

SBOA SCHOOL AND JUNIOR COLLEGE

CHENNAI – 101

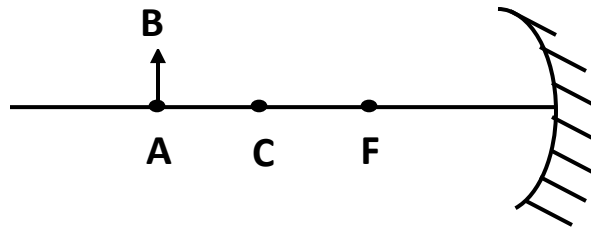
PHYSICS ASSIGNMENT – II

STD – XII

Reference – STD X NCERT

STD XII Vol II, NCERT

1. A ray of light is incident on a plane mirror normally. What is the angle of incidence and angle of reflection?
2. Which mirror is used as rear view mirror? Why?
3. An object AB is kept in front of a concave mirror as shown in the figure



- a) Complete the ray diagram showing the image formation of the object.
 - b) How will the position and intensity of the image be affected if the lower half of the mirror reflecting surface is painted black?
4. Which of the following does not change during the refraction of light? Wavelength, frequency or velocity of light?
 5. When light moves from air to glass, the refracted ray is bent towards the normal. Why?
 6. Light of wavelength 5000 \AA in air enters a medium of refractive index 1.4. What will be its frequency in the medium?
 7. The refractive index of glass w.r.t air is $\frac{3}{2}$ and the refractive index of water w.r.t air is $\frac{4}{3}$. What is the refractive index of glass w.r.t water?
 8. What is one dioptre?
 9. What do you mean by dispersion of light?
 10. Which colour deviates the most when white light passes through prism? Why?
 11. An object is placed at a distance of 20 cm from the pole of concave mirror of focal length 10 cm. The distance of the image is
 - a) 20 cm
 - b) 10 cm
 - c) -20 cm
 - d) -10 cm