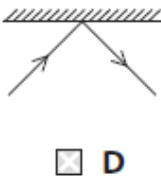


Question number	Answer	Notes	Marks
6 (a)			(1)
(b) (i)	normal drawn correctly;	judge by eye	(1)
(ii)	correct angle marked to their normal;	judge by eye	(1)
(iii)	correct angle chosen within $\pm 3^\circ$;	27° , no ECF from bi or bii	(1)
(vi)	$\frac{\sin i}{\sin r} = n$;	accept rearrangements	(1)
(v)	substitution; evaluation; e.g. $\frac{\sin 43}{\sin 27} = n$ 1.5	allow ECF from biii	(2)
(c) (i)	Total Internal Reflection;	accept TIR	(1)
(ii)	MP1. light reflects (inside (surface) of fibre); MP2. with angle $i >$ critical angle; MP3. (because) light travels slower in glass;	condone light hits/bounces off the fibre wall	(3)

Total for Question 6 = 11 marks