### APEEJAY SCHOOL, SAKET HOLIDAY HOMEWORK CLASS-X 2020-21

#### **ENGLISH**

#### WRITING SKILLS TASKS:

Q1- You have realized the necessity of education and financial independence of women for their family, society and in turn for the nation. Write a letter to the Editor,'The National Times' highlighting your ideas on the importance of education of women leading to a better status for them.You are Tarun/Taruna, B-7/9, Mall Road,New Delhi

Q2- You are Kashish/Arun of 10, Civil Lines Extension, Chakankyapuri, Agra. The main road leading to your locality has three open manholes causing frequent accidents at night, especially during the rainy season. Write a letter to the chairman of the Municipal Corporation drawing his attention to the problem of the residents.

Q3- Write a letter to the Police Commissioner, New Delhi complaining about the increase in crime rate in the city and asking him to take steps to solve the problem. You are Nitish/Nehal of A-8, Oaks Valley, Vasant Kunj, New Delhi.

Q4- Write a paragraph in about 100-120 words on the topic, 'The Importance of Reading' Or

Write a paragraph in about 100-120 words on the topic,'The benefits of Homeschooling'

Q5- Cultural diversity and unity brings us together as a society. An anthem is a musical composition of celebration usually used as a symbol for a distinct group. Research about the culture of Sikkim and compose an anthem on the basis of their culture, language, history and festivals. The anthem should not exceed 12-15 lines.

Q6- J.K Rowling rightly said,"There's always room for a story that can transport people to another place."Research about the culture, tradition and literature of Sikkim and use your creativity and imagination to weave a wonderful story on any topic on the basis of your research. The story should include the following elements: plot, setting, characters (protagonist/antagonist) and **illustrations** related to Sikkim. It should not exceed 200 words.

1 - सिक्किम पर्यटन विभाग की तरफ से सिक्किम राज्य में पर्यटन को बढ़ावा देने के लिए एक आकर्षक विज्ञापन तैयार कीजिए जिससे देसी और विदेशी पर्यटक यहां के प्रमुख शहर सभ्यता और संस्कृति की तरफ आकर्षित हों और अधिक से अधिक संख्या में यहाँ घूमने आएँ।

2 - गर्मी की छुट्टियों में आप 'नाट्यशाला' संस्था के द्वारा आयोजित की जा रही थिएटर वर्कशॉप में प्रवेश लेना चाहते हैं, निदेशक को 80 से 100 शब्दों में पत्र लिखकर वर्कशॉप की जानकारी मांगिए।

3- दिए गए विषय पर संकेत बिंदु के आधार पर 100 शब्दों में अनुच्छेद लिखिए। इंटरनेट के कमाल

संकेत बिंदु- सुविधा, मुद्दी में दुनिया, समय की बचत

4- सहायक पुस्तिका संचयन की प्रथम कहानी 'हरिहर काका पढ़कर निम्नलिखित प्रश्नों के उत्तर लिखिए।

1-बुजुर्गों को समाज में उचित स्थान मिलना चाहिए ,हरिहर काका कहानी के आधार पर इस विषय पर अपने विचार स्पष्ट कीजिए |

2- हरिहर काका कहानी पारिवारिक एवं धार्मिक पाखंड को उजागर करती है| इस कथन की सत्यता को सिद्ध कीजिए|

3-अंत में हरिहर काका द्वारा ज़मीन के बारे में लिया जाने वाला निर्णय क्या था और वह परिवार के मूल्य को किस परिस्थिति में प्रभावित करता है और कैसे? यह स्थिति हर व्यक्ति को क्या संदेश प्रदान करती है?

5- निम्नलिखित प्रश्नों के उत्तर 30 से 40 शब्दों में लिखिए।

1 बिहारी कवि ने वाहय आडंबरों का विरोध किस प्रकार किया है।

2 'भगवान भक्तों के संकट दूर करते हैं 'यह सिद्ध करने के लिए मीरा ने क्या-क्या उदाहरण दिए हैं?

<u>हिंदी</u>

3 कबीर की किसी साखी के आधार पर बताइए कि कबीर किन जीवन मूल्यों को मानव के लिए आवश्यक मानते हैं?

4 फेल होने के बाद बड़े भाई साहब के व्यवहार में क्या अंतर आ गया?

5 डायरी का पन्ना पाठ के माध्यम से लेखक ने य्वा पीढ़ी को क्या संदेश दिया है?

