

**LK SINGHANIA EDUCATION CENTRE  
GOTAN**



**HOLIDAY ASSIGNMENT**

**SESSION : 2024-25  
CLASS : X**

*“Climb every mountain, ford every stream,  
Follow every rainbow, till you find your dream.”*

**Dear Students,**

**Wishing you a happy and blessed summer time!**

**You are the torch bearers of change. Put in your sincere efforts and do some unique and creative work for the society. The tiny efforts of each soul are the remarks of gratitude to Nature.**

**The entire team of LKSEC teachers has put all will and might in designing “The Holiday Assignment”, where certain aspects are kept in mind like use of technology, wise use of paper and resources from surroundings. Put your shoulder to the wheel in making the projects creative, attractive and cost effective with appropriate information.**

**While preparing the assignment, keep in mind following points:**

- 1. All the assignments should be original.**
- 2. Use technology wisely and correctly.**
- 3. Values and virtues bring enrichment in bonds among members of the family. So, as a piece of advice, involve your parents in the process.**
- 4. Use poster colours, sketch pens etc.**
- 5. Grammatical accuracy also carries weightage.**
- 6. Sincere and honest efforts will be appreciated.**
- 7. The cover page must include details like student’s name, class and section, subject and name of the teacher it is to be submitted to.**

**Make this summer special, innovative and enthralling.**

**Educationally Yours,**

**R C Joshi  
Principal**



# SUMMER VACATIONS ASSIGNMENT

## ALL SUBJECTS

*"The only source of knowledge is experience."*

*Albert Einstein*

### SUMMER VACATION

#### HOME WORK

#### X SCIENCE

#### CHEMISTRY

1. Write and learn the chemical formulae of following compounds.

S.No	Name of the compound	Chemical Formula
1	Water	$H_2O$
2	Carbon dioxide	$CO_2$
3	Magnesium oxide	$MgO$
4	Calcium oxide (Quicklime)	$CaO$
5	Calcium hydroxide(s) (slaked lime)	$Ca(OH)_2(s)$
6	Calcium hydroxide(aq) (lime water)	$Ca(OH)_2(aq)$
7	Calcium carbonate	$CaCO_3$
8	Lead nitrate	$Pb(NO_3)_2$
9	Ferrous sulphate	$FeSO_4$
10	Ferric oxide	$Fe_2O_3$

11	Sulphur dioxide	<b>SO<sub>2</sub></b>
12	Sulphur trioxide	<b>SO<sub>3</sub></b>
13	Nitrogen dioxide	<b>NO<sub>2</sub></b>
14	Copper sulphate	<b>CuSO<sub>4</sub></b>
15	Lead iodide	<b>PbI<sub>2</sub></b>
16	Potassium iodide	<b>KI</b>
17	<b>Potassium nitrate</b>	<b>KNO<sub>3</sub></b>
20	Zinc sulphate	<b>ZnSO<sub>4</sub></b>
21	Zinc chloride	<b>ZnCl<sub>2</sub></b>
22	Barium sulphate	<b>BaSO<sub>4</sub></b>
23	Barium chloride	<b>BaCl<sub>2</sub></b>
24	Aluminium chloride	<b>AlCl<sub>3</sub></b>
25	Aluminium sulphate	<b>Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub></b>
25	Aluminium oxide	<b>Al<sub>2</sub>O<sub>3</sub></b>
26	Hydrochloric acid	<b>HCl</b>
27	Sulphuric Acid	<b>H<sub>2</sub>SO<sub>4</sub></b>
28	Nitric acid	<b>HNO<sub>3</sub></b>
29	Carbonic Acid	<b>H<sub>2</sub>CO<sub>3</sub></b>
30	Sodium Hydroxide	<b>NaOH</b>
31	Potassium Hydroxide	<b>KOH</b>
32	Ammonium Hydroxide	<b>NH<sub>4</sub>OH</b>

33	Ammonia	<b>NH<sub>3</sub></b>
34	Acetic acid	<b>CH<sub>3</sub>COOH</b>
35	Silver chloride	<b>AgCl</b>
36	Potassium sulphate	<b>K<sub>2</sub>SO<sub>4</sub></b>
37	Sodium carbonate	<b>Na<sub>2</sub>CO<sub>3</sub></b>
38	Sodium bicarbonate	<b>NaHCO<sub>3</sub></b>

