CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2013 series

0625 PHYSICS

0625/51

Paper 5 (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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.



	Page 2			Mark Scheme	Syllabus	Paper
		_		IGCSE – October/November 2013	0625	51
1	(a)	(i)	l_0 , re	ecorded in mm		[1]
		(ii)	work	cable length clearly shown on Fig. 1.1 (or Fig. 1.2)		[1]
	(iv)	, (v)		e: ect F values used and increasing l values (> l_0) lues correct		[1] [1]
	(b)	suit all p	s corr able solots of	rectly labelled scales correct to ½ small square judgement AND thin, continuous line		[1] [1] [1] [1]
	(c)			method used and shown least half of candidate's line		[1] [1] [Total: 10]
2	(a)	(i)	sens	sible value for $ heta_{ extsf{H}}$		[1]
	(a)-	-(d)	temp evide			[1] [1] [1] [1]
	(c)	sen	sible	new value for $ heta_{ extsf{H}}$ (lower than first value)		[1]
	(e)	viev	_	i: hermometer at right angles e to being ready on time		[1]
	(f)	roo star dist	ting tance	from: nperature emperature of thermometer bulb from water surface on of thermometer		
			ughts			[2]
						[Total: 10]

3	I V P P	V to at least 1 d.p. and < 3 V o at least 2 d.p. and < 1 A in V and I in A (at least once, not contradicted) in W (at least once, not contradicted) values correct I =			
		 statement matches results (expect YES) and justification in terms of within or beyon limits of experimental accuracy o.w.t.t.e 			
	(c) (i	diagram: lamps in parallel and variable resistor in series with power supply, correct symbols for variable resistor, lamps, voltmeter one voltmeter, correctly positioned	[1] [1]		
	(ii) vary current (or p.d.)		[1]		
		[То			
4	(a) (i	v = 28 - 32 (cm)	[1]		
	(ii) (iii	calculations correct	[1]		
	(iv	f correct	[1]		
	(b) $v = 22 - 26$ (cm) f values within 4 cm of each other		[1] [1]		
	(c) (i	Sensible range up to 2 cm around a value approximately 24 cm	[1]		
	(ii	$f_{\rm AV}$ given to 2 or 3 significant figures and correct unit $f_{\rm AV}$ = 13 – 17 cm	[1] [1]		
	(iii	any two from: use of darkened room/brighter lamp mark position of centre of lens on holder place metre rule on bench (or clamp in position) ensure object and lens are same height from the bench lens/object/screen perpendicular to bench use of repeats [Total:	[2]		
		[Total:	. וטן		

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