

# SAINIK SCHOOL EAST SIANG



Education, Character & Nationalism

## HOLIDAY ASSIGNMENT

### VOLUME: II

ACADEMIC YEAR: 2023-24

Vacation is the time for the Cadets to explore their myriad interests and indulge in various activities which would lead to their all-round development. Let's utilize this golden period for family reunion and reiterate family ties with your loved ones. Let's cheer for the 3R's- Rejuvenation, Relaxation and Rebonding!

Esteemed Parents/Guardians,

Here are few tips for you to act as a facilitator to help your child balance his/her eagerness in pursuing adventure, creativity and self-expression with development of responsibility.

- ❖ Make sure that you spend quality time with your ward.
- ❖ Teach them the importance of moral values in their life.
- ❖ Motivate them to read good books.
- ❖ Encourage and help your child in shouldering responsibilities in household chores. It will aid them to be independent.
- ❖ Talk respectfully with the child and encourage your child to do the same. ➤ Encourage your ward to take up yoga or any other form of healthy activity during the vacation
- ❖ Allow them to complete homework on their own under your guidance.

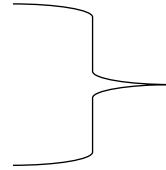
Dear Cadets,

- ❖ Holiday Homework carries marks; hence submission of work post vacation i.e., on 22 Nov 2023 is compulsory for all Cadets.
- ❖ Students will be assessed for the handwriting, presentation, neatness and completion of work as per given instructions.
- ❖ Subject Teachers have further imparted specific instructions with their work. Complete your task accordingly.
- ❖ Align all the worksheets in a separate folder and decorate it.
- ❖ Remember a "BOOK" is a gift you can open again and again. So, read at least a couple of good books during the vacation.

**HOLIDAY ASSIGNMENT FOR CLASS VI, VII & VIII**  
**DEFENCE STUDIES**

The below mentioned assignments are mandatory for all the Cadets studying in classes VII, VIII and IX.

1. Rank structure of Indian Armed forces.
2. Role of Indian Navy/ Army/ Airforce.
3. List the types of entry into Indian Army.
4. List the types of entry into Indian Navy.
5. List the types of entry into Indian Air Force.
6. NDA Entry and requirements.
7. Stages in Services Selection Board- List.



**Any two from 3,4 & 5**

**Guidelines.**

1. Write the project report on A4 size plain paper in your own hand writing.
2. Design an attractive cover page for the above mentioned assignment.
3. The project should contain certificate, acknowledgement, index concerned information and Bibliography.

## **HOLIDAY ASSIGNMENT:CLASS VI**

### **SUBJECT – SCIENCE**

#### **Answer the following.**

1. What are the main components of food, and how do they contribute to our body's growth and development?
2. Describe the tests that can be performed to detect the presence of starch, proteins, and fats in food.
3. Why is it essential to have a balanced diet that includes all the components of food?
4. Why is it important to classify materials into groups? What criteria can be used for sorting materials?
5. Give examples of materials that are good conductors of heat and electricity and materials that are insulators.
6. How can the properties of materials be used to determine their suitability for specific purposes?
7. Describe different methods for separating mixtures and provide examples of when each method is used.
8. What is the difference between filtration and distillation as separation techniques? When is each method preferred?

**Instructions.** The above-mentioned questions to be written in Science Copy with the heading as “HOLIDAY ASSIGNMENT”.

### **CHART WORK**

#### **Make a chart on the following topic-**

- Create a colorful chart showing the five main components of food: Carbohydrates, Proteins, Fats, Vitamins, and Minerals.
- Include illustrations and examples of food items rich in each component.
- Write a brief explanation of the role of each component in our diet and its significance for our health.

## **SUBJECT – SOCIAL SCIENCE**

### **Answer the following-**

1. Prepare the Earth with clay or ball or scrap papers, tailors cut pieces or any paper pads with availability.
2. Prepare a manuscript “Atlas” on A4 sheet with division of zones, India, Arunachal Pradesh with capital cities and continents?

## **SUBJECT – COMPUTER SCIENCE**

### **Answer the following.**

1. Search internet for different generation of Computer Languages. Explore and collect various facts about these languages.
2. Write about different main components of File Explorer Window.
3. Write the steps, how you transfer of data from one drive to another drive of a same computer?

**Instructions.** The above-mentioned questions to be written in Computer Science Copy with the heading as “HOLIDAY ASSIGNMENT”

## **SUBJECT – MATHEMATICS**

**Assignment 01.** Memorize the multiplication table from 1 to 20.

**Assignment 02.** Write biography of any five famous Mathematicians in 150-200 words.

**Assignment 03.** Collect 10 pictures of famous Mathematicians and paste it in a paper. Also write the names at the bottom.