नोट -प्रश्न 1 को A 4 आकार की शीट में कीजिए।

प्रश्न 2 से 5 तक का कार्य हिंदी कार्य पुस्तिका में कीजिए।

# <u>संस्कृत</u>

- सिक्किम राज्य के बारे जानकारी एकत्र कर संस्कृत भाषा में वर्णन कीजिए तथा संबंधित चित्र भी चिपकाईये |
- 2 रचनात्मक कार्य के अन्तर्गत मञ्जूषा सहित किन्हीं दो चित्रों को लेकर 5-5 वाक्यों का निर्माण कीजिए |
- 3 अपठित अवबोधनम् के अन्तर्गत दो अपठित गद्यांशों को लेकर प्रश्नों के उत्तर कीजिए |
- 4 'संधि' के नियमों को दो-दो उदाहरण देते हुए स्पष्ट कीजिए |

नोट:- यह सभी कार्य उत्तरपुस्तिका में कीजिये |

# FRENCH

1.Ecrivez un dialogue entre vous et votre ami(e) sur le système d'education.(80 mots)

2.Déssinez et coloriez l'un des monuments français ou l'un des festival français.3. Apprenez et faites les conjugaisons des verbes en présent, passé

composé, imparfait, future antérieur, plus que parfait et en plus faites les phrases avec les verbes suivantes:

Acheter, Arriver, vendre, Aller, Écouter, Suivre, Passer, Réussir, Échouer, monter 4. Ecrivez sur le feuille de papier "La Marseillaise" et apprenez-la!

#### **MATHEMATICS**

Sikkim is well known for its thangka paintings. In these paintings, a central deity is often surrounded by other identified figures in a symmetrical composition. Explore and explain the geometrical patterns, symmetry and fractals in the making of Thangka paintings. Illustrate your explanation.



#### **SCIENCE**

**I. Class X, Science Research Project:** The state of Sikkim has been leading a green revolution of its own kind. Despite being small and isolated, and with its people leading their lives in extremely tough mountainous terrain, Sikkim has emerged as one of India's environmental leaders.

**Research on the topic as per your roll no 1-15: Project A, 16 – 35: Project B, and Roll no 36 onwards: Project C**. Your project should have a minimum of 10 pages. It should be handwritten and supported by photographs, pictures, maps and statistics. The project should have a title page, content page, content matter and bibliography.

A) "Sikkim is one of the 18 biodiversity hotspots in the world including nearly one third of the total species of angiosperm found in the country" – Justify the statement with reference to its ecology and location. Research on one plant and one animal indigenous to Sikkim.

B) The state's farming activities are practiced on the terraced fields of Sikkim. What is the reason for this? Name the common crops grown. Tell the story of one crop from preparation of soil to harvesting.

C) What do you understand by the word balneology? What are hot springs? What are the health benefits of soaking yourself in a hot spring? What element is found in its water? Mark three hot springs of Sikkim on a map.

### II. Do the given assignments in your respective notebooks.

### **Chemistry assignment - Chemical reactions and equations**

1. A compound 'X' is used for drinking, has pH=7. Its acidified solution undergoes decomposition in the presence of electricity to produce gases 'Y' and 'Z'. The volume of 'Y' is double than 'Z', 'Y' is highly combustible whereas 'Z' is a supporter of combustion. Identify 'X' 'Y' and 'Z' and write the chemical reactions involved.

2. Bhawna took a pale green substance 'A' in a test tube and heated it on the flame of a burner. A brown colour residue 'B' was formed along with evolution of two gases with the burning smell of sulphur. Identify 'A' and 'B'. Write the chemical equation involved.

3. A student took 2-3 g of a substance 'X' in a glass beaker & poured water over it slowly. He observed bubbles along with hissing noise. The beaker becomes quite hot. Identify 'X'. What type of reaction is it?

4. A student has mixed the solution of Lead (II) nitrate and Potassium iodide.

a. What was the colour of the precipitate formed? Can you name the compound precipitated?

b. Write the balanced chemical equation for the reaction.

c. What type of reaction is it?

5. A student burnt a metal 'A' found in the form of ribbon. The ribbon burnt with a dazzling flame and a white powder 'B' is formed which is basic in nature. Identify 'A' and 'B'. Write the balanced chemical equation.

6. Asha has been collecting silver coins & copper coins. One day she observed a black coating on silver coins and green coating on copper coins. Which chemical phenomenon is responsible for these coatings? Write the chemical name for the Black and Green coatings?

7. A few drops of Phenolphthalein indicator were added to an unknown solution 'A'. It acquired a pink colour. Now another unknown solution 'B' was added to it drop by drop and the solution became colourless. Predict the nature of 'A' and 'B'.

8. An aqueous solution of metal nitrate 'P' reacts with sodium bromide solution to form yellow precipitate of compound 'Q' which is used in photography. 'Q' on exposure to sunlight undergoes decomposition reaction to form metal present in 'P' along with reddish brown gas. Identify 'P' & 'Q' . Write the chemical reaction & type of chemical reaction.

9. A water insoluble substance 'X' on reacting with dilute  $H_2SO_4$  released a colourless and odourless gas which is accompanied by brisk effervescence. When the gas was passed through water, the solution obtained turn blue litmus red. On bubbling the gas through lime water, it initially became milky and the milkiness disappeared when the gas was passed in excess. Identify the substance 'X' and write the chemical equations of the reaction involved.

10. A grey coloured metal 'X' is used in making dry cell. It is also used for coating iron metal to prevent it from rusting. When granules of 'X' are added to blue solution of compound of reddish brown metal 'Y' the colour of solution gets discharged and metal 'Y' is formed. Identify X and Y. Write the chemical reaction and identify the type of reaction.

