

Qu No.		Extra Information	Marks
7.1	(for both fibres) increasing the <u>wavelength</u> of light decreases and then increases the percentage / amount of light transmitted (for both fibres) the minimum transmission happens at 5×10^{-7} metres the shorter fibre transmits a greater percentage of light (at the same wavelength)		1 1 1
7.2	$f = c / \lambda$ $= 6 \times 10^{14}$ Hz		1 1
7.3	Light <u>refracts</u> at boundary between cladding and core Light changes speed/ slows down in cladding	Do not allow speeds up	1 1

Qu No.		Extra Information	Marks
8.1	A and C or B and D Only one (independent) variable or different shapes but the same colour		1 1
8.2	B radiates faster / B is a better <u>emitter</u> (of heat) But B has a smaller (surface) area / B has a smaller (surface) area: volume ratio		1 1