**NOTE:** Use A4 size papers to do the assignments (Assignment 02 and 03) and make a file (both assignments in one file). Write School Name, Name & Class Name on the front page of the assignment at the bottom and write topic (in the middle of the page) as “MATHS ASSIGNMENT: 2023-24”

## विषय- हिंदी

1. यदि आपके घर में एक चिड़िया का घोंसला है तथा उसमें बच्चे भी हैं। अब आप एक नए घर में जा रहे हैं तो उस घर को छोड़ने से पहले उस चिड़िया के बच्चे के लिए आप क्या इंतजाम करेंगे? लिखिए।
2. अपने बचपन की कोई मनमोहक घटना याद करके विस्तार से लिखिए।
3. 'चाँद से थोड़ी-सी गप्पें' कविता याद करें और सुंदर अक्षरों में लिखें।

**निर्देश:** उपर्युक्त सभी कार्य अपनी हिंदी कॉपी में करें।

## SUBJECT – SANSKRIT

1. रुचिरा पाठ-1 पाठ 2 का शब्दार्थ याद करे और वर्ण संयोजन और वर्ण विच्छेद साफ अक्षर में लिखे।
2. रुचिरा पाठ-3 का चित्र बनाकर संस्कृत से नाम लिखे।
3. पाठ-4 का सारांश एवं शब्दार्थ संस्कृत कॉपी में लिखे।

निर्देश- उपर्युक्त कार्य अपनी संस्कृत की कॉपी में साफ व सुंदर लिखावट के साथ लिखे।

## SUBJECT – ENGLISH

You are Sonam/ Sahil a student of class VI. You have lost your library book which was issued to you, in the playground. Draft a notice for the school notice board informing the students about it.

You are Madhavi/ Manav of Oxford Public School. You have found a wrist watch lying in the library. Draft a notice mentioning other relevant details of the watch so as to find its owner.

Write an application to your Principal requesting for fee concession thereby giving your reasons.

Write an application to your Principal requesting to grant you 5 days leave as you were suffering from fever.

1. Make a beautiful note presentation on VERB.
2. Do one page of handwriting practice every day. Submit the handwriting copy.

3. Imagine you have an opportunity to enjoy a holiday trip with your favourite comic character. Create a comic strip of 8-10 pages narrating your experience of the trip.

**Key Points.**

- a. An eye catchy cover page.
  - b. You can draw / paste pictures of the characters.
  - c. Brief descriptive prose.
  - d. Dialogues should be in bubbles/ balloons
  - e. There should not be more than four characters.
4. Write a self-made poem on 'My Home' of 10 lines.

**Instructions. Write it on an A-4 size paper and decorate it.**



## **HOLIDAY ASSIGNMENT:CLASS VII**

### **SUBJECT - ENGLISH**

#### I. Unseen Passage

##### Passage-1

Education is an essential part of our life. It not only helps us acquire knowledge and skills but also helps in building our character and values. Education plays an important role in our personal and professional development and is an investment in our future.

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Education has many benefits. It helps us understand the world around us and think critically and creatively. It also gives us the skills we need to succeed in the workforce and contribute to our communities. Education can open up new opportunities and give us a sense of accomplishment and self-satisfaction.

Additionally, education helps promote equality and social mobility. It gives individuals the tools and knowledge they need to rise out of poverty and achieve their full potential. Education is also a key factor in reducing discrimination and promoting understanding and tolerance between different cultures and groups.

In short, education is an important part of our lives and has the power to transform individuals and communities.

##### Questions and Answers

1. What is the importance of education in our lives?
2. Write some benefits of education.
3. How does education promote equality and social mobility?
4. How can education change individuals and communities?



## Passage-2

Once there was an old man. His eyes were useless to see and his ears were useless to hear and his knees trembled. Often spilt food on the tablecloth and sometimes threw down his clothes which annoyed his son and daughter-in-law. They gave him his food in an earthen dish. It made him very sad. His eyes watered. One day the dish fell on the ground and broke into pieces. The young daughter-in-law scolded him.

But he didn't answer and just signed. Then they bought him a wooden plate with a few paise. He must eat from it now. One day his little grandson was fitting some pieces of wood together. The old man asked, "What are you doing?" "I'm making it to feed mom and dad when I grow up". His parents were ashamed of their behaviour after hearing this. Then they treated the old man well.

### Questions and Answers

- (a) Who was the main character in the story?
- (b) How did the son and daughter-in-law treat the old man?
- (c) What happened when the earthen dish broke?
- (d) What did the old man's grandson do?
- (e) How did the son and daughter-in-law change their behaviour towards the old man?

## **II. STORY WRITING**

At some point, you must have had visitors – salesmen, beggars, people asking for assistance, inquisitive neighbours, uninvited guests – calling at your door. Do you remember any of these people in particular? Has one of them made an impression on you?

Write a short story titled "The Visitor". Make your story as interesting as possible.

## **III. LETTER WRITING**

### **INFORMAL LETTER**

Write a letter to your friend for inviting him on the marriage ceremony of your brother

## FORMAL LETTER

Write an application to the Principal of your school to allow you to change your section. Give suitable reasons.

### SUBJECT - HINDI

‘पापा खो गए’ नाटक में बच्ची को बचाने वाले पात्रों में एक ही सजीव पात्र है, उसकी कौन- कौन सी बातें आपको मजेदार लगी? लिखिए।

### अथवा

‘शाम एक किसान’ नामक कविता की पूरी पंक्तियाँ चित्रों के साथ लिखिए।

**निर्देश-** उपर्युक्त सभी कार्य अपनी हिंदी की कॉपी में साफ़ व सुंदर लिखावट के साथ करें।

### SUBJECT - SANSKRIT

1. सुभाषितानि पाठ का किन्ही चार पंक्तियों को लिखकर उनका अर्थ लिखिए।
2. स्वावलंबनम् पाठ 3 का शब्दार्थ लिखे एवं याद करे।
3. पाठ -6 सदाचार का श्लोक नंबर एक से तीन तक श्लोक और श्लोक का अर्थ लिखे।

**निर्देश-** उपर्युक्त कार्य अपनी संस्कृत की कॉपी में साफ व सुंदर लिखावट के साथ लिखे।

### SUBJECT - MATHEMATICS

**Assignment 01.** Complete mathematics notebook and cover it.

**Assignment 02.** Write 150-to-200-word essay about 7 mathematicians on a A4 size papers and file it.

### SUBJECT – COMPUTER SCIENCE

1. Write a short note about the harmful effects of different computer viruses.
2. Explain the ethical and Unethical practices related to Internet use.
3. Write the etiquettes while working in Computer Lab.
4. Explain the various operators in MS excel.

