

Chapter 7. lenses and their uses

(5 marks questions)

Q. 1. Questions based on diagrams

1) Draw a ray diagram with labels to show the images obtained by convex lens in the given situation :

- a) object at infinity
- b) object beyond $2F_1$
- c) object at $2F_1$
- d) object between $2F_1$ and F_1
- e) object at F_1
- f) Object between F_1 and optical center

For each case,also write the place of image, its nature and shape as compared to the object

Q. 2 . Questions with long answers

1. What is Myopia or nearsightedness? What are the reasons behind it. How is this defect corrected? explain with diagrams.
2. What is farsightedness? what are the reasons behind it? How is this defect corrected? explain with diagrams.
3. Explain the structure and working of a compound microscope with the help of a diagram.
4. Explain the structure and working of a refractive telescope with the help of a diagram
 - a. OR
 - b. How will you explain the working of a telescope on the basis of refraction of light ?