UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2012 question paper for the guidance of teachers

0625 PHYSICS

0625/63

Paper 6 (Alternative to Practical), maximum raw mark 40

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

• Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

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	Page 2			Syllabus	Paper		
			IGCSE – May/June 2012	0625	63		
1	(a)	a) Table: correct <i>d</i> values 70.0, 60.0, 50.0, 40.0, 30.0, 20.0, 10.0 cm, N ALLOW m, mm if consistent with figures					
	(b)	 (b) (i) d against F (or vice versa) OR distance against force/forcemeter reading NOT 'extension', 'forcemeter', quantity expressed just as units (ii) Straight line Through origin or wtte 					
	(c)) Would change forcemeter reading/change mass on rule/wtte					
	(d)	Check Line up		[1]			
					[Total: 7]		
2	(a)	23 °C need unit for the mark					
	(b)	Axes correctly labelled with quantity and unit Suitable scales All plots correct to ½ small square Good line judgement Thin, continuous line					
	(c)	Draugh	temperature/humidity/sun through window/air conditioning		[2]		
					[Total: 8]		
3	(a)	-	= 1.9 = 0.3 nits V and A both correct		[1] [1] [1]		
	(ii)/	(iii) <i>R</i> _P	$_{\rm o}$ = 6.33 and 4 $R_{\rm P}$ = 25.3/25.2 to 2 or 3 sig. figs.		[1] [1]		
	(b)	$R_{\rm S}$ = 23	3.8 (Ω) or 24 (Ω)		[1]		
	(c)		t statement (from candidate's work) atching justification (idea of within or beyond experimental a	accuracy)	[1]		

	Page 3			Mark Scheme: Teachers' version Syllabus		Paper	
	_	-		IGCSE – May/June 2012	0625	63	
	(d)) Circuit: correct symbols for ammeter, voltmeter and lamp in correct series circuit					
	(e)) (i) Char		nge/control current/voltage		[1]	
		(ii)	Тоо	obtain range of readings (or wtte)		[1]	
						[Total: 10]	
4	(a)	Blocks parallel with ONE sphere completely between Rule correctly placed				[1] [1]	
	(b)	(i)		e of sight perpendicular to scale e of sight along bottom of meniscus		[1] [1]	
		(ii)	70 (d	cm ³)		[1]	
		(iii)	0.53	3 cm ³ , 2 or 3 significant figures, with unit		[1]	
						[Total: 6]	
5	(a)	Tra Nor N a a v		[1] [1] [1]			
	(b)	All correct lines drawn, thin and continuous a and b both with consistent, correct unit which matches figures b value 6.2cm ± 3mm correct answer only n value range 1.4 – 1.5 after rounding to 2 or 3 significant figures and no unit					
	(c)	One Pin Pin Vie Ens Use Sha					
		Sharp pencil Use thin pins					
						[Total: 9]	