

**Class X**  
**Holiday Homework**  
**Subject- Science**  
**2019-20**  
**Subject- Biology**

1. Write one function each of
  - a) Pepsin
  - b) Trypsin
  - c) Lipase
  - d) Amylase
  - e) Bicarbonates present in bile juice
  - f) HCl
  - g) Saliva
2. With the help of flow chart describes the process of double circulation in human beings.
3. Draw a well labelled diagram of
  - a) Digestive system
  - b) Excretory system
  - c) Respiratory system
4. How can we help in reducing the problem of waste disposal. Define 10% law of energy?
5. Why aquarium needs regular cleaning while it is not required in ponds and lakes?
6. Explain the process of nutrition in amoeba with the help of a labelled diagram.
7. On the basis of structure and function differentiate between
  - a) Arteries and Veins
  - b) Xylem and Phloem

**Subject- Chemistry**

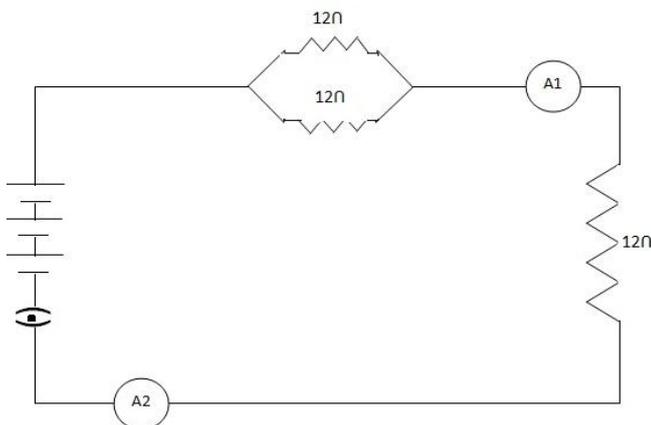
1. Define and write 4 reaction each of
  - a) Displacement reaction
  - b) Double Displacement reaction
  - c) Decomposition reaction
  - d) Redox Reaction
2.
  - a) Explain combination reaction with an activity of quick lime with water.
  - b) Explain decomposition reaction with electrolysis
3. What happens when metal hydrogen carbonates reacts with an acid. Identify the gas produced. Give two confirmatory tests for the gas produced.
4.
  - a) Write the chemical formula for hydrated copper sulphate and anhydrous copper sulphate. Giving an activity to illustrate how these two are inter convertible
  - b) Write chemical name, formula and preparation of Plaster of Paris, Washing Soda, Baking Soda, Bleaching Powder and Sodium Hydroxide.
5. Write a balanced chemical equation for each and classify them
  - a) Lead acetate solution is treated with dilute hydrochloric acid to form lead chloride and acetic acid solution.
  - b) Hydrogen sulphide reacts with oxygen to form sulphur and water.
6. Define corrosion.
  - a) Write the reaction involved in the corrosion of Iron, Silver and copper.
  - b) Write preventive measures of corrosion.
  - c) Define Rancidity. Write its four preventive measures.

## Subject- Physics

1. Define Resistance. Give its S.I unit.
2. Draw circuit diagram for the verification of Ohm's Law.
3. Two electric bulbs rated 200W, 220 V and 100 W, 220 V are connected in parallel to an electric mains 220 V.

Find out the current drawn by bulbs from the mains.

4. Study the following circuit and find out
  - a) Current in 12 ohm resistor
  - b) Difference in the readings of A1 and A2



5. Compare the power used in the 2 ohm resistor in each of the following cases
  - a) A 6 V battery in series with 1 ohm and 2 ohm resistors
  - b) A 4 V battery in parallel with 12 ohm and 2 ohm resistors
6. Derive the expression for electrical power in terms of current and resistance and potential difference and resistance.
7. A copper wire has a diameter of 0.8 mm & resistivity of  $1.6 \times 10^{-8} \Omega\text{-m}$ . What will be the length of this wire to make its resistance of  $12\Omega$ ?

