

SBOA School & Junior College, Chennai 101

Physics

Std : XII

Assignment – I

Note: Refer Std X text book and Std XII e- book vol.II

1. A ray of light is incident normally on a mirror and retraces its path. Why?
2. What is the focal length of a plane mirror?
3. An object is placed between two plane parallel mirrors. Why do the distant objects get fainter and fainter?
4. A man holds a lighted candle in front of a thick glass mirror. On viewing it obliquely, he sees a number of images. Why?
5. What happens to the focal length of a glass lens when immersed in water?
6. On what factors does the focal length of a lens depend?
7. When does a convex lens produce a virtual image of an object?
8. An object is placed at the focus of a concave lens. Where will its image be formed?
9. Can a converging lens behave like a diverging lens . Explain.
10. What changes in the focal length of a i) concave mirror ii) convex lens , occur , when the incident violet light is replaced with red light.
11. Why is the ocean blue in colour.
12. For the same angle of incidence, the angle of refraction in two different media A and B are 25 degrees and 35 degrees . In which medium is the velocity of light less?
13. Watching sunset on a beach, one can see the sun for several minutes after it has actually set. Explain.
14. A glass lens is immersed in a liquid having the same refractive index as that of the glass. How would the glass lens appear ?
15. What will be the colour of the sky if viewed from the moon
