find a.
2. Write the zeroes of the polynomial $x^2 + 2x + 1$.
3. Write the zeroes of the polynomial $x^2 - x - 6$.
4. Write a quadratic polynomial, the sum and product of whose zeroes are 5 and –2 respectively.
5. If one zero of the polynomial $(a^2 - 9) x^2 + 13x + 6a$ is reciprocal of the other, find the value of 'a'.
6. If the product of zeroes of the polynomial $ax^2 - 6x - 6$ is 4, find the value of 'a'.
7. Find all the zeros of the polynomial $x^4 + x^3 - 34x^2 - 4x + 120$, if two of its zeroes are 2 and – 2.
8. Represent the linear equations on a graph: 4x-3y+4=0, 2x+3y-24=0.
9. Check whether the decimal expansion is terminating or non terminating repeating of the following rational numbers.
7/180   (b) 15/350
10. The LCM and HCF of two numbers are 240 and 12 respectively. If one of the numbers is 60, then find the other.
Lab Activities-
Lab Activity-1 Page no-1 to 4
Lab Activity-2 Page no-5 to 11
Lab Activity-3 Page no-12 to 19
Note- All written work must be done in Subject Test Register and Lab Activities must be done in Practical file.
Revise Chapter-1,2 in Test register.

SOCIAL STUDIES

Make a booklet of Map work
On the political map of India mark the following
(a) Major Soil types
(b) Dams
Salal, Sardar Sarova, Bhakra Nangal, Hirakud, Tehri, Nagarjuna Sagar, Rana Pratap Sagar,
Tungabhadra

© Agriculture

Major areas of Rice and Wheat

Largest /Major producer States of Sugarcane, Tea, Coffee, Cotton and jute

(c) Iron Ore mines

Mayurbhanj, Bellary, Durg, Kundremukh, Bailadila

(d) Coal Mines

Raniganj, Bokaro, Talcher, Neyveli

(e) Oil Fields

Digboi, Naharkatia, Mumbai High, Bassien, Kalol

(f) Power Plants Thermal

Namrup, Singrauli, Ramagundam

Q2.Which conditions were viewed as obstacles to Economic exchange & growth by the new commercial classes during Napoleon rule?

Q3. Make a project on Consumer Rights.

Q4. How did the Belgium government solve it's ethnic problem?

Q5. How did the Tamils make efforts to gain power in Sri Lanka?

Q6. How had the female figures became an allegory of the nation during 19th century in Europe? Analyse.

Q7. Describe the various party system existing in different countries.

Q8. "Political parties are a necessary condition for a democracy." the statement with example

SCIENCE

CHEMISTRY

What type of chemical reactions take place when:

(a)Limestone is heating?

(b)A magnesium wire is burnt in air?

(c)Electricity is passed through water?

(d)Ammonia and hydrogen chloride are mixed?

(e)Silver bromide is exposed to sunlight?

To balance a chemical equation, can we change the formula of either reactants or products?

Why should a magnesium ribbon be cleaned before burning in air?

If any of the following reactions occurs spontaneously, write the balanced net ionic equation. If not, write no reaction

(a)$Pb + Zn^{2+}$ ___ $Pb^{2+} + Zn$

(b)$Fe + H^+$ ___$Fe^{2+} + H_2$

(c)$Cu + Ag^+$ ___ $Cu^{2+} + Ag$

(d)$Cr + Zn^{2+}$ ___$Cr^{2+} + Zn$

Nickel (II) nitrate is prepared by heating nickel metal with liquid dinitrogen tetroxide. In addition to the nitrate, gaseous nitrogen monoxide is formed. Write the balanced equation.

Why is the amount of gas collected in one of the test tubes in electrolysis of water double of the amount collected in the other? Name this gas.

Write a balanced chemical equation with state symbols for the following reactions:-

i. Solution of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.

ii. Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water.

Prepare a project on acid, base and salts.

PHYSICS

Answers the following questions

State the ohms law.

Derive an expression for equivalent resistance for three resistors having value R1, R2 and R3 when connected in parallel combination.

A piece of wire of resistance R is cut into five equal parts. These parts are then connected in parallel. If the equivalent resistance of this combination is R*, then find the ratio R/R*.

A cable of resistance of resistance 12Ω carries electric power from a generator producing 250 kW at 10,000V. Calculate:

The current in the cable,

The power lost in the cable during transmission, and

The potential difference across the ends of the cable.

Answer the following questions:

Derive an expression for equivalent resistance of a combination of three resistors having resistances R1, R2 and R3 respectively when connected in series.

How can three resistances of 2, 3 and 6 ohms be connected so as to give a total resistance of 1 ohm? Justify your answer.

Calculate the numbers of electrons constituting one coulomb of charge.

Describe an experimental setup for ohm's law.

A current of 0.5 A is drawn by a filament of an electric bulb for 10 minutes. Find the amount of electric charge that flows through any point of the circuit.

Show that one ampere is equivalent to a flow of 6.25×10^{18} elementary charges per second.

In the Bohr model of hydrogen atom, the electron revolves around the nucleus in a circular path of radius 5.1×10^{-11} m at a frequency of 6.8×10^{15} revolutions per second. Calculate the equivalent current.
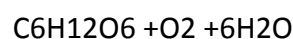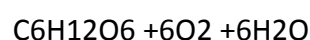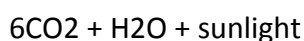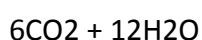
Prepare a working model on either electricity or sources of energy.

