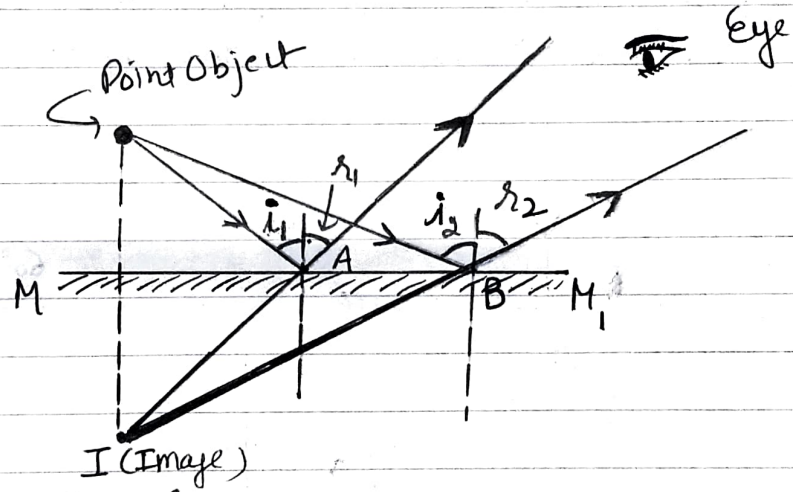
Q9 The following diagram shows a point object O placed in front of a plane mirror. Take a two rays from point O and show how the image of O is formed and seen by the eye.

(OR)

Q9 Draw a diagram for the formation of image of a point object by a plane mirror.

Ans



Here MM_1 is a plane mirror.

I - position of image

$\angle i_1 = \angle r_1$

$\angle i_2 = \angle r_2$ [By Laws of reflection]

Q10:→ Write three points of difference between the real image and virtual image.

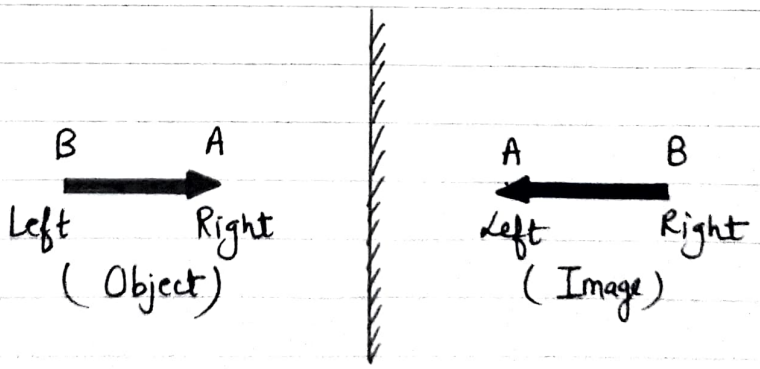
Ans:→

(Real Image)	(Virtual Image)
① It can be obtained on screen	① It cannot be obtained on screen.

(Real Image)	(Virtual Image)
(2) This image is formed by the actual intersection of reflected rays.	(2) This image is formed when reflected rays are produced backward.
(3) It is always inverted	(3) It is always erect (upright)
(4) It is formed in the front of the mirror	(4) It is formed in the behind of mirror.

Ques 11:- What is meant by lateral inversion of an image in a plane mirror? Explain it with the help of a diagram.

Ans 11:→ The interchange of left and right sides in the object and image formed by the plane mirror is called lateral inversion.



Lateral image of Letter F in a plane mirror :→