## Subject-Social Science

1. Prepare a project file on the following topics-
  - 1) Consumer Awareness (Section- A, B, C)
  - 2) Social Issues- "Women Empowerment" (Section D, E, F)
  - 3) Sustainable Development (Section G, H)Note- Topic should be explained under the following headings
  - a) Cover page
  - b) Acknowledgment
  - c) Index
  - d) Content-
    - I) Introduction
    - II) Objectives
    - III) Need
    - IV) Role towards society
    - V) Steps for improvement
  - e) Conclusion
  - f) Bibliography

## **SUBJECT ENGLISH**

### **Q.1 Read the passage given below and answer the questions that follow:**

1. The relation between students and politics is one of the vexed questions of the day. There are two classes of people in India—those who believe that students should, as a matter of duty, take part in politics; and those who are of the opinion that they should not. People frequently talk over the matter with me and ask for my opinion, knowing me to be interested in the subject, but I always tell them that their question cannot be answered off-hand.
2. The broadest definition that I think of politics is that it is a science concerned with the means of promoting the general welfare of the state. It is a science (like any other science) with laws which, if brought into operation, produces certain definite effects.
3. Politics has come to mean agitation, constitutional or otherwise, either against certain measures which the government of the country has thought fit to adopt, or in favour of certain measures which the government does not adopt and which the agitator thinks ought to be adopted. Another kind of agitation has come to involve the minds of many—the imputing of bad motives to the opposite party.
4. With this kind of politics, I strongly affirm the opinion that students should have nothing to do. Let me add that I am, by no means, of the opinion that agitation is wrong at all events. For instance, constitutional agitation in which the law is made to work for the agitator and in which he takes advantage of existing forms to secure his ends may not be so counter-productive as long as personalities are carefully avoided, together with the imputation of evil motives. In this way, indeed, the state makes progress.

### **1.1 Attempt any eight of the following questions on the basis of the passage you have read:**

- (i) What is one of the questions regarding politics?
- (ii) What are people's opinions about relation between students and politics?
- (iii) What is the author's view about this?
- (iv) What is the definition of politics according to author?
- (v) How is it compared to science?
- (vi) How has politics come to mean agitation?
- (vii) After seeing the present scenario what is author's opinion?
- (viii) How is agitation sometimes not counter-productive and is beneficial for the state?
- (ix) Find the word in paragraph no.4 which means the same as 'movement'.

### **Q.2 Read the passage given below and answer the questions that follow:**

1. Of course, human activity is chiefly responsible for the increasing problem of global warming. In the last century, the rapid increase in the consumption of hydrocarbon as well as the vigorous expansion of the industries and domestic markets for halocarbons has drastically altered the atmospheric concentration of numerous gases. This has altered the nature's auto-balancing mechanism.
2. As a result, the world is now struck with several environmental problems; including the problems of acid rain, melting of glacial ice, large scale evaporation of water in tropics, increase in cloudiness in higher latitudes and so on. The implications of these changes on human life are likely to be enormous and may cause a series of adverse effects.
3. One of the direct effects of global warming is the altering of the heat budget and its regional variations in the atmosphere, the primary driver of weather systems around the world. The potential impact of warming on the monsoon in India is of serious concern. The warming, though widespread across the country, is more pronounced over northern India.

4. An important effect of global warming on meteorological conditions is an increase in sea surface temperature in the oceans around the subcontinent. Food production and food security, fresh water supply, forest biodiversity, coastal settlements, fishing and more will be adversely affected. India, like most developing countries, is committed to the principle of common responsibility in addressing climate change. India needs to chart multiple strategies to cope with the impending threats of climate change which are additional to the existing environmental stresses.
5. Pursuing a sustainable development model is critical to addressing climate change in India and elsewhere. India should adopt strategies for sustainable development irrespective of the climate change debate. It involves economic growth, social equity and environmental sustainability.

**2.1 On the basis of your reading of the passage, answer any four of the following questions in about 30- 40 word each:**

- (i) How is human activity chiefly responsible for increasing problem of "Global Warming"?
- (ii) What are the problems the world is facing due to "Global Warming"?
- (iii) How has "Global Warming" affected India?
- (iv) How should India plan to cope with the danger of "Global Warming"?
- (v) What is the most remarkable effect of global warming on meteorological conditions?

**2.2 On the basis of your reading of the passage, answer any four of the following:**

- (i) The world is now facing many.....
 

