UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2010 question paper for the guidance of teachers

0625 PHYSICS

0625/51

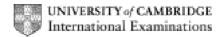
Paper 51 (Practical), maximum raw mark 40

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.

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	Page 2		Mark Scheme: Teachers' version	Syllabus	Paper
			IGCSE – May/June 2010	0625	51
1	(a)	<i>l</i> value g	$20-100~\mathrm{mm}$ reater than l_A and correct calculation of e_A itable marks (must indicate a reproducible length)		[1] [1] [1]
	(b)		20 – 100 mm recorded		[1] [1]
	(c)		f <i>l</i> recorded and correct <i>e</i> values ct <u>method</u>		[1] [1]
	(d)		nt matches readings on matches statement and by reference to results		[1] [1]
	(e)	use of ho measuring repeats	of: ce of parallax error explained orizontal aid ng to same point each time springs to stop moving		[1]
					[Total: 10]
2	(a)		tures decreasing e of temperatures to 1°C		[1] [1]
	(b)	T_1 corrections T_2 corre			[1] [1] [1]
	(c)		cupying at least half of grid correct to ½ square		[1] [1] [1] [1]
					[Total: 10]

	Page 3		Mark Scheme: Teachers' version	Syllabus	Paper
			IGCSE – May/June 2010	0625	51
3	(a)	correct s correct p	<u>5</u>		[1] [1]
	(b)	V values	values all < 2.5 V and to at least 1 d.p. decreasing es correct		[1] [1] [1] [1]
	(c)	justificati	nt matches readings (Expect NO) on matches statement and by reference to results of constant, <i>V</i> increases as <i>l</i> decreases or wtte.		[1] [1]
	(d)	avoidand	of: r zero error ce of parallax error when reading <i>l</i> ff between readings		
					[Total: 10]
4	ray trace: all lines present, thin, neat and in correct areas normal drawn GJ at 30° to normal (by eye) second mirror position 10° from first P_1P_2 distance at least 5 cm				
	(i)	r ₁ correc	t to ± 2°		[1]
	(n)	r_2 correct α and (2)	t to $\pm 2^{\circ}$ $\theta - \alpha$) correct (ignore – sign)		[1] [1]
	(o)		nt matches result (Expect YES) on matches statement and by reference to result		[1] [1]
					[Total: 10]