



Holiday Homework: Explore, Express, and Evolve!

Dear Students of Class X ,

As we head into the holiday season, it's time to unwind, recharge, and refocus. To keep your minds active and engaged, we've curated a special holiday homework package just for you.

In this package, you'll find a range of activities that cater to your diverse interests and strengths. From creative writing and art to research and reflection, we invite you to explore new ideas, express yourself authentically, and evolve as learners and individuals.

Embrace this opportunity to:

- Unleash your creativity and imagination
- Develop your critical thinking and problem-solving skills
- Reflect on your experiences and growth
- Discover new passions and interests

Remember, holiday homework is a chance to learn at your own pace, explore your interests, and have fun! So, take your time, be curious, and enjoy the journey!

Happy holidays and happy learning!

Best regards,

[Teachers of Class X]

DAV PUBLIC SCHOOL , BISTUPUR JAMSHEDPUR

HOLIDAY HOME WORK FOR PHYSICS

STD-X (SESSION-2024-2025)

M.C.Q.-

1. An object is placed 20 cm in front of a plane mirror. The mirror is moved 2 cm towards the object. The distance between the positions of the original and final images seen in the mirror is:

- (a) 2 cm (b) 4 cm (c) 10 cm (d) 22 cm

2. A ray of light that strikes a plane mirror PQ at an angle of incidence of 30° , is reflected from the plane mirror and then strikes a second plane mirror QR placed at right angles to the first mirror. The angle of reflection at the second mirror is:

- (a) 30° (b) 45° (c) 60° (d) 90°

3. An object is placed at 100 mm in front of a concave mirror which produces an upright image (erect image). The radius of curvature of the mirror is:

- (a) Less than 100 mm
(b) Between 100 mm and 200 mm
(c) Exactly 200 mm
(d) More than 200 mm

5. A concave mirror produces a magnification of +4. The object is placed:

- (a) At the focus
(b) Between focus and centre of curvature
(c) Between focus and pole
(d) Beyond the centre of curvature

6. Two big mirrors A and B are fitted side by side on a wall. A man is standing at such a distance from the wall that he can see the erect image of his face in both the mirrors. When the man starts walking towards the mirrors, he finds that the size of his face in mirror A goes on increasing but that in mirror B remains the same:

- (a) Mirror A is concave and mirror B is convex
(b) Mirror A is plane and mirror B is concave
(c) Mirror A is concave and mirror B is plane
(d) Mirror A is convex and mirror B is concave

7. A student traces the path of a ray of light passing through a rectangular slab.

DAV Public School, Bistupur, JSR

Home Assignment for Summer Vacation

Class: X

Subject : English

- I. Make a comic book based on the poem, The Frog and the Nightingale. Refer to the cues mentioned below. You can also make use of a graphic design tool to create this.

Cues:

(How are comic books made?

Once a comic book script is complete, multiple artists illustrate the comic by adding pencilling, inking, coloring and lettering. Much of this work can be done digitally. After an editor approves the work, the comic is then sent off to a printer.

How to make a good comic book cover?

First, determine your comic book cover dimensions. Design your title and match the title with the cover art, be sure the tone and quality of the comic matches the cover and use contrast to highlight the cover content. Choose an appropriate finish and weight for the paper.

What makes a good comic strip?

One essential part of a good comic strip is a strong narrative, or story arc. Create characters with hopes and dreams, who face challenges but overcome them in the end. Make the visuals as high quality as possible. Use speech bubbles and make the frames as action-packed as possible.)

- II. Do the worksheets of Chapter 1 and 2 in the English workbook.
- III. Write an Email to the Principal of your school, requesting him/ her to grant you leave for five days to attend the wedding ceremony of your sister.

