

MODERN PUBLIC SCHOOL, SEC-37 FBD.
SUMMER HOLIDAYS HOMEWORK (2022-23)
CLASS 8th
Sub. - SCIENCE

- 1) A needle placed 45 cm from a lens forms an image on the screen placed 90 cm on the other side of the lens. Identify the type of the lens and determine its focal length. What is the size of the image if the size of needle is 5 cm.
- 2) How much time will light take to cross 2 mm thick glass pane if refractive index of glass is $\frac{3}{2}$?
- 3) A small amount of quick lime is added to water in a beaker.
- (a) Name and define the type of reaction that has taken place.
- (b) Write balanced chemical equation for the above reaction. Write the chemical name of product obtained.
- (c) State two observations that you will make in the reaction.
- 4) An aqueous solution of metal nitrate 'P' reacts with sodium bromide solution to form yellow precipitate (compound 'Q') which is used in photography. 'Q' on

exposure to sunlight undergoes decomposition reaction to form metal present in along with a reddish brown gas. Identify 'P' and 'Q'. Write balanced chemical equation for the chemical reaction. List the two categories in which this reaction can be placed.

5) While performing the experiment to prove that carbon dioxide is essential for photosynthesis. Why were the following steps taken?

(a) The two potted plants A and B were selected and kept in dark for 48 hours.

(b) They were then kept in sunlight.

(c) Pot B had water droplets on the bell jar whereas Pot P did not.

(d) If a watch glass containing KOH was kept inside along with pot B, what would be the result?

6) In alimentary canal

(a) The part from where acid is released.

(b) Secretion of this helps in emulsification of fats.

(c) Long tube like structure where peristalsis is the only process taking place

(d) A vestigial organ

(e) Accessory digestive heterocrine gland.

- 7) Draw ray diagrams to find different type of images formed by spherical lens on A-3 size sheet. Write the nature and size of the image in each case.