

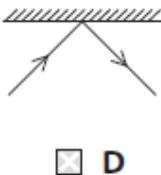


Mark Scheme (Results)

January 2016

Pearson Edexcel International GCSE in
Physics (4PH0) Paper 1P
Science Double Award (4SC0) Paper 1P

Pearson Edexcel Certificate in
Physics (KPH0) Paper 1P
Science (Double Award) (KSC0) Paper 1P

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