**Note.** Use A4 size papers to do the assignments.

### **SUBJECT – SCIENCE**

1. Rajnish recently painted the gates of his gates of his garden. Explain why?
2. Find out about blood groups and their importance.
3. When a person suffers from chest pain, the doctor immediately takes an ECG. Visit a doctor and get information about ECG. You can also take help from encyclopedia or the internet.
4. Do plants need a respiratory system? Give reasons.
5. Why can't fish breathe outside of water?

**Note.** Use A4 size papers to do the assignments.

### **SUBJECT – SOCIAL SCIENCE**

1. What is water cycle? Explain with the use of a diagram.
2. What are the different types of vegetation in India? Which are the factors on which the growth of vegetation mostly depends?
3. How important was the income from land revenue to the stability of the Mughal Empire?
4. What was the impact of the Mongol invasions on the Delhi Sultanate?
5. How does the MLAs become the minister?
6. What are the vertical divisions of Indian Judiciary/ Discuss along with the structure.

**Note.** All the above work should be done in the A4 sheet paper.

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## **HOLIDAY ASSIGNMENT:CLASS VIII**

### **SUBJECT- ENGLISH**

1. Complete the Cross words (pdf attached).
2. Prepare a video of less than 2 minutes. In the video share your observations/experiences during the vacation. Share it to 6001819096 via WhatsApp.

#### **Instructions.**

- (a) Do not use A4 sized papers or any loose papers for writing English Assignment.
- (b) Do not make a separate copy for Holiday Assignments. Use English notebook and complete the assignment there.
- (c) The assignment must be handwritten. You may use colour pencils, sketch pens, highlighters etc.

### **SUBJECT- HINDI**

1. पाठ 'बस की यात्रा' में लेखक ने अपनी एक रोमांचकारी यात्रा का वर्णन किया है। आप भी ऐसी ही किसी यात्रा के खट्टे मीठे अनुभव को याद करते हुए एक लेख लिखिए।
2. पाठ 'क्या निराश हुआ जाए' में लेखक ने हमारे महान मनीषियों के सपनों के भारत का जिक्र किया है। आपके सपनों का भारत कैसा होना चाहिए? लिखिए।

**निर्देश:** उपर्युक्त सभी कार्य अपनी हिंदी कॉपी में करें।

### **SUBJECT- SANSKRIT**

1. अकारांत पुलिंग शब्दरूप याद करके बालक, छात्र, शिक्षक के रूप लिखिए।
2. आकारान्त स्त्रीलिंग शब्द रूप याद करके लता, छाया, बालिका के रूप लिखिए।
3. पञ्चम पाठ कण्टकेनैव कण्टकम् के शब्दार्थ याद करके अपनी कॉपी में लिखिए।

**निर्देश:** उपर्युक्त कार्य अपनी संस्कृत की कॉपी में साफ व सुंदर लिखावट के साथ लिखें।

### **SUBJECT- MATHEMATICS**

**Assignment 01.** Draw a pie chart showing percentage of different blood groups of your family.

**Assignment 02.** Draw a pie chart showing the expenditure (in percentage) on various items and savings of a family during a month.

**Assignment 03.** Make a solid model of CUBE.

**Assignment 04.** Complete your note book for all the chapters (Chapter 1 to 8).

**Assignment 05.** Memorize the multiplication table from 1 to 20.

**NOTE:** Do both the assignments in your Mathematics Notebook (next of Chapter 8) mentioning it as “MATHS ASSIGNMENT: 2023-24”

### **SUBJECT- SOCIAL SCIENCE**

1. Prepare a scrap book on “Global Warming”
2. Write a story around the theme, “justice delayed is justice denied”.

### **SUBJECT- COMPUTER SCIENCE**

1. Write the components of a Chart in MS Excel.
2. Explain the basic flowcharting shapes.
3. Explain the different topologies of Computer Networks.
4. Explain the different types of Computer Networks.

### **SUBJECT- SCIENCE**

(Do the below mentioned work in A4 size plain paper in your own hand writing)

1. **Activity 1: Action Work.** Under the guidance of your mother or an elder at home make arrangement for the formation of curd. Write your experience in the form of a paragraph. Also write the name of bacteria involved in formation of curd.
2. **Activity 2: Preservatives.** To know about the different methods of preservation.
  - (a) Collect the wrappers of frozen and canned food items and milk.
  - (b) Find about the preservatives present in these food items.
  - (c) List the various preservatives and methods of their preservation.

3. Activity 3: Map Activity. Locate the major rivers in the Map of India. Identify and also locate the industrial cities situated near them. Which of these cities are major sources of water pollution?

