Guru Gobind Singh Public School, Chas

Class—X. Summer Holiday Assignment. Subject—physics

Chapter- Reflection and refraction of light

Portion—Up to Mirror formula and magnification

1. What type of image is formed on a cinema screen?
2. Why is convex mirror used as a rear view mirror in vehicles? state any one reason.
3. What is the significance of +ve sign of magnification?
4. Which property of concave mirror is utilised for using them as shaving Mirrors?
5. What should be the position of the object when a concave mirror is to be used as a doctor's mirror?
6. Define the term principal axis of a spherical mirror.
7. List four characteristics of the images formed by plane mirrors?
8. State two position in which a concave mirror produces a magnified image of a given object. List two differences between the two images.
9. Define the following terms in the the context of spherical Mirrors.
   (i) Polel . (ii) centre of curvature (iii) radius of curvature (iv)principal axis
10. A convex mirror used for rear view on an automobile has a radius of curvature of 3m .If a bus is located at 5 metre from this mirror .Find the position ,nature and size of the image.
11. An object 4 cm in height ,it is placed at 15 cm in front of a concave mirror of focal length 10 cm .At what distance from the mirror should a screen be placed to obtain a sharp image of the object. Calculate the height of the image.

Project work (Do the work in a project file)

12. (i) Explain the laws of reflection with the help of a neat and labelled ray diagram.
    (ii) Draw ray diagram for the image formation by a concave mirror and convex mirror for all the position of the object.