

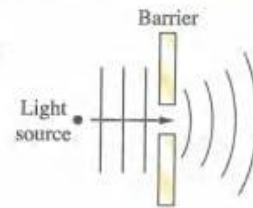
6 A light ray transfers from air to a medium of absolute refractive index 1.6 as in the opposite figure, so the angle of the incidence (ϕ_1) of the ray equals.....

- (a) 15.2° (b) 22.8°
- (c) 28.5° (d) 34.2°



7 The opposite figure represents the diffraction phenomenon for a light ray of wavelength (λ) and frequency (ν) passing through a slit of width d in a barrier, so to make the diffraction more clear, we have to

- (a) use a light of frequency less than ν
- (b) use a light of wavelength less than λ
- (c) use a barrier with a slit of width larger than d
- (d) increase the distance between the light source and the barrier

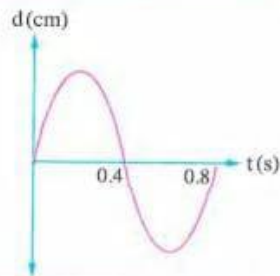


8 If the speeds of light in two media are 3×10^8 m/s, 2×10^8 m/s, so the relative refractive index from the optically rarer medium to the optically denser medium equals

- (a) 0.67 (b) 0.83 (c) 1.2 (d) 1.5

9 The opposite graph represents the relation between displacement (d) of one of the molecules of a medium through which a transverse wave is propagating with a speed of 20 m/s and time (t), so the wavelength of that wave equals

- (a) 4 m (b) 8 m
- (c) 16 m (d) 25 m



Answer the following questions (10 : 12) :

10 Give reason for: When a light ray gets incident perpendicularly on a reflecting surface it reflects on itself.

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