

November 2003

INTERNATIONAL GCSE

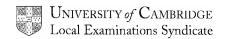
MARK SCHEME

MAXIMUM MARK: 40

SYLLABUS/COMPONENT: 0625/06

PHYSICS

Alternative to Practical



	Page 1	Mark Scheme	Syllabus	Paper
		IGCSE EXAMINATIONS – NOVEMBER 2003	0625	6
1	(a)	wind string round more than once		1
		divide measured length by number of turns to find c		1
	(b) (i)	correct diagram, blocks parallel, one at each end		1
	(ii)	119 mm OR 11.9 cm to 121 mm OR 12.1 cm		1
	(c)	V = 32.39 to 32.41 cm ³		1 1
	(d) (i)	$V_{\rm m} = 0.5 - 2 {\rm cm}^3$		1
	(ii)	correct calculation and 2/3 sf (ignore unit)		1
				TOTAL 8
2	(a) (i)(ii)	2 neat continuous rays (thickness up to as EF)		1
	(iii)	normal where incident ray meets mirror (90° by eye)		1
	(iv)	i = 20 $^{\circ}$ ± 1 $^{\circ}$ (allow e.c.f. if mark for normal not scored)		1
	(b) (i)(ii)	lines complete and neat with AX correctly intersecting		1
	(iii)	AY = 5.9 - 6.1 cm AND $YX = 5.5 + 0.3 cm$		1
	(c)	any one from:		
		thickness of mirror		
		thickness of lines		
		thickness of pins		
		judgement of where lines cross		1
				TOTAL 6
3	(a)	pointer at 0.35 A		1
	(b) (i)	variable resistor/rheostat/potentiometer		1
	(ii)	V		1
		A		1
		Ω		1
		One R correct		1
		All R correct (6.129, 5.769, 4, correctly 1	rounded)	1
		Consistent sf for R (either all 2 sf or all 3 sf)		1
	(iii)	variable resistor/number of cells		1
	(c)	Voltmeter in parallel with resistors (or power source)		1
		Ammeter next to X		1
		Symbols correct and all connections drawn in		1
				TOTAL 12

	Page 2		Mark Scheme	_	Syllabus	Paper
			IGCSE EXAMINATIONS – NO	/EMBER 2003	0625	6
4	(a)	Scales: y-axis 1N = 4 cm; x-axis 1m/s2 = 4/5 cm right way round				1
		Bot	Both axes labelled with quantity and unit			
		Plo	ts to $rac{1}{2}$ sq (-1 each error or omission, r	minimum mark zero)		2
		Line thickness less than 1 mm and no 'blob' plots				1
		We		1		
	(b)	Lar	ge triangle used (> ½ line) clear on gra	aph		1
		Inte	erpolation to ½ sq (if la	arge enough triangle լ	oresent)	1
		Val	ue 1.38 – 1.48			1
		kg a	and 2/3 sf			1
						TOTAL 10
5	(a)	Tw	o from:			
		san	ne volume of water			
		san	ne starting temperature of water			
		san	ne size/shape/type beakers			
		san	came thickness/mass/volume of insulator			
		san	ne room temp			2
	(b)	64°	C (with unit)			1
	(c)	В				1
						TOTAL 4