

IMPORTANT QUESTIONS

Electricity Class 10

Q1. If the refractive index for light going from air to diamond be 2.42, what will be the refractive index for light going from diamond to medium.

Q2. A ray of light is incident on a glass slab at an angle of incidence of 60° . If the angle of refraction be 32.7° , calculate the refractive index of glass. (Given: $\sin 60^\circ = 0.866$ and $\sin 32.7^\circ = 0.540$).

Q3. The speed of light in vacuum and in two different glasses is given in the table below:

Medium	Speed of light
Vacuum	$3.00 \times 10^8 \text{m/s}$
Flint glass	$1.86 \times 10^8 \text{m/s}$
Crown glass	$1.97 \times 10^8 \text{m/s}$

Q4. The speed of light in air is $3 \times 10^8 \text{m/s}$. In medium X its speed is $2 \times 10^8 \text{m/s}$ and in medium Y the speed of light is $2.5 \times 10^8 \text{m/s}$. calculate:

- (a) Air in X
- (b) Air in Y
- (c) X and Y