# Physics assignment - Electricity

1. State Joule's law of heating. list two special characteristics of a heating element wire. An electric iron consumes energy at the rate of 880 W when heating is at the maximum rate and 440 W when the heating is at the minimum rate. The applied voltage is 220 V. Calculate the current and resistance in each case.

2. A copper wire has a diameter 0.5 mm and resistivity  $1.6 \times 10^{-8}$  ohm m.

(i) What will be the length of this wire to make the resistance of 12 Ohm

(ii) How much will be the resistance of another copper wire of the same length but half the diameter?

3.Calculate the electrical energy produced in 5 minutes when a current of 2 A is sent through a conductor by a potential difference of 500 volts.

4. Resistors are given as  $R_1 = 10$  ohm,  $R_2 = 20$  ohm, and  $R_3 = 30$  ohm. Calculate the effective resistance when they are connected in series. Also calculate the current flowing when the combination is connected to a 6 V battery.

5. An electric iron is used on a 240V supply and draws a current of 4 Ampere?

(a) What is its power?

(b) What is its resistance?

(c) What is the cost of using the iron for the month of January 10 hours a day if 1 kwh costs Rs.3.40?

6. You have two electric lamps having rating 40 W; 220 V and 60 W; 220 V. Which of the two has a higher resistance? Give reason for your answer. If these two lamps are connected to a source of 220 V, which will glow brighter?

7. If three resistors of  $6\Omega$ ,  $9\Omega$  and  $21\Omega$  are connected in series to a 12V battery, find

- a) The total resistance of the circuit.
- b) The current flowing through the circuit.
- c) The potential difference across the 21  $\Omega$  resistor

8. Find out the following in the electric circuit given in Figure.

- (a) Effective resistance of two 8  $\Omega$  resistors in the combination
- (b) Current flowing through 4  $\Omega$  resistor
- (c) Potential difference across 4  $\Omega$  resistance
- (d) Power dissipated in 4  $\Omega$  resistor
- (e) Difference in ammeter readings, if any



9. Three 2  $\Omega$  resistors, A, B and C, are connected as shown in Figure. Each of them dissipates energy and can withstand a maximum power of 18W without melting. Find the maximum current that can flow through the three resistors?



10.  $B_1$ ,  $B_2$  and  $B_3$  are three identical bulbs connected as shown in Figure. When all the three bulbs glow, a current of 3A is recorded by the ammeter A.



(i) What happens to the glow of the other two bulbs when the bulb  $B_1$  gets fused?

(ii) What happens to the reading of  $A_1$ ,  $A_2$ ,  $A_3$  and A when the bulb  $B_2$  gets fused?

(iii) How much power is dissipated in the circuit when all the three bulbs glow together?

### **Biology assignment- Life Processes**

- 1. Draw well labeled diagrams of the Human digestive and respiratory system..
- 2. State the three events that occur during the process of photosynthesis. Explain the role of stomata in the process.
- 3. Why do herbivores have longer, small intestines than carnivores?
- 4. Name the green dot like structures in some cells observed by a student when a leaf peel was viewed under a microscope. What is this green color due to?
- 5. What are the final products after digestion of carbohydrates and proteins?
- 6. Draw a diagram to show nutrition in Amoeba and label the parts used for this purpose. Mention any other purpose served by this part other than nutrition.
- 7. Leaves of a healthy potted plant were coated with Vaseline to block the stomata. Will this plant remain healthy for a long time? State three reasons for your answer.
- 8. Describe an experiment to show that "sunlight is essential for photosynthesis".
- 9. Draw a diagram depicting human alimentary canal and label on it: gallbladder, liver and pancreas.
- 10. State the role of liver and pancreas in the human body.

### SOCIAL SCIENCE

As per CBSE guidelines, students of Class X have to submit a handwritten project . Students are requested to utilise their summer vacation to complete this project Every student has to compulsorily undertake any one project on the following topics:

Consumer Awareness OR Sustainable Development

The Project Report should be handwritten by the students themselves.

Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

Records pertaining to projects (internal assessment) of the students will be maintained for a period of three months from the date of declaration of result for verification at the discretion of Board. Subjudiced cases, if any or those involving RTI / Grievances may however be retained beyond three months (SUBMISSION AFTER SUMMER BREAK) (The cover page should be written in bold letters with the topic, name and roll number )



Dear Children, let's use these holidays to learn more about one of the beautiful north east states of our country- SIKKIM

#### Find out about its history-

- the original inhabitants of Sikkim
- when was the kingdom of Sikkim established
- the dynasty which ruled over it

- its relations with the British East India Company and
- its merger with India

#### Research its cultural life-

- the religious practices of the people
- the main festivals
- the dances
- the language spoken by people
- the famous art of paintings such as thang-Kas.
- Illustrate your project with pictures etc.
- The project should be handwritten

The cover page should be written in bold letters with the topic, name and roll number