कक्षा - दशमी - संस्कृतम् - २०२४-२५

ग्रीष्मावकाशः गृहकार्यम्

(शेमुषी - पाठ्य-पुस्तकं आधारितम् ।

(१) शेमुषीः पाठः - १, २, ३ अभ्यासं स्मरणं च ।

(२) सन्धिकार्यम् - व्यञ्जन सन्धिः - तुकागम, मोऽनुसारः ,

वर्गीयप्रथमक्षराणाम् तृतीयवर्णं परिवर्तनम् , प्रथमवर्णस्य पञ्चमवर्णं परिवर्तनम् सोदाहरणं अभ्यासं लिखनं च ।

(३) विसर्गसन्धि - विसर्गस्य उत्त्वं, रत्वम् , विसर्गस्य लोपः, विसर्गस्य स्थाने स्, ष, श् अभ्यासः लिखत ।

(४) समासः - वाक्येषु समस्तपदानां विग्रहः विग्रह पदानां च समासः ।

(५) तत्पुरुषः (विभक्तिः बहुव्रीहिः

HISTORY & POLITICAL SCIENCE

ASSIGNMENTS

HISTORY

NATIONALISM IN EUROPE

1. What do you understand by the term 'allegory'? (1)
2. "The 1830s were years of great economic hardship in Europe". Explain how? (3)
3. "Culture had played an important role in the development of Nationalism in Europe during 18th and 19th centuries". Support the statement with examples. (3)
4. How Europe was closely allied to the ideology of liberalism? (3)
5. What conditions of Balkan areas led to World War 1? (5)
6. Briefly explain the process of Unification of Italy. (5)

POWER SHARING

1. When was Sinhala recognized as the official language of Sri Lanka? (1)
2. What is the major difference between unitary and federal systems? (1)
3. Explain the main differences between the Belgium and Sri Lanka. (3)

FEDERALISM

4. Highlight 3 major distinctions between the Federations of "coming together and holding together" federations with their examples. (3)
5. Explain any 5 major features of Federalism. (5)
6. Explain the 4 main forms of power sharing with their examples. (5)

DAV PUBLIC SCHOOL, BISTUPUR JAMSHEDPUR

HOLIDAY HOMEWORK 2024-25

CLASS – 10

SUBJECT – MATHEMATICS

- I. COMPLETE THE FIRST 3 CHAPTERS IN MATHS NOTE BOOK WITH PROPER REVISION BY SOLVING MINIMUM 5 QUESTIONS FROM PREVIOUS YEAR BOARD QUESTION PAPER .
- II. WRITE 5 ACTIVITY IN YOUR MATHS LAB MANUAL LISTED BELOW IN SEQUENCE :-
 1. To find the HCF of two numbers Experimentally .
 2. Draw the graph of Quadratic Polynomial and write the observation
 3. To verify the Condition for Consistency for a Pair of Linear Equations in two Variables by Graphical method (Unique Solution).
 4. To verify the Condition for Consistency for a Pair of Linear Equations in two Variables by Graphical method (Many Solution).
 5. To verify the Condition for Inconsistency for a Pair of Linear Equations in two Variables by Graphical method (No Solution).

III. PROJECT WORK / CASE STUDIES

Class will be divided into different groups with four/five students in each group.

TOPIC ALLOTTED : Indian mathematicians and their contributions

Note : - Students can use any one of below mentioned sub topics or any sub topic of their choice to make the project .

INTEGRATION WITH OTHER SUBJECTS :

The concept/theorems can be integrated into various other disciplines such as science, social-science . Students can be courage to explore the connections and apply their understanding of theorems/statements in different contexts. Students will learn about the applications of all those statements/theorems in various fields.

REAL-LIFE LINKAGE :

The concept can be linked to real-life situations such as income & expenditure, population, growth. Students will explore these connections and apply their understanding in the contexts .

ART INTEGRATION :

The concept can be integrated with art by exploring the graphical representation of theorems . Students will create their own graphs and identify the characteristics of different types of polynomials. This can help them develop their creativity and **visualization skills** .

SUSTAINABLE DEVELOPMENT GOALS :

The theorems, axioms can be linked to Sustainable Development Goals such as Goal 8 : Decent Works and Economic Growth, Goal 10 : Reduced Inequalities and Goal 16 : Peace, Justice and Strong Institutions. Students will explore these connections and apply their understandings of the topic in the contexts.

GENERAL GUIDELINES :-

- The project is to be done on inter – leaf sheets.
- The total length of the project will be 15 – 20 pages.
- Students have to preserve the initial drafts of the project as well as any research papers that they may have used.
- Students have to be prepared to give a presentation of the project in the class.
- A summary / synopsis (one page) of the project has to be prepared covering : The objective statement Their observations and findings The learning outcomes.
- Any other learning from this exercise such as skills of team work, problem solving, time management, information collection, processing, analysing and synthesizing relevant information to derive meaningful conclusions.
- The project must be neat and well-presented and must be completely hand-written.
- No whiteners to be used or written matter to be crossed out. In case of any mistakes, redo the sheet .
- Do not number sheets or write dates unless so instructed .
- Colour illustrations, graphs may be hand drawn or printed (if it is relevant for any aspect of your project) are welcome to make them look attractive .

