

I. Very short answer type.

1. Find the focal length of a mirror whose radius of curvature is 32cm?
2. List 3 uses of concave mirror.
3. Define 1-dioptre of a lens?

Find the power of a concave lens of focal length 4cm?

II.Short answer type.

1. Why do we prefer convex mirror as a rear view mirror in vehicles?
2. A student has difficulty in reading the black board while sitting in the last row. What would be the defect? Suggest a way for its correction.
3. A concave lens focal length of 15c.m.At what distance should the object from the lens be placed so that it forms an image at 10cm from the lens?Also find the magnification produced by the lens?

III.Long Answer type.

- 1.Define Hypermetropia? What are the causes and what way it can be corrected. Explain all with the help of neat ray diagrams.
- 2.Define i) laws of refraction.ii) A ray of light travelling in air enters obliquely into water. Does the light ray bend towards the normal or away from normal?why?
3. Write any four differences between real and virtual image?