4. (a) Prepare a project report on various samples of
- (i) a mixture
  - (ii) a compound
  - (iii) an element [metal and nonmetal], (3 of each category) highlighting the main characteristics features of mixtures, compounds and elements.
- (b) Prepare a report on 4th and 5th state of matter.

## HOLIDAY ASSIGNMENT:CLASS IX

### SUBJECT- ENGLISH

1. Read the chapter 'The last Leaf', carefully and based on your deep understanding, do you think the feeling of depression is common among teenagers?

What are the major factors that leads to and how one can overcome depression. Discuss in detail (only handwritten and words limit is 500).

OR

2. Complete all the remaining chapters answers and questions. (prose+ poetry)

### SUBJECT – HINDI

'रैदास के पद' के किन्हीं पाँच अवतरण लिखकर उनका अर्थ स्पष्ट करते हुए एक सफल परियोजना तैयार कीजिए।

अथवा

सोनजुही की लता के नीचे बनी गिल्लू की समाधि से लेखिका के मन में किस- किस विश्वास का जन्म होता है?

**निर्देश-** उपर्युक्त सभी कार्य अपनी हिंदी की कॉपी में साफ़ व सुंदर लिखावट के साथ करें।

### SUBJECT: MATHEMATICS

**Assignment 01.** List all the formulas of Chapter 1 to 5 and Chapter 10 to 12.

**Assignment 02.** Solve the MCQs attached as PDF.

**Assignment 03.** Memorize the multiplication table from 1 to 30.

**NOTE:** Do both the assignments in a separate copy and write "MATHS ASSIGNMENT: 2023-24" in the front cover of the copy.

### SUBJECT– SOCIAL SCIENCE

1. What were the peculiar features of Nazism?
  2. What makes elections in India democratic?
  3. What are the challenges to free and fair elections in India?
  4. Discuss the mechanism of Indian monsoon?
  5. What are the factors affecting Indian monsoon?
  6. What are the different anti-poverty measures adopted by the govt. in India?
  7. Discuss why Nazism became popular in Germany by 1930?
- Note. All the above work should be done in the A4 sheet paper.

### SUBJECT - COMPUTER SCIENCE

1. Explain the term 'text alignment' in MS Word. Name the different types of alignment.
2. What is Format Painter option in MS Word.
3. Explain different ways of indenting paragraph.
4. Explain the steps to work with a mini translator with examples.



SUBJECT – SCIENCE

Physics

**Q1. Make your own Science Model**

Prepare a Science Model on the topics mentioned below as per your roll numbers. Also write a short note explaining the concept on an A4 size sheet.

TOPIC	ROLL NUMBERS
Propagation of sound	1 – 6
Reflection of light	7 – 12
Production of sound in humans	13 – 18
Electric current and circuits	19 – 24
Rectilinear propagation of light	25 – 29

**Parameters.**

- (a) Creativity
- (b) Presentation of Model
- (c) Concept Clarity

Q2. Newton's laws of motion are an inherent part of our everyday life. Starting from the beginning of the day till the end, Newton's laws find their applications in a number of activities we do.

**Instructions.**

- (a) With reference to the content given in NCERT, find out what are the three laws of Motion?
- (b) Give examples showing applicability of the laws in everyday life situations. (think in reference to walking, playing, driving etc). Also Paste pictures.
- (c) Use A4 size papers to do the assignments.

**Parameters:**

- (a) Relevance
- (b) Accuracy
- (c) Presentation

Q3. Do **practice manual** questions of chapter- Motion (3 marks and 5 marks) and sample periodic paper 1 in physics notebook.

### Chemistry

1. Make a pictonary of 50 new words related to chemistry from the chapters of **NCERT** and also paste pictures related to the topic.
2. Do the **practice manual** questions of 3 marks and 5 marks of Chapter- 1 & 2 (Matter in our surroundings and Matter Around Us ) and sample periodic paper 1 in chemistry notebook.
3. Do the assignment of the below mentioned chemistry assignment in chemistry notebook.

### Chemistry Assignment

Q1. Account for the following

- (a) Dogs generally hang out their tongue in summer.
- (b) Smell of lighted incense stick spreads several meters away
- (c) Sponge though compressible is a solid.

Q2. Water as ice has a cooling effect whereas water as steam may cause severe burns.

Q3. Discuss the effect of increasing temperature and pressure on the liquid state of a substance. Are these effects similar? If not assign reasons.

Q4. 5ml of water was taken in a test tube and china dish separately. These samples were then kept under different conditions as below

Both the samples are kept under a fan

Both the samples are kept inside a cupboard

- (a) State in which case evaporation will be faster? give reasons
- (b) How will the rate of evaporation change if above activity is carried out on a rainy day? Justify

Q5. Explain how will you separate Ammonium chloride and common salt using sublimation

Q6. Write an activity to prove that liquids of different densities diffuse at different states.

Q7 All of us are familiar with LPG cooking gas cylinder used at home

- (a) What is the full form of L.P.G?
- (b) What is it composed of?
- (c) In what form gas is stored? What are the factors responsible for it?
- (d) What is the change observed when regulator is opened? Why?

Q8 Convert

- (a) 5°C to Kelvin
- (b) 345 K to °C

Q9 At What temperature on the kelvin scale does ice melt? Draw a diagram to show set up of melting point of ice.