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HOLIDAY HOME WORK

BIOLOGY

STD-X - SESSION-2024-2025

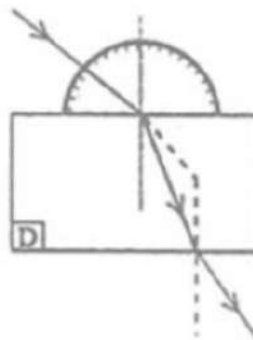
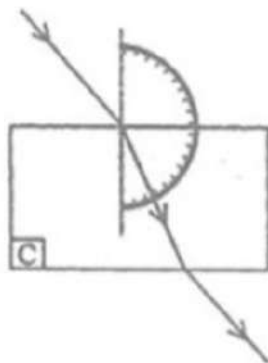
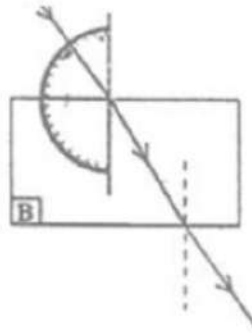
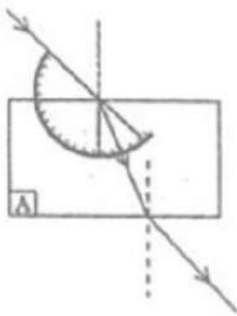
1. Prepare a travelogue/ travel brochure of food from mouth(ingestion) to Anus(Egestion) with suitable diagrams.

Sample -



You can use your creativity, content presentation , ideas etc to prepare it. Try to be original.

2. Revise all the life processes done in class.



8. For measuring the angle of incidence, he must position the protractor in the manner shown in the figure:

- (a) A (b) B (c) C (d) D

9. When a plane mirror is rotated through a certain angle, the reflected ray turns through twice as much and the size of the image:

- (a) is doubled (b) is halved (c) becomes infinite (d) remains the same

10. The focal length of a plane mirror is

- (a) 0 (b) infinite (c) 25 cm (d) -25 cm

Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true but R is not the correct explanation of A.
 (c) A is true but R is false.
 (d) A is false but R is true.

11. Assertion (A) : The emergent ray is parallel to the direction of the incident ray.

Reason (R) : The extent of bending of the ray of light at the opposite parallel faces (air- glass interface and glass-air interface) of the rectangular glass slab is equal and opposite.

DAV PUBLIC SCHOOL, BISTUPUR JAMSHEDPUR
HOLIDAY HOME WORK

ARTIFICIAL INTELLIGENCE (417)

Activity-2

Power Point Presentation
Job Advertisement for 2029!

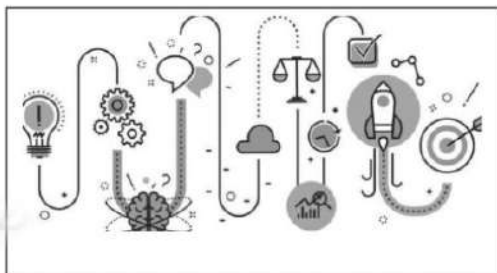
Here's what you have to do:

- Search for current and emerging trends in employment to make a Future Job Advertisement. (Use PowerPoint Presentation for creation of **Job Advertisement**)
- The job description is for a job which will exist ten years from now, i.e. the current date.
- To help you , the job advertisement must include the following information.

