UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2011 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.

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

Cambridge is publishing the mark schemes for the October/November 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

	Page 2		Mark Scheme: Teachers' version Syllabus			Paper	
			IGCSE -	- October/Nove	ember 2011	0625	51
1	(a)	(a) & (b) correct d values 5, 10, 15, 20, 25 x and y values present all less than 45 cm					
	(c)	scales su all plots of		least half of grid st ½ small squar			[1] [1] [1]
	(d)	triangle method used and clearly shown, using at least half line readings from graph correct to ½ small square					[1] [1]
	(e)	W calculation correct with unit N and to 2 or 3 significant figures (ecf) W value between 0.7 and 1.4					[1] [1] [Total: 10]
2	(a)	$\theta_{\rm m}$ betwee Any two stirring waiting for	or temperature t rmometer scale	ınit °C o stabilise			[1] [1]
	(b)	θ_c and θ correct a		es, $ heta_{ extsf{m}}$ between $ heta$	$ heta_{ extsf{c}}$ and $ heta_{ extsf{h}}$		[1] [1]
	(c)	justified	nt matches read by reference to ental accuracy		clude idea of within	n (or beyond) limits	[1] of [1]
	(d)	heat loss	s to surrounding	s o.w.t.t.e.			[1]
	(e)	lid on be	peakers ansfer of water	cylinder			[1] [Total: 10]

3	` ,	unit I_{A} a	values to 2 decimal places A at least once (and not contradicted) and $I_{\rm D}$ both greater than $I_{\rm B}$ and $I_{\rm C}$: $(I_{\rm B}+I_{\rm C})$ to 1 decimal place	[1] [1] [1] [1]
	(b) $(I_{\rm B}+I_{\rm C})$ correct statement matches readings justified by reference to readings			[1] [1] [1]
	(c)	V to R c	[1] [1]	
	(d)	volt	[1] [Total: 10]	
4	(a)–(f)		trace: normal at 90° in correct position all lines present and neat AB correct position first P_2P_3 distance ≥ 5.0 cm	[1] [1] [1] [1]
	(h)–	-(j)	trace: M ₁ R ₁ and AC correct	[1]
			table: i values correct to 2° r values correct to 2° both $i = r$ to 4°	[1] [1] [1]
	thic thic thic		two from: kness of lines kness of mirror kness of protractor o.w.t.t.e.	103
		thic	kness of pins/holes	[2] [Total: 10]

Mark Scheme: Teachers' version IGCSE – October/November 2011

Page 3

Syllabus 0625 Paper 51