# Kailash Vidya Vihar: Nimbahera
## (ISO 9001 : 2015)

## Summer Vacation Assignments : 2019-20

**Class X**                                           **Subject: Mathematics**

**Class X**                                           **Subject: English**

**Class X**                                           **Subject: Science**

**Biology**

### Chapter-6, Life Processes
### Holiday Homework

1. *Name the site of photosynthesis.*

2. *Draw the diagram of cross – section of a leaf and label the following in it:*

   **a.** *Chloroplast          b. Guard cell          c. Lower epidermis     d. Upper epidermis.*

3. *What is meant by life process?*

4. *What are autotrophs? Give two examples.*

5. *Explain how nutrition takes place in paramoecium?*

6. *Name any two autotrophic plants which also shows heterotrophic mode of nutrition. Why do they need to do so?*

7. Where does digestion of starch begins in human body?

8. Write an experiment to prove the essentiality of light for photosynthesis.

9. Why herbivorous animals have long alimentary canal as compared to carnivores?

10. Give two examples each of saprophytic and parasitic organisms.

11. What is common for cuscuta, ticks and leeches?

12. Name the substrates for the following enzymes:
    i) Trypsin            ii) Pepsin            iii) Lipase.

13. Draw a well labelled diagram of human digestive system.

14. How is small intestine designed to absorb digested food?

15. How are fats digested in our body? Where does this process take place?

16. What is the role of saliva in the digestion of food?

17. Write the names of different types of teeth found in vihuman beings along with their numbers and one function of each.

*18. What criteria do we use to decide whether something is alive?*

*19. What are the differences between autotrophic nutrition and heterotrophic nutrition?*

*20. What is the function of amylase?*

*21. What are the raw materials required for photosynthesis?*

*22. Bile does not contain any enzymes, yet it is essential for the digestion of food. Why?*

*23. How would non – secretion of hydrochloric acid in our stomach affect food digestion?*

*24. How nutrition takes place in Amoeba? Explain with diagram.*

*25. How does each of the following factors affect the productivity in the process of photosynthesis?*

   *i.     Temperature         ii. Water               iii.Carbon dioxide.*

## Chemistry

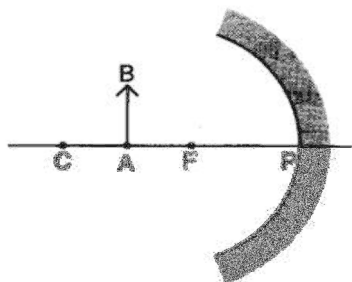Prepare question and answer on each activity of chapter -1

One mark question 1

Two mark question 1

Total activity 11

Total no. of questions = 11×2 =22

## Physics X B

1. List two properties of the image formed by a plane mirror.

2. List two properties of the image formed by a convex mirror.

3. List two properties of the image formed by a concave mirror, when object is placed between focus and pole of the mirror.

4. Name the type of mirror used in the following situations:
   (1)Headlights of a car  (2)Rear-view mirror of vehicles (3)Solar furnace Support your  .
   (4)In street lamp

5. Draw the following diagram in your answer book and show the formation of image of the object AB with the help of suitable rays.



6. State sign conventions for a concave mirror for following.
   (i) Object distance    (ii) Radius of curvature (iii) Image distance

(iv) Magnification for real image (v)Focal length (vi)Magnification for virtual image

7. A concave mirror has focal length of 20 cm. At what distance from the mirror a 5 cm tall object be placed so that it forms an image at 15 cm from the lens? Also calculate the size of the image formed.

8. Draw the ray diagram in each case to show the position and nature of the image formed when the object is placed:
(i) at the center of curvature of a concave mirror
(ii) Between the pole( P) and focus (F) of a concave mirror
(iii) in front of a convex mirror
(iv) at F of a concave mirror

9. An object 2 cm in size is placed 30 cm in front of a concave mirror of focal length 15 cm. Atwhat distance from the mirror should a screen be placed in order to obtain a sharp image?What will be the nature and the size of the image formed? Draw a ray diagram to show theformation of the image in this case.

10.The refractive index of glass is 1.50 and the speed of light in air is 3 x $10^8$ ms-1. Calculate the speed of light in glass.

11. Define and show on a diagram, the following terms relating to a concave mirror:
(i) Aperture    (ii) Radius of curvature   (iii) focal length (iv) pole (v) principal axis

12. Define 'refractive index of a transparent medium.' What is its unit? Which has a higher? refractive index, glass or water?


# Class X                                              Subject: English

a) Utilise your leisure time in reading English newspaper.

b) Read 1,2,3, 4 and 5 of supplementary reader. Write  the summary, theme and character sketch of these chapters.

c) Writing section - Letter to Editor- 2, Story- 2 and Article- 2 of your choice from sample papers.

# Class X                                              Subject: Hindi

❖ क्षितिज पाठ्यपुस्तक और व्याकरण के बिन्दुओं पर एक पी.पी.टी तैयार करना।
❖ पत्र :

       सम्पादकीय पत्र : 2

❖ निबंध :
    1. लोकतन्त्र में चुनावों का महत्व
    2. कामकाजी महिलाएँ और उनकी दोहरी भूमिका
❖ पढ़े हुए पाठों का दोहरान करें।

**Class X**                                        **Subject: Social Science**

(1)Project work on Popular Struggle or disaster management
(2) History chapter 5, civics, Geog, Eco chapter 1 Frame at least 40 questions with answers


**Class X**                                        **Subject:  Drawing**

 5 paintings of their own choice
 5 sketches of their own choice