

# Home Assignment

by  
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Q1. Which phenomenon is responsible for making the paths of light visible?

A Tyndall effect

Q2 Give an example of a phenomenon where Tyndall effect can be observed.

A Tyndall effect can be observed when rays of sunlight pass through a dense forest. The mist possesses droplets of water.

Q3. State the characteristics of the image formed by a plane mirror.

- A
- laterally inverted
  - virtual & erect
  - Behind the mirror
  - Size of image is equal to size of the object



Q4. What is the function of retina in the human eye?

A The retina acts as a screen on which image is formed. The eye lens focuses rays on retina to form a real inverted image. Retina sends these electrical signal through optical nerve to brain.

Q5. What type of reflection of light takes place from a cinema screen?

A Diffused Reflection

Q6. Find the angle of reflection when the angle of incidence is  $30^\circ$ .

A Angle of incidence is  $90 - 30 = 60^\circ$   
The angle of incidence & angle of reflection are equal, both angles equal  $60^\circ$ .

Q7. What is iris? What is its function?

A Iris is a dark muscular structure which gives eye its distinct colour. It controls the amount of light entering into the eye.

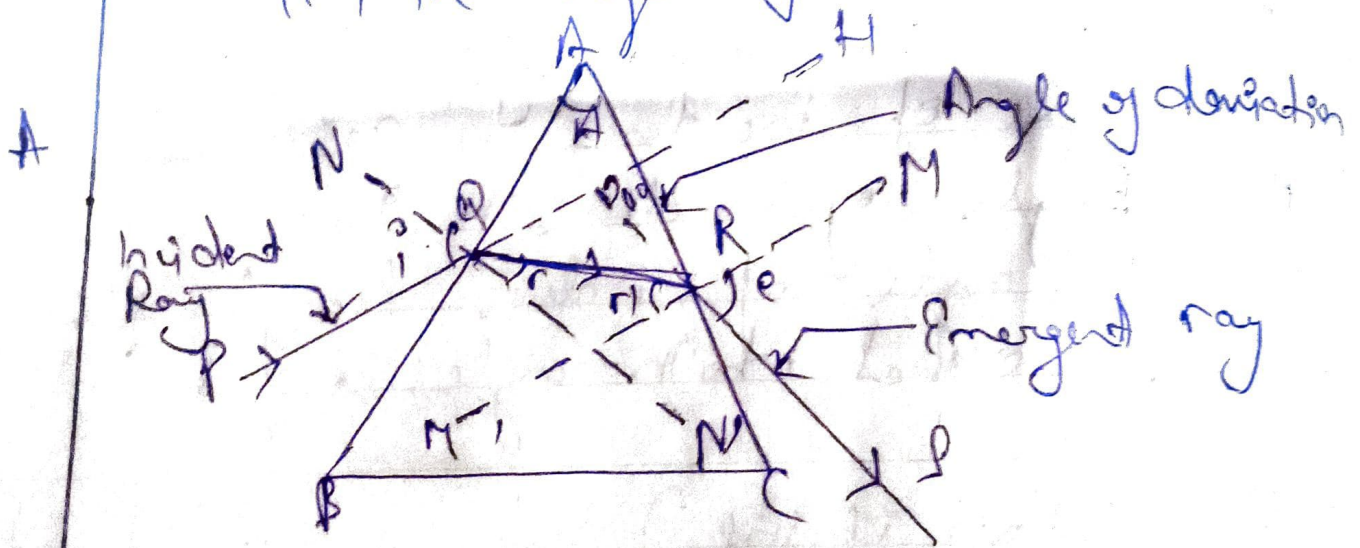
Q8. To an astronaut why does the sky



A. appears dark instead of blue? At there is no atmosphere in space & hence light does not scatter into its constituent colours that is why the sky appears dark instead of blue. & astronaut in space

Q9. Draw the ray diagram to show refraction of light through a glass prism. Mark it

- (a) The incident ray (b) The emergent ray  
(c) The angle of deviation



Q10. A person suffering from an eye defect uses lenses of power -1D to correct the defect. Name defect is suffering & value of ~~ref~~ lens to be used to correct it  
A. Hypermetropia ; convex lens