2. Translate the following statements into chemical equations and balance them.

- Hydrogen gas combines with nitrogen to form ammonia.
- Hydrogen sulphide gas burns in the air to give water and sulphur dioxide.
- Barium chloride reacts with aluminium sulphate to give Aluminium chloride and a precipitate of barium sulphate.
- Potassium metal reacts with water to give potassium hydroxide and Hydrogen gas.
- Calcium hydroxide + Carbon dioxide  $\rightarrow$  Calcium carbonate + Water
- Zinc + Silver chloride  $\rightarrow$  Zinc chloride + Silver
- Aluminium + Copper sulphate  $\rightarrow$  Aluminium sulphate + Copper
- Barium chloride + Potassium sulphate  $\rightarrow$  Barium sulphate + Potassium chloride

## PHYSICS

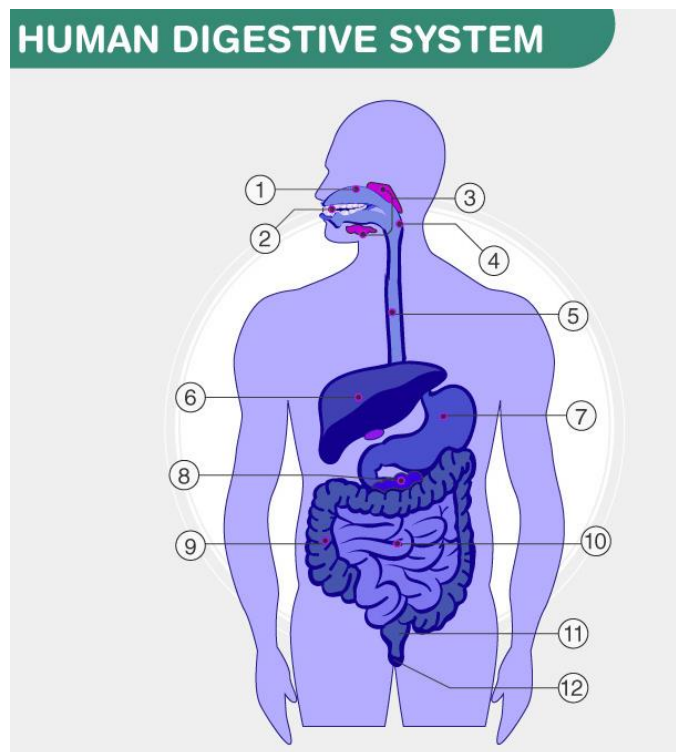
### ANSWER THE FOLLOWING QUESTIONS:-

- What is a GI TAG product? A mirror from India has got GI tag in 2005. Name the mirror and paste or draw the picture of that mirror. Write a paragraph describing the mirror.
- Which is better for viewing the road- regular reflection or irregular reflection? Justify your answer.

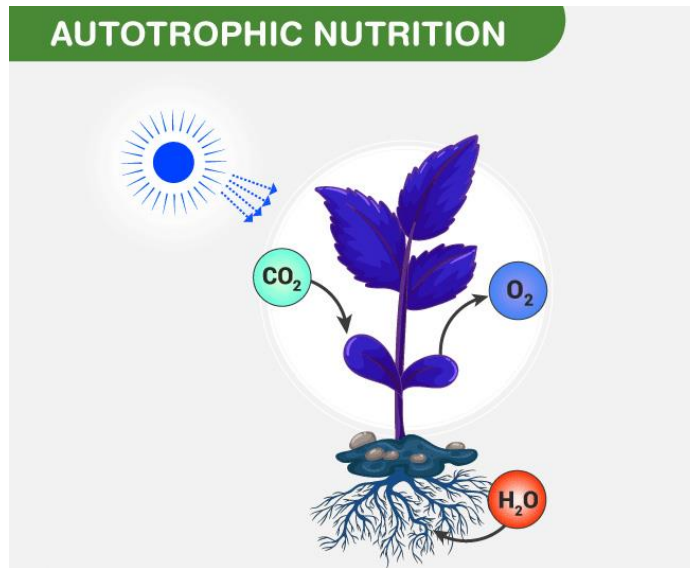
- (III) Using the law of reflection, explain how powder applied on the face of a person takes the shine off a person's nose. What is the name of the optical effect? Draw and justify the answer.

