

ASSIGNMENT

Subject : Physics

Class :X

1. Refractive index of two material medium X and Y are 1.3 and 1.5 respectively. In which of the two, the light would travel faster?

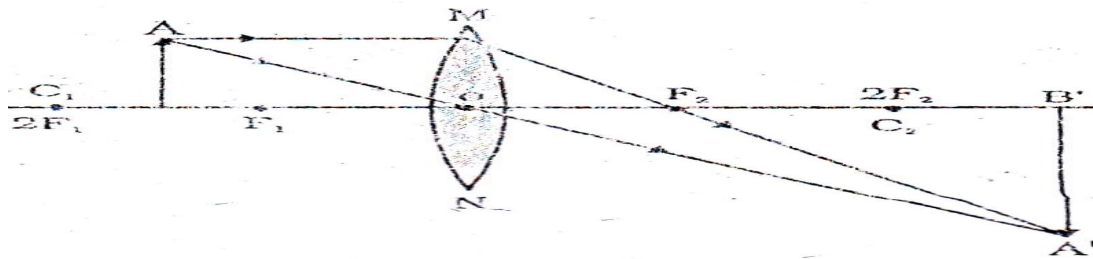
2. Write in one word or at the most in one sentence about the following

- (i) Mirrors used by dentists to examine teeth
- (ii) The smallest distance, at which the eye can see objects clearly without strain.

3 Explain why?

- (i) 'Danger' signals are red in colour.
- (ii) Convex mirrors are commonly used as rear – view mirrors.

4 Study the ray diagram given below and answer the following questions -



- (i) State the type of lens used in the figure.
- (ii) List two properties of the image formed
- (iii) In which position of the object will the magnification be -1?

5 What is meant by power of accommodation of the eye? How is it related to the focal length of the eye lens?

6 A 2.0 cm tall object is placed perpendicular to the principal axis of a concave lens of focal length 10 cm. The distance of the object from the mirror is 15 cm. Find the nature, position and size of the image formed.

Represent the situation with the help of a ray diagram.