BIOLOGY

LIFE PROCESSES

Q.1. Multiple Choice Questions

1. Which of the following is the correct equation for the summary of
    photosynthesis

$6CO_2 + 12H_2O$ $C_6H_{12}O_6 + 6O_2 + 6H_2O$

$6CO_2 + H_2O + sunlight$ $C_6H_{12}O_6 + O_2 + 6H_2O$

$6CO_2 + 12H_2O + chlorophyll + sunlight \quad\quad C_6H_{12}O_6 + 6O_2 + 6H_2O$

$6CO_2 + 12H_2O \; chlorophyll + sunlight \quad\quad C_6H_{12}O_6 + 6O_2 + 6H_2O$

2. Products of anaerobic respiration in muscles are

Lactic acid and energy

Lactic acid ,carbon dioxide and energy

Lactic acid ,water ,carbon dioxide and energy

Lactic acid , water , and energy

3. Which of the following statements are true about respiration

During inhalation , ribs move inward and diaphragm is raised

In alveoli exchange of gases takes place Ie oxygen from blood into alveolar air l

Haemoglobin has greater affinity for carbon dioxide than oxygen

Alveoli increase the surface area for absorption of gases

i.   a & d   ii. b & c   iii. a & c iv. b & d

4. The main function of the urinary bladder is to

control the pressure of urine in the urinary bladder

take the urine from the kidney to the urinary bladder

filter blood and remove the urine

connect the parts of the excretory system

Q.2. Assertion and Reasoning

Direction : in the following questions , a statement of assertion (A) is followed by a statement of reason (R) .

Mark the correct choice as :

Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)

Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A)

Assertion (A) is true but reason(R) is false

Assertion (A) is false but reason(R) is true

Assertion: aerobic respiration requires less energy as compared to anaerobic respiration .

Reason : mitochondria is the power house of the cell .

B) . Assertion: human heart is four chambered .

    Reason : vena cava is the only artery that supplies deoxygenated blood to the heart .

C). Assertion: energy is required to carry on different life processes

    Reason : energy is obtained in the form of ATP in mitochondria

Q3. Name the following :

The process in plants that links light energy with chemical energy

Organisms that can prepare food on their own

The cell organelle where photosynthesis occurs

Cells that surround the stomatal pore

Organisms that cannot prepare their own food

An enzyme secreted from the gastric glands in the stomach that acts on proteins

Q4. How are alveoli designed to maximize the exchange of gases?

Q5. Answer as directed

Write two water conducting tissues present in plants ? how does water continuously enter into the root system ?

Explain why plants have low energy needs as compared to animals.

Q6. Describe the processes of urine formation in the kidneys

Q7. Draw a sectional view of the human heart and label the following

    a. The chamber of the heart that pumps out deoxygenated blood .

The blood vessel that carries away oxygenated blood from the heart .

The blood vessel that rece4ives deoxygenated blood from the lower part of our body .

Part that prevents the backward flow of blood .

Q.8 . Prepare a working model on

a) digestive system (roll no. 1 to 10)

b) respiratory system (roll no. 11 to 20)

c) human heart (roll no. 21 to 30)

d) excretory system (roll no. 31 to 40)

COMPUTER APPLICATIONS

Q1 Write T for True and F for False Statements.

1) You should install a genuine antivirus to protect your system from virus attacks.

2) Passwords should only contain lowercase letters.

3) Pop-up windows are created by advertisers.

4) You should keep the family name as a password for your home wi-fi.

5) A computer virus spread through e-mail attachments.

Q2 Multiple choice questions.

a. Who provide us internet

1. TCP

2. ISP

3. FTP

4. HTTP

b. TCP/IP mainly used for:

1. File Transfer

2. Email

3. Remote Login Service

4. All of these

c. URL stands for:

1. Universal Resource Locator

2. Uniform Resource Locator

3. Uniform Radio Locator

4. None of these

d. FTP can be runs on:

1. Unix
2. Linux
3. Dos/Windows
4. All of these

e. Which protocol is used for browsing website?
1. TCP
2. HTTP
3. FTP
4. TFTP

f. Which is not the browser?
1. Internet Explorer
2. Opera
3. Mozilla
4. Google

g. Which is not the search engine?
1. Altavista.com
2. Google.com
3. Facebook.com
4. Yahoo.com

h. Which is the chatting application?
1. Yahoo messenger
2. Google earth
3. You tube
4. None of these

i. Which is the advantage of e-business?
1. Better Service
2. Reduction of cost
3. Reduction of paper work
4. 4. All of these

J In HTTPS 'S' is stands for:
1. Simple
2. Secured
3. Server
4. None of these

Q3 Long answer questions.
1) Differentiate between LAN and WAN?
2) Give the advantages and disadvantages of using Optical fibre in a network.
3) What are the different types of guided media available?
4) What do you understand by mobile computing?
5) What are the different ways in which network security can be implemented?
6) Why is network security important?

Q4 Write the full name of the following

a. CDMA

b. HTTP

c. SMTP

d. DHTML

e. URL

Q5 What is a web page ?

Q6 Name two internet service providers in India .

Q7 Explain the features of E-mail

ART AND CRAFT

1. Make any drawing on still life study (using pencil shading).
2. Make any drawing on still life study (using water colours)
3. Draw your favourite sport for summer vacation.
4. Poster making title is as your wish.