Question number	Answer	Notes	Marks
6 (a)	MP1. any internal reflection at first surface; MP2. approximately correct angle of reflection at first surface; MP3. ray reflects from second surface and emerges parallel to incident ray (by eye);	gets MP1 and MP2 gets MP1 and MP3	3
(b) (i)	$\sin(c) = 1/n;$	allow in standard symbols or in words	1
(ii)	substitution; rearrangement; evaluation; e.g. sin(24°) = 1/n (n=) 1/sin(24°) (n =) 2.5	can be in either order (n =) 2.459, 2.46 condone 2.45	3
(c)	 any sensible use; e.g. optical fibres in {communication / sending information / decorative lamps} endoscopes safety reflector prism in {binoculars / telescope / camera / periscope / rangefinder} 	allow 'broadband' for communication allow described use of endoscope e.g. bicycle/car reflector, cat's eye	1

Total for question 6 = 8 marks