## BIOLOGY

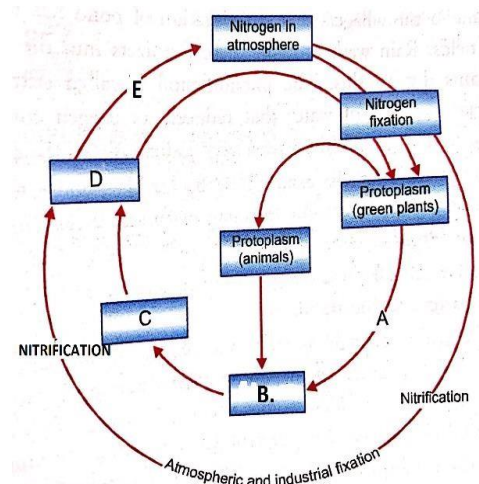
### ASSIGNMENTS

1. Look at the picture and answer. Refer to “**NCERT** book ,CHAPTER – Natural Resources

- a. Fill in A,B,C,D AND E.
- b. What will happen if step A does not occur?
- c. What is the role of Nitrogen Fixing Bacteria in the biosphere?
- d. Name two biologically important compounds that contain both oxygen and nitrogen.

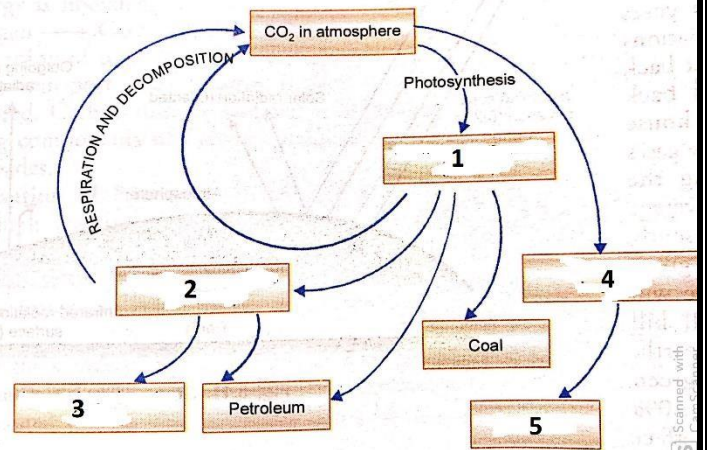
**Where to do: Biology notebook**

**Parameters: Accuracy, Neatness**



2. Look at the picture and answer. Refer to “**NCERT**”, book CHAPTER – Natural Resources

- What do blanks 1,2,3,4 and 5 in the given cycle stand for?
- Name two natural and one man made process by which  $\text{CO}_2$  returns to the atmosphere.
- $\text{CO}_2$  is necessary for plants but it is also a pollutant. Justify your answer.



Where to do: Biology notebook Parameters: Accuracy, Neatness

## **HOLIDAY ASSIGNMENT:CLASS X**

### **SUBJECT-SOCIAL SCIENCE**

Comparative study of India and any one country from the United States of America/Australia/Canada/South Africa. (Use A4 size paper)

The study report to include:

- Meaning of Federalism
- Why federalism required in India and the “chosen” country.
- Features of Federalism in both – similarities and differences.
- How successful has federalism in both the countries.
- Which system – a federal or unitary, do you favour for India and why?

### **SUBJECT-ENGLISH**

#### **A. Letter to Editor**

1. You are Saurabh Srivastava, a resident of Defence Colony Jabalpur, Siliguri. Your colony is facing the severe problem of inadequate and contaminated water supply. You decide to express your views and make the authorities aware of the situation by writing a letter to the Editor of **The Siliguri Times**, Siliguri. Write your letter in about 100-120 words.
2. Recently, you read a report on increasing stress level among the younger generation and you are very disturbed with the scenario. You decide to write a letter to the Editor of a newspaper expressing your concern and also about some measures which can be adopted by the youth to overcome stress. Write your letter in about 100-120 words.
3. Recently, you got an opportunity to meet few courageous girls, who, despite serious opposition from their families, continue their education. This has made you feel both proud and concern about these girls and you decide to write a letter to the Editor of a newspaper emphasizing upon the need to promote girl child education. Write your letter in about 100-120 words.
4. A survey reveals that most of our health-related problems are due to our over fascination with modern gadgets like smart phones, lap tops, television and video games. The findings of the survey compel you to share your views on the issue and you decide to write a letter to the Editor of a newspaper. On the basis of your understanding write the letter.

5. You observe that most of your class mates bring fast food items as part of their school tiffin and even some of them regularly suffer from one disease or other but they keep on bringing fast food. You wish to make parents of such children aware of the harms of the fast food and so you decide to write a letter to the Editor of news daily. On the basis of your own understanding of the problem write the letter.

### **B. LETTER OF COMPLAINT**

1. You are Sneha/ Swapnil residing at 506, Netaji Marg, Kanpur. The other day you bought two set of shirts from Men's Collection, Rajiv Nagar, Lucknow. On unpacking you find to your surprise that both the shirts were not the ones which you had selected in the shop. Write a letter of complaint to the manager asking for replacement at their cost.

2. You are Rivaan living at III/5, Meera Road, Bhawanipatna, Kalahandi. You purchased a washing machine last week from Amit Electronics, Bolangir. but it is not working properly. Write a complaint letter to the dealer to raise the issue regarding the same with necessary details.

