

Multiple Choice Answers

Q26: B

Multiple Choice Answers

Q28: C

Multiple Choice Answers

Q28: B

Multiple Choice Answers

Q27: B

Multiple Choice Answers

Q25: C

Multiple Choice Answers

Q24: A

5(a)	sound waves are longitudinal / not transverse (and only transverse waves can be polarised)
5(b)(i)	A periodic curve of at least one period with minimum 0 and maximum I_0
	Smooth continuous $\sin^2 \alpha$ curve
	Peaks at 90° and 270° and troughs at $0, 180^\circ$ and 360°
5(b)(ii)	$I \propto A^2$
	$I = I_0 \cos^2 \theta$
	At $\alpha = 20^\circ$ the angle between the planes of polarisation of light and filter is 70° (or 110°)
	$I = I_0 \cos^2 70^\circ$ or $I = I_0 \cos^2 110^\circ$
	$(I = 0.12 I_0)$
	amplitude = $0.34 A_0$

Multiple Choice Answers

Q26: A