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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2010 question paper for the guidance of teachers

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

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

CIE is publishing the mark schemes for the October/November 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



1	(a)	d values in cm and less than 50 cm correct calculation of 1/d	[1] [1]
	(b)	Graph: Axes labelled and suitable scale All plots correct to ½ small square Well judged line (position) Thin line, single (quality)	[1] [1] [1] [1]
	(c)	Gradient by triangle method using at least $\frac{1}{2}$ candidate's line Clear, on graph, how obtained	[1] [1]
	(d)	z value 0.5 cm – 5 cm z given to 2 or 3 significant figures with correct unit	[1] [1] [Total: 10]
2	(a)	$ heta_{\!\scriptscriptstyle ext{r}}$ sensible value	[1]
		Table: t in s, θ in °C Correct t values Table 2.1 temperatures decreasing Table 2.2 temperatures increasing Evidence of temperatures to 1°C	[1] [1] [1] [1]
	(e)	at least 300s and given to nearest 10s or in mins	[1]
	(f)	Statement matches readings and justified by reference to readings Comparison given of changes in temperature and time with numbers	[1]
	(g)	Any two from: same starting temperature constant room temperature/avoid draughts/same place same time intervals same thermometer (wtte) same mass/amount/volume of water same beaker lid always used	[2]
			رع] [Total: 10]

Mark Scheme: Teachers' version IGCSE – October/November 2010

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Syllabus 0625 Paper 51

	Page 3	Wark Scheme, reachers version	Syliabus	Paper
		IGCSE – October/November 2010	0625	51
3	Resis	eter symbol stor symbol ect circuit		[1] [1] [1]
	(b) I ₀ 0.1	–1.0 (A)		[1]
	All <i>I</i> t <i>I</i> valu	e: Ω , I in A o 2 d.p. les decreasing I value = $0.5I_0$ (\pm 10%)		[1] [1] [1]
		ect calculation of $0.5I_0$ shown (ecf) nate matches results and given to nearest ohm		[1] [1] [Total: 10]
4	Point E la Initial pin	itial angle of incidence 18°–22°		[1] [1] [1] [1]
	(i) θ cor	rect to ± 2°		[1]
	(j) Corre	ect calculation of difference		[1]
		values present and angles in ° ast once, no contradiction)		[1]
	(eithe	ect statement matching results or exact or within limits of experimental accuracy, or ied referring to specified results	·wtte)	[1] [1]
				[Total: 10]

Mark Scheme: Teachers' version

Syllabus

Paper

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Please note that due to a labelling error on the paper, the final five marks were not considered when deciding the grade thresholds.