(a) environmental problems	(b) challenges
(c) increase	(d) implications
- (ii) The heat budget and its regional variations in the atmosphere have been caused by.....
 

(a) environment	(b) imbalance
(c) global warming	(d) warming
- (iii) In paragraph no.1, ..... means '**changed**'.
 

(a) balanced	(b) altered
(c) melting	(d) rapid
- (iv) In paragraph no. 3, the synonym of '**noticeable**' is.....
 

(a) potential	(b) warming
(c) strategies	(d) pronounced
- (v) The developing countries are committed to..... climate change.
 

(a) address	(b) addressing
(c) respond	(d) work

3. Write a story in 200-250 words from the outline given below:

A boy was playing in the park. He saw a small sparrow sitting a stone. He went near it, still it didn't fly. He.....

4. Using the input given below, prepare an article on companionship of Books in about 150 words to be read out in the school assembly.
  - Amuses and instructs youth
  - Comfort and consoles in age
  - Treasuries of golden thought
  - Essence of immortality
  - Great writers, poets, leaders, artists still live in books.
5. All parental acts are for the betterment of children. Justify this statement by taking points from the lesson "The First flight".
6. Do you agree that wild animals should be caged? Comment yes or no giving reasons.
7. Love is the basic human value that can transform evil into goodness. How did this value of Anil changed Hari Singh?
8. Revise all the work done in notebook.

**Note: Do holiday homework in a separate notebook.**

## Mathematics

1. Draw the graph of quadratic polynomial  $x^2-7x+12$  and cubic polynomial  $x^3+6x^2+11x+6$ . Also verify the zeros algebraically.
2. To obtain the condition of consistency for a pair of linear equations in two variables by graphically.
3. Derive the following T-values geometrically:  $0^\circ$ ,  $60^\circ$ ,  $30^\circ$ ,  $45^\circ$ , and  $90^\circ$ .
4. Learn and write all formulas and identities of unit I of prescribed syllabus.

(Note: Do all above activities in activity file.)

### विषय—संस्कृतम्

1. समाचारपत्रात् एकं चित्रं स्वीकृत्य (A-4 शीट) पत्रे संश्लेष्य पंचवाक्येषु चित्रवर्णनं क्रियताम्।
2. एकस्य पत्रस्य ( औपचारिक पत्रं वा अनौपचारिक पत्रं ) छायाचित्रं कृत्वा (A-4 शीट) पत्रे संश्लेष्य पत्रस्यपूर्तिं रिक्तस्थानेषु क्रियताम्।
3. 'व्यायामस्य महत्वं' इति विषयं स्वीकृत्य हिन्दी भाषायां दश लघु वाक्यानि लिखित्वा संस्कृतभाषायां वाक्यानाम् अनुवादं क्रियताम्।

### विषय – हिन्दी

4. "सुमित्रानन्द पंत जी कल्पना के सुकुमार कवि है" –स्पष्ट कीजिए।
5. पर्वत प्रदेश में पावस के दृश्यों को कवि ने इन्द्रजाल क्यों कहा है?
6. 'डायरी का एक पन्ना' पाठ में क्या संदेश दिया गया है?
7. समाज में स्त्रियों की भूमिका को नज़रअंदाज नहीं किया जा सकता – डायरी का एक पन्ना पाठ के आधार पर सिद्ध कीजिए।
8. मीराबाई ने जिन भक्तों का उदाहरण देकर अपने कष्टों को हरने की बात कही है उन प्रसंगों का विस्तार से वर्णन कीजिए।
9. अपने आराध्य श्रीकृष्ण के दर्शन पाने के लिए मीरा क्या क्या उपाय करती है?
10. दो मित्रों के बीच पढ़ाई के बोझ से सम्बन्धित संवाद को लगभग 50 शब्दों में लिखिए।
11. खाद्य पदार्थों में होने वाली मिलावट के बारे में मित्र के साथ हुए संवाद को लगभग 50 शब्दों में लिखिए।
12. ग्यारहवीं कक्षा में विषय के चयन से सम्बन्धित माँ एवं पुत्री के बीच संवाद लिखिए।
13. अपने पुराने मकान को बेचने सम्बन्धी विज्ञापन का आलेख लगभग 25 शब्दों में लिखिए।