3. Write a letter to M/s. National Book Trust in India, New Delhi complaining that the books sent by them were not those you had ordered for. Ask for a replacement. You are Sikha, Sector-05, Bhilai, Chhatisgarh.

4. Due to naked wire through the dense/most population of your area and the low pole are very dangerous and many times electrical shock is there and heavy vehicles face so many problems during passing on that way right a complaint letter to the Assistant Engineer

(Electrical)of your area to solve it. You are Kuna/Kuni of ward No-36 Lane No-5 of Municipal Corporation Bhubaneswar.Santoshi Temple road BBSR-21

### **C. REPORTED SPEECH**

1. Samson: I am looking for a new employee who will be honest, hard-working and dedicated;

Wilson: Well in that case you should hire me. One day Samson and Wilson were in conversation.

Samson remarked that .....honest, hard working and dedicated.

Ravi's father : Son, if you stop watching T V, I will give you five hundred rupees. Ravi : Then I will stop watching TV. With your five hundred rupees, I can watch several movies.

Upset with Ravi's addiction to TV, his father decided to wean him away from it. He promised Ravi that ..... five hundred rupees.

Tanish : How did you spend your vacation? Tara

: I visited Kashmir with my parents.

Tanish met Tara after the holidays and asked her

..... vacation.

D. Write a 10-minute-long speech on the topic- "One Earth, One Family, One Future."

### विषय- हिंदी

1. 'आज की युवा पीढ़ी और नैतिक मूल्य' विषय पर लगभग 120 शब्दों में अनुच्छेद लिखिए।
2. समास के प्रत्येक भेद के दस-दस उदाहरण लिखिए।
3. निम्नलिखित प्रश्नों के उत्तर लिखिए-
  - (i) 'हरिहर काका' कहानी में समाज के किस कटु सत्य को उजागर किया गया है?
  - (ii) फिल्म निर्माता के रूप में शैलेंद्र में कौन-कौन से गुण थे?
  - (iii) 'बड़े भाई साहब' पाठ में बड़े भाई तथा छोटे भाई में से आप किसे नायक मानते हैं तथा क्यों?

**निर्देश:** उपर्युक्त सभी कार्य अपनी हिंदी कॉपी में करें।

**SUBJECT: MATHEMATICS (041)**

<b><u>SEA (05 Marks)</u></b>	
<b><u>Assignment 01.</u></b>	Write all the MCQs of chapters 1 to 9 given in mathematics assignment booklet.
<b><u>Assignment 02.</u></b>	Solve any 03 sample question paper (attempt only those questions which are from chapter 1 to 9) from mathematics assignment booklet.
<b><u>Assignment 03.</u></b>	Take printout of mathematics assignment booklet and study it.
<b><u>Note-Book (05 Marks)</u></b>	
<b><u>Assignment 03.</u></b>	Complete your Mathematics note book and cover it.

**NOTE:** Use A4 size papers to do the assignments (Assignment 01 and 02). Write the question on the page while doing each of the assignment. Write Name, Class, School Name on the front page of the assignment at the bottom and write topic (in the middle of the page) as "MATHEMATICS ASSIGNMENT: 2022-23".

**SUBJECT: SCIENCE (086)**

1. Practice questions from 05 sample papers from OSWAL SAMPLE PAPER till completed syllabus.
2. Complete all intext and exercise questions of discussed chapters (Physics & Biology) in Notebook.



## Chemistry

1. Identify any ten chemical reactions taking place around you and try to write the corresponding balanced chemical equations yourself.
2. Make a table for the nature of the various samples like milk, Soap water mixture, common salt solution, lemon juice, tap water. baking soda solution etc by using natural indicators like red cabbage juice, turmeric etc.  
(Note: Surf the internet to learn how to make natural indicators at home)

3. Make mind maps for Chapter 1 and Chapter 2 in your notebooks.
4. Why does an aqueous solution of alcohol fail to conduct electricity?
5. Which of these will have higher concentration of H<sup>+</sup> ions?

1M HCl.      or      1M CH<sub>3</sub>COOH

6. How is chloride of lime different from Calcium Chloride?
7. Does Tartaric acid help in making cake or bread fluffy? Explain.
8. Dry ammonia gas has no action on litmus paper but a solution of ammonia in water turns red litmus paper blue. Why is it so?
9. A chemical compound having smell of chlorine is used to remove yellowishness of clothes in laundries. Name the compound and write down its preparation.
10. A knife which is used to cut a fruit was immediately dipped in water containing few drops of blue litmus solution. If the colour of the solution changes to red, what inference could be drawn about the nature of the fruit?
11. Why are some salts known as hydrated salts?
12. What is tooth enamel chemically? State the conditions when it starts corroding.
13. A dry pellet of a common base B when kept open absorbs moisture and turns sticky. The compound is also prepared by Chlor Alkali process. Identify B. What happens when B reacts with hydrochloric acid?
14. What happens when egg shell is placed in concentrated nitric acid in a beaker?
15. If at home your mother uses baking soda for making cake.
  - (a) How will it affect the taste of cake and why? what is the role of tartaric acid added to baking soda
  - (b) How can baking soda be converted into baking powder?
  - (c) What is the role of tartaric acid added to baking soda?