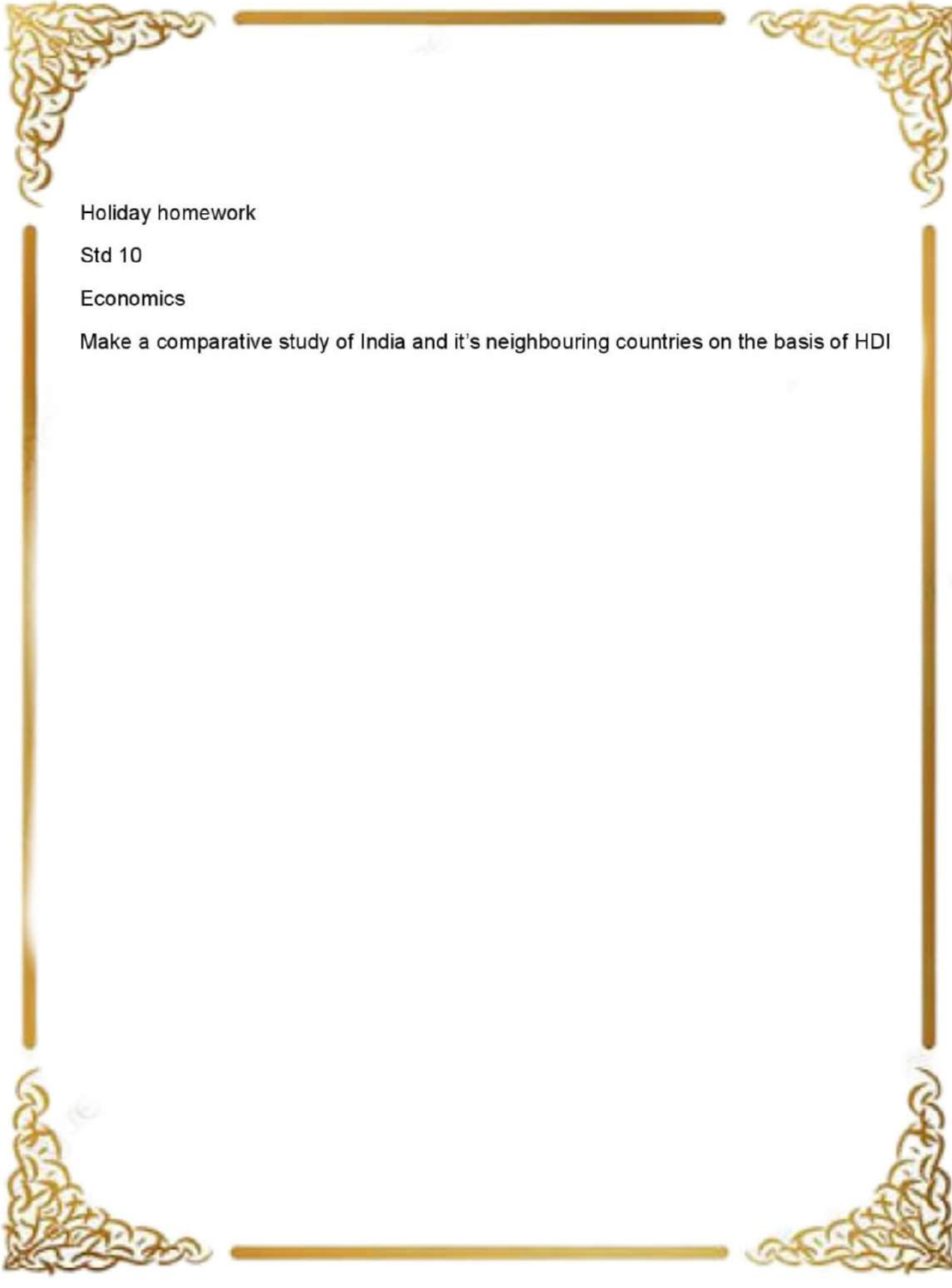
Information about the hiring company	Required Skills - Vital, Essential And Desirable Skills
Is the company a start up?	Is the company a big Organization
Is this a community Project?	Share the reason why you choose this job or jobs?

Analysis

List the kinds of futuristic job opportunities that wouldbe available for you?



Write the skills you will require to do these jobs?



Holiday homework

Std 10

Economics

Make a comparative study of India and it's neighbouring countries on the basis of HDI

HOLIDAY HOMEWORK

SUBJECT- CHEMISTRY

STD-X

ACTIVITY

Test the pH values of the solutions

Record your observation(click photo)

