

# Polarisation Past Paper Questions

Jan 2002 to Jan 2009

5 Which one of the following types of wave **cannot** be polarised?

- A radio
- B ultraviolet
- C microwave
- D ultrasonic

**Q5 Jan 2003**

2 (a) State the characteristic features of

(i) longitudinal waves,

.....  
.....

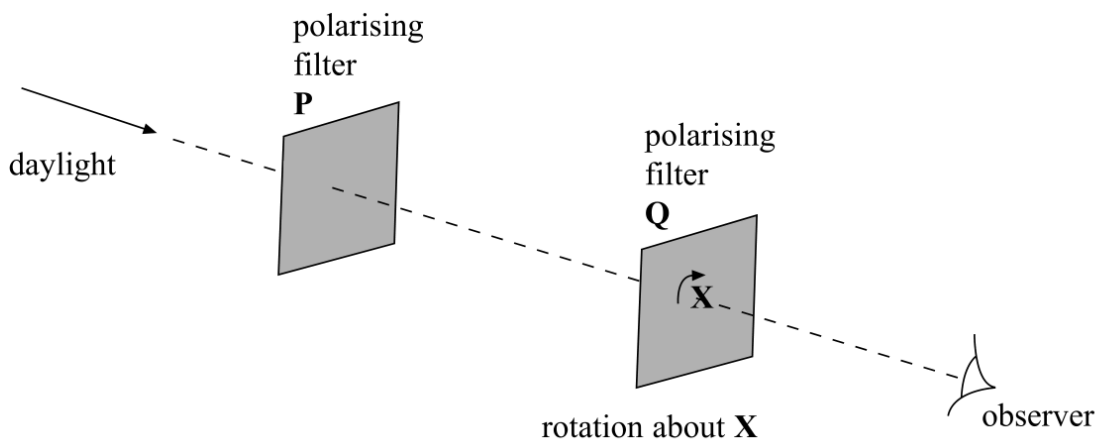
(ii) transverse waves.

.....  
.....

*(3 marks)*

(b) Daylight passes horizontally through a fixed polarising filter **P**. An observer views the light emerging through a second polarising filter **Q**, which may be rotated in a vertical plane about point **X** as shown in **Figure 4**.

**Q2 Jan 2005**



**Figure 4**

Describe what the observer would see as **Q** is rotated slowly through  $360^\circ$ .

You may be awarded marks for the quality of written communication provided in your answer.

.....

.....

.....

.....

.....

.....

*(2 marks)*

**5** Which one of the following properties of light waves do polarising sunglasses depend on for their action?

Light waves may

- A** interfere constructively.
- B** interfere destructively.
- C** be polarised when reflected from a surface.
- D** be polarised by the lens in the eye.

**Q5 Jun 2005**

**3** The sound quality of a portable radio is improved by adjusting the orientation of the aerial. Which statement is a correct explanation of this improvement?

- A** The radio waves from the transmitter are polarised.
- B** The radio waves from the transmitter are unpolarised.
- C** The radio waves become polarised as a result of adjusting the aerial.
- D** The radio waves become unpolarised as a result of adjusting the aerial.

**Q3 Jun 2006**