MARK SCHEME for the May/June 2010 question paper

for the guidance of teachers

0625 PHYSICS

0625/52

Paper 52 (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	52
1	(a)		es in cm (all < 50) es correct (at least 2 significant figures)		[1] [1]
	(b)	plots all	elled uitable, plots occupying at least half grid correct to ½ square ged line thin line		[1] [1] [1] [1]
	(c)		<u>method</u> used and <u>shown</u> (any indication on graph)) using at least half line (can be seen in calculation)		[1] [1]
	(d)	μ 27 – 33 2 or 3 sig	3 (g) gnificant figures and unit g		[1] [1] [Total: 10]
2	(a)	times 30 beaker A dish B te	both in °C 9, 60, 90, 120, 150, 180 A temperatures decreasing emperatures decreasing more rapidly e of temperatures to 1 °C		[1] [1] [1] [1] [1]
	(b)	both tem	perature falls correct (ignore unit or lack of unit)		[1]
	(c)		ion matches statement (expect B) eference to readings (need a comparison – not 'hea B <u>&</u> temp fall for this mark in same time	ť or 'iť)	[1] [1]
	(d)	stir/same same int constant same vo avoid dra (NOT ref	from: arting temperature e thermometer position terval time t room temperature/carry out at same time olume/amount/mass of water aughts or wtte ference to container, insulation, precaution) nswers: –1 if incorrect, ignore if neutral)		[2]
					[Total: 10]

[Total: 10]

	Page 3		Mark Scheme: Teachers' version						Syllabus		Paper	
					IGCSE	– May	/June 2	2010		0625	5	52
3	(a) ·	(a) – (e) table: V, A, Ω V to at least 1 dp (1 – 2.5) I to at least 2 dp and < 1A correct R values circuit 3 R value less than other two values										[1] [1] [1] [1] [1]
	(f)	diagram: correct s voltmete lamps in	symt er po	sition c		rcuit						[1] [1] [1]
	(g)	statemer justificati				· · ·	pect N(by refe	O) erence to re	esults			[1] [1] [Total: 10]
4	ray trace: one set of lines present, thin, neat and in correct areas normal drawn EF at 30° to normal (by eye) one P_1P_2 distance at least 5 cm one P_3P_4 distance at least 5 cm						IS			[1] [1] [1] [1]		
	(h)	θ correct	t to <u>-</u>	<u>+</u> 2°								[1]
	(i)	(heta-2i) c	corre	ect								[1]
	(j)	heta and ($ heta$) — 21) prese	nt, unit °	at least	t once i	in (h) , (i) or	· (j)			[1]
	(k)	(within lir	ion r mits	natches of expe	s stateme erimental	ent and	•	erence to re	esults			[1]
		or <u>too</u> dif	mere	nt, wtte	;)							[1]
												[Total: 10]