16. What is the colour of litmus in a solution of Ammonium hydroxide?
17. Two solutions A and B have p H values of 5 and 8 respectively. Which solution will be basic in nature?
18. What is observed when SO<sub>2</sub> is passed through (a) water(b) lime water Also write chemical equations for the reactions that take place.
19. What is baking powder? How does it make the cake soft and spongy?
20. A calcium compound which is yellowish white powder is used as a disinfectant and also in textile industry. Name the compound. Which gas is released when this compound is left exposed to air?
21. Name the gas that is liberated when a dilute acid reacts with a metal. What happens when a burning candle is brought near the gas?
22. A compound which is prepared from gypsum has the property of hardening when mixed with a proper quantity of water. Identify the compound. Write the chemical equation for its preparation. For what purpose Is it used in hospitals?
23. Why should water be never added dropwise to concentrated Sulphuric acid?
24. Name the products formed in each case-(a) hydrochloric acid reacts with caustic soda.
  - (a) Granulated Zinc reacts with caustic soda.
  - (b) carbon dioxide is passed into lime water.
25. Why does hydrogen chloride gas not show acidic behaviour?
25. What is meant by water of crystallization? Describe an activity to show that blue COPPER Sulphate crystals contain water of crystallization.

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## HOLIDAY ASSIGNMENT:CLASS XI

### SUBJECT-ENGLISH

TOPIC: Project work/Assignment

Comment on the relationship between language and identity in context to Arunachal Pradesh. (Within 500 words)

OR

How do new languages emerge. Discuss in 500 words.

OR

Make a PPT on the theme of the chapter "SILK ROAD" in your words. (Within 10 slides)

### SUBJECT-CHEMISTRY

Answer the following questions:

1. Calculate the molecular mass of the following:
  - (i)  $\text{H}_2\text{O}$
  - (ii)  $\text{CO}_2$
  - (iii)  $\text{CH}_4$
2. Calculate the mass percent of different elements present in sodium sulphate ( $\text{Na}_2\text{SO}_4$ ).
3. Determine the empirical formula of an oxide of iron which has 69.9% iron and 30.1% dioxygen by mass.
4. Calculate the amount of carbon dioxide that could be produced when
  - (i) 1 mole of carbon is burnt in air.
  - (ii) 1 mole of carbon is burnt in 16 g of dioxygen.
  - (iv) 2 moles of carbon are burnt in 16 g of dioxygen.
  - (v)

5. Calculate the mass of sodium acetate ( $\text{CH}_3\text{COONa}$ ) required to make 500 mL of 0.375 molar aqueous solution. Molar mass of sodium acetate is  $82.0245 \text{ g mol}^{-1}$
6. Calculate the concentration of nitric acid in moles per litre in a sample which has a density,  $1.41 \text{ g mL}^{-1}$  and the mass per cent of nitric acid in it being 69%.
7. How much copper can be obtained from 100 g of copper sulphate ( $\text{CuSO}_4$ )?
8. Determine the molecular formula of an oxide of iron in which the mass per cent of iron and oxygen are 69.9 and 30.1 respectively. Given that the molar mass of the oxide is  $159.69 \text{ g mol}^{-1}$ .
9. Calculate the atomic mass (average) of chlorine using the following data:

	% Natural Abundance	Molar Mass
35 Cl	75.77	34.9689
37 Cl	24.23	36.9659

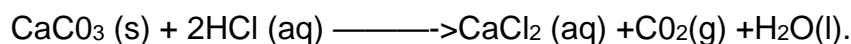
10. In three moles of ethane ( $\text{C}_2\text{H}_6$ ), calculate the following:
- Number of moles of carbon atoms.
  - Number of moles of hydrogen atoms.
  - Number of molecules of ethane.
11. What is the concentration of sugar ( $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ ) in  $\text{mol L}^{-1}$  if its 20 g are dissolved in enough water to make a final volume up to 2 L?
12. If the density of methanol is  $0.793 \text{ kg L}^{-1}$ , what is its volume needed for making 2.5 L of its 0.25 M solution?
13. Pressure is determined as force per unit area of the surface. The SI unit of pressure, Pascal is as shown below:  $1 \text{ Pa} = 1 \text{ N m}^{-2}$ . If mass of air at sea level is  $1034 \text{ g cm}^{-2}$ , calculate the pressure in Pascal.
14. What is the SI unit of mass? How is it defined?
15. Match the following prefixes with their multiples:

	Prefixes	Multiples
(i)	micro	$10^6$
(ii)	deca	$10^9$
(iii)	mega	$10^{-6}$
(iv)	giga	$10^{-15}$
(v)	femto	10

16. What do you mean by significant figures?
17. A sample of drinking water was found to be severely contaminated with chloroform,  $\text{CHCl}_3$ , supposed to be carcinogenic in nature. The level of contamination was 15 ppm (by mass).
- Express this in percent by mass.
  - Determine the molality of chloroform in the water sample.
18. Express the following in the scientific notation:
- 0.0048
  - 234,000
  - 8008
  - 500.0
  - 6.0012
19. How many significant figures are present in the following?
- 0.0025
  - 208
  - 5005
  - 126,000
  - 500.0
  - 2.0034
20. Round up the following up to three significant figures:
- 34.216
  - 10.4107
  - 0.04597
  - 2808
21. In the reaction,  $\text{A} + \text{B}_2 \longrightarrow \text{AB}_2$ , identify the limiting reagent, if any, in the following mixtures
- 300 atoms of A + 200 molecules of B
  - 2 mol A + 3 mol B
  - 100 atoms of A + 100 molecules of B
  - 5 mol A + 2.5 mol B
  - 2.5 mol A + 5 mol B
22. Dinitrogen and dihydrogen react with each other to produce ammonia according to the following chemical equation:
- $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \longrightarrow 2\text{NH}_3(\text{g})$
  - Will any of the two reactants remain unreacted?
  - If yes, which one and what would be its mass?

