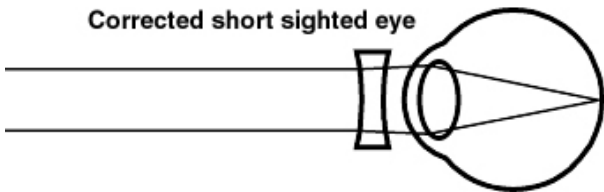
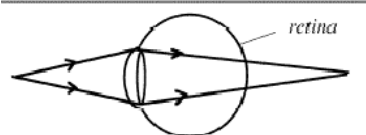
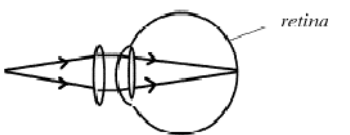


HEALTH CREDIT TEST ANSWERS

1		Endoscope 2 bundles of fibres (½ mark) 1 bundle sends light down to patient 1 bundle brings back light (½). Light travels down by T.I.R (1)	3 KU
2	a)	Corrected short sighted eye  1 for lens, 1 for diverging rays after lens 1 for converging at cornea and lens, 1 for meeting at retina (4KU)	4KU
	b)	convex	1KU
	ii)	converging rays meet at the back of the eye instead of “behind” the eye or by diagram Long Sight  	2KU
3	a)	1000->500->250->125 (½) 3t ½ (½) t ½ =30/3=10mins (1)	2KU
	b)	Detector (1 mark) Use (1 mark)	2KU (previously 3 marks)
4	a)	2000 pulses per second therefore time between pulses = 1/2000= 0.005s or 5ms	2PS
	b)	lots of reflection off tummy, little off foetus	1PS
	ii)	reduce reflection off tummy or increase signal	1PS
	c)	$v=1500 \text{ m/s}$ (½) $t=0.2 \times 10^{-3} \text{ s}$ (½) $v = \frac{d}{t}$ (½) $d = v \times t$ $d = 1500 \times 0.2 \times 10^{-3}$ $d = 0.3\text{m}$ (½) $\text{depth} = \frac{0.3\text{m}}{2} = 0.15\text{m}$ (1)	3PS
	d)	High frequency sounds ABOVE the UPPER Range of HUMAN HEARING or >20kHz	1KU
	e)	high frequency sound lower wavelength therefore shorter λ giving a sharper image	1PS
	f)	Breaking down gall stones/ kidney stones healing muscle	1KU
	g)	X-rays can be harmful and produce radiation	1KU

[illegible]