### BIOLOGY

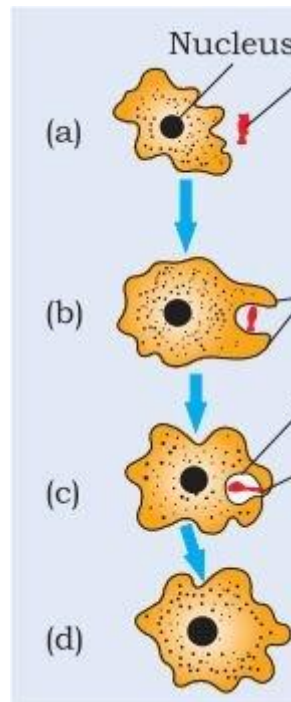
- A. Draw the diagram given below in an A4 Sheet and label the parts.



- B. Explain the process of photosynthesis in Autotrophic nutrition given below along with diagram.



C. Draw and label the steps of holozoic nutrition in Amoeba given below-





# CLASS – X

## SUB – ENGLISH

### Vacation Home assignment

#### **1. Reading Assignment:**

Choose a novel or play from a suggested list (e.g., 'To Kill a Mockingbird,' 'Julius Ceaser' or any other). Write a summary of each chapter.

#### **2. Literature:**

(a) **Poetic devices-** Pen down any 10 literary devices with definitions and two examples of each.

(b) **Read** the chapter **Glimpses of India** from 'First Flight' (PDF form is available on the Internet).

Take up any state of India or the place you belong to and make a PPT/video on its Culture, Climate, Soil, Crops, Festivals, Traditional Dresses, Cuisine, etc. Include handmade sketches and computer graphics.

**You may also make a collage of the pictures and sketches.**

OR

**Students have to shoot a minute video about their favourite hobby or talent considering any one of the following topics as an example -**

- Song
- Instrument record
- Art & craft (sketching/ doodling/painting/etc.)
- Speech/Debate/Conversational shorts
- Create a news show
- Create a book report video
- Vlog
- Cooking tutorials
- Promote a good cause video
- Video on the explanation of any of the story/poem/topic

### **Points to remember-**

- **The video should be of good picture quality.**
- **Students must shoot it in a decent dress.**
- **It must have a small self-intro. (Full name, School name, Class, topic/objective of video)**
- **The background should be free from disturbances and chaos.**
- **Should be confident and smart while shooting it.**
- **All the students must do this project.**

**[The main motive of this project is to highlight student's talent.]**

**Class – X**  
**Subject – Mathematics**

**Summer Assignment**

**Project No. - 1**

You, being an Architect design your “DREAM HOUSE” for the area of land available at your home.

**Project No. - 2**

You, being a Historian by researching the life of any two Mathematicians of the past, present their important contributions in addition to their life story through a Power Point Presentation.

**Project No. - 3**

You, being a Mathematics student, research & present any two types of proof of Pythagorean Theorem through Power Point presentation.

**Project No. - 4**

Prepare a budget of at least one month of your house hold expenses (including water bill, electricity bill, Phone bills, House rent and all other house hold commodities expenses). Budget presentation may be in the form of Tables / Graph etc.

**Project No. - 5**

Prepare a Mind map/Concept Map/ Summary of first three units including illustrative examples, Real Numbers from your Mathematics Text Book.

**कक्षा - 10**  
**ग्रीष्मकालीन हिन्दी गृहकार्य - 'अपना गांव-अपना शहर'**

अपने शहर या गांव की किन्हीं चार प्रसिद्ध जगह/ वस्तुओं की जानकारी एकत्र कर उनके बारे में अलग-अलग 100 से 120 शब्दों में चार अनुच्छेद लिखें ।

**Class - X**  
**Sub - Social Science**

**Economics Project work**

**Topic - Consumer Rights / Consumer awareness**

MM-10

Guidelines for the Project-

- Project should be hand written and must be submitted in hard copy (Project File) Containing A4 sheets before 15<sup>th</sup> July-2024.
- Maximum page limit is 10 pages
- Project must contain the following topics with relevant pictures.

1. Cover page
2. Acknowledgement
3. Introduction
4. History of consumer protection act-1986- with relevant pictures
5. Consumer protection act. Description six rights
6. Redressal agencies under consumer protection act-1986
7. Reliefs available to the consumer
8. Consumer Responsibilities
9. Conclusion
10. Bibliography

- Assessment criteria –

- |                      |       |
|----------------------|-------|
| 1. Presentation      | - 2 M |
| 2. Content Relevance | - 3 M |
| 3. Creativity        | - 3 M |
| 4. Viva-Voce         | - 2 M |