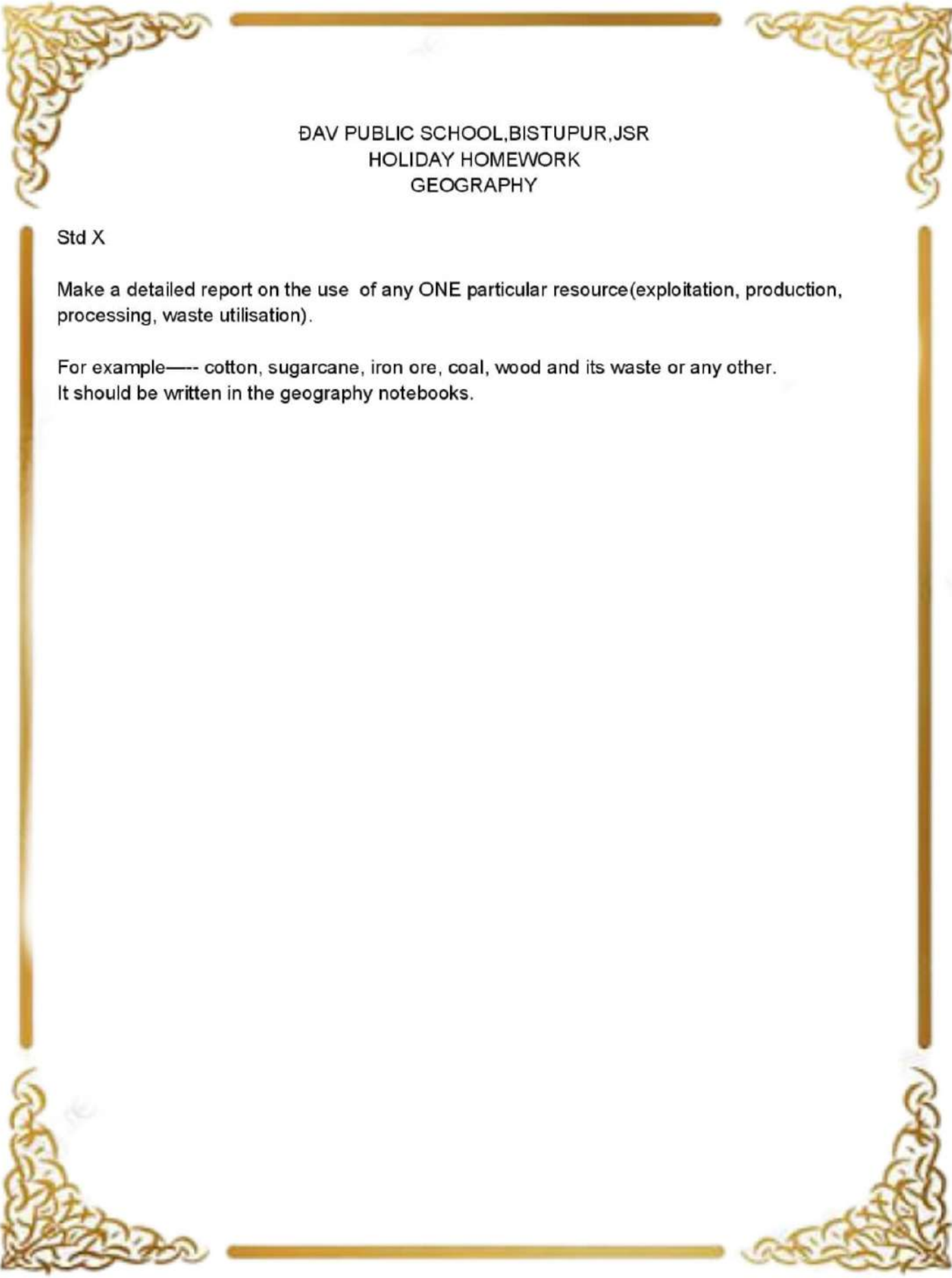
What is the nature of each substance on the basis of your observations ?

Solution	Colour of pH paper	Approximate pH value	Nature of substance
Saliva(before meal)			
Saliva after meal			
Lemon juice			
Vinegar			
Coffee			
Soap solution			
Onion juice			
Tomato juice			
Tap water			
Milk			

Write your observations in tabular form in A₄ size sheet,Paste photo

Submit in stick file

(pH paper you can purchase from any Chemi shop)



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HOLIDAY HOMEWORK
GEOGRAPHY

Std X

Make a detailed report on the use of any ONE particular resource (exploitation, production, processing, waste utilisation).

For example— cotton, sugarcane, iron ore, coal, wood and its waste or any other.
It should be written in the geography notebooks.