23. How are 0.50 mol  $\text{Na}_2\text{CO}_3$  and 0.50 M  $\text{Na}_2\text{CO}_3$  different?
24. If ten volumes of dihydrogen gas react with five volumes of dioxygen gas, how many volumes of water vapour could be produced?
25. Convert the following into basic units:
- 28.7 pm
  - 15.15  $\mu\text{s}$
  - 25365 mg
26. Calculate the molarity of a solution of ethanol in water in which the mole fraction of ethanol is 0.040.
27. A welding fuel gas contains carbon and hydrogen only. Burning a small sample of it in oxygen gives 3.38 g carbon dioxide, 0.690 g of water and no other products. A volume of 10.0 L (measured at S.T.P.) of this welding gas is found to weigh 11.6 g. Calculate
- empirical formula,
  - molar mass of the gas, and
  - molecular formula.

28. Calcium carbonate reacts with aqueous HCl according to the reaction



What mass of  $\text{CaCO}_3$  is required to react completely with 25 mL of 0.75 M HCl?

29. Chlorine is prepared in the laboratory by treating manganese dioxide ( $\text{MnO}_2$ ) with aqueous hydrochloric acid according to the reaction.
- $$4 \text{HCl} (\text{aq}) + \text{MnO}_2 (\text{s}) \longrightarrow 2 \text{H}_2\text{O} (\text{l}) + \text{MnCl}_2 (\text{aq}) + \text{Cl}_2 (\text{g})$$

How many grams of HCl react with 5.0 g of manganese dioxide? (Atomic mass of Mn = 55 u)

### SUBJECT: PHYSICS

- What is free falling body?
- Is the value of g positive or negative?
- Define rectilinear motion.
- Give two drawbacks of Dimensional analysis.
- A stone is thrown vertically upward with an initial velocity of 14m/s. What is the maximum height reached? ( $g=9.8\text{m/s}^2$ )

6. Rain is falling vertically with a speed of 35m/s. Winds start blowing after sometime with a speed of 12m/s in East to West direction. Find resultant and In which direction should a boy must hold his umbrella?
7. A car travel in positive x direction at 20m/s and needs to pass a truck. The car's velocity is to increase to 25m/s in 2 s. Find average acceleration of the car.
8. Distinguish between Scalar and Vector quantity with two example each.
9. What is projectile and derive it's all equation.
10. Define Uniform Circular motion, Centripetal Acceleration and Centripetal Force.
11. Derive the maximum velocity of a car when moves at
  - (1) Level Road
  - (2) Banked Road.
12. State Newton second law of motion and derive the formula for Force.

**Note: Write all assignment questions given in class as well.**

**SUBJECT: MATHEMATICS**

1. Make a chart paper in which draw a graph of all trigonometric functions. Also mention it's domain and range.
2. Make a chart paper in which write all formula related to trigonometric functions.
3. Make a chart paper in which write definition of functions and types of functions with domain and range with graph.

**SUBJECT: COMPUTER SCIENCE**

1. Write a program to calculate in how many days a work will be completed by three persons A, B and C together. A, B, C take x days, y days and z days respectively to do the job alone. The formula to calculate the number of days if they work together is  $xyz/(xy + yz + xz)$  days where x, y, and z are given as input to the program.
2. The volume of a sphere with radius r is  $\frac{4}{3}\pi r^3$ . Write a Python program to find the volume of spheres with radius 7cm, 12cm, 16cm, respectively.
3. The formula  $E = mc^2$  states that the equivalent energy (E) can be calculated as the mass (m) multiplied by the speed of light ( $c = \text{about } 3 \times 10^8 \text{ m/s}$ ) squared. Write a program that accepts the mass of an object and determines its energy.
4. Write a function that checks whether an input number is a palindrome or not.
5. How is built-in function pow () function different from function math.pow() ? Explain with an example.

**SUBJECT: BIOLOGY**

1. Write the project on any one of the following topics (Choice one topic only):

- (a) Effect of light and gravity on plant growth movement
- (b) Effects of herbicides on the plants
- (c) An aquarium for studying water ecosystem
- (d) Fermentation by Yeast
- (e) Study on the growth pattern of Money Plant
- (f) Study on some medicinal plants found in your surroundings
- (g) Study on some insects for their usefulness
- (h) The effect of smoking on human health
- (i) Effect of Global warming on living organism
- (j) Pollution hazards on Human being
- (k) Major effects of landslide on Northeast India
- (l) Recent disease of eyes- Conjunctivitis

2. The above-mentioned choice topic of the project should be followed according to the following pattern or sequence and write it on the project notebook accordingly.

- (a) Topic Name
- (b) Objective
- (c) Introduction
- (d) Reason for selecting the Project
- (e) Materials Required
- (f) Procedure
- (g) Observation
- (h) Conclusion

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