



KEC

K Education Centre



AS Waves -1

Waves Phenomena -1

Assignment Questions

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Waves Phenomena -1 :

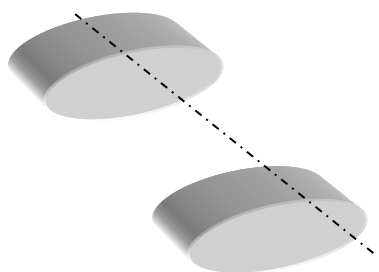
$$c = 3 \times 10^8 \text{ ms}^{-1}$$

Q1 : What is meant by polarisation ?

Q2 : Explain why longitudinal waves cannot be polarised , but transverse waves like light can.

Q3 : Give some uses of polarised waves.

Q4 : If light is allowed to its passed through a plastic lens made up of polarised material as shown in figure below and then pass through the other lens .



Explain what will happen to the light if the second lens is rotated through 90° .

Q5 : Two points on a progressive wave have a phase difference of $\pi/6$ radians

The speed of the wave is 340 m s^{-1} .What is the frequency of the wave when the minimum distance between the two points is 0.12 m ?

Q6 : Calculate the speed of the waves of wavelength $6.3 \times 10^{-2} \text{ m}$ and frequency of the waves is 30 kHz .