

## November 2003

## INTERNATIONAL GCSE

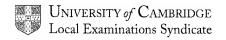
## MARK SCHEME

**MAXIMUM MARK: 60** 

SYLLABUS/COMPONENT: 0625/05

**PHYSICS** 

Practical



	Page		Syllabus	Paper
		IGCSE EXAMINATIONS – November 2003	0625	5
1	(b)(c)	Table A, 6 temps, decreasing		1
		Table B, 6 temps, decreasing		1
		Temp unit		1
		Time unit		1
		Evidence of temp to better than 1°C		1
		Consistently better than 1°C		1
	(d)	Graph:		
		Time axis suitable (no '3' scales allowed)		1
		Time axis labeled		1
		Check plots at 210 s and 240 s		1
		lines judgement (best fit curves)		1
		lines thickness		1
		Both lines correctly labeled		1
	(0)	Conclusion:		
	(e)	Conclusion:  Correct statement in relation to candidate's lines		1
		Explained with correct reference to gradients		ı
		(if previous mark scored)		1
		,	TO	OTAL 15
2	<b>/</b> b\	v = 20.0 (om)	·	
2	(b)	x = 20.0  (cm)		1
	(c)	y value less than 25 cm		1
		y value to nearest mm		1
	(d)	d = 25 (cm) (allow e.c.f.)		1
	(e)	t value correct arith		1
	(f)	x = 30  (cm)		1
		y value in range 30.0 – 37.5 (cm)		1
		d = 37.5 (cm) (allow e.c.f.)		1
		all x, y, d consistently in mm, cm or m (unit stated at least one	ce)	1
		x, y d units stated every time		1
		t value correct arith		1
		t values within 0.5 cm of each other		1
	(g)	average t; correct method		1
		final answer to 2/3 sf		1
		with correct unit		1

Page 2	Mark Scheme	Syllabus	Paper
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3		Trace	
		Neat thin lines	1
		Lines complete	1
		A and B correct positions	1
		New B correct	1
		i = r (by eye)	1
		CD at least 5 cm	1
		Second CD at least 5 cm	1
		Straight lines extended to X	1
		XA drawn and Y labeled	1
	(j)	AY correct to 2 mm	1
		YX correct to 2 mm	1
		AY and YX same to within 10 mm	1
	(k)	Thickness of mirror OR thickness of pins OR thickness of lines	1
	(I)	Precaution (pin separation, view bases, vertical pins)	1
		Reason	1
			TOTAL 15
4.	(b)–(g)	x in m, cm or mm	TOTAL 15 1
4.	(b)–(g)	x in m, cm or mm V in V	
4.	(b)–(g)		1
4.	(b)–(g)	V in V	1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm	1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m)	1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm	1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf	1 1 1 1 1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V	1 1 1 1 1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V	1 1 1 1 1 1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V 3 k values	1 1 1 1 1 1 1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V 3 k values Check second k value, correct	1 1 1 1 1 1 1
4.	(b)–(g)	V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V 3 k values Check second k value, correct all k to 2 sf OR all k to 3 sf	1 1 1 1 1 1 1 1
4.		V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V 3 k values Check second k value, correct all k to 2 sf OR all k to 3 sf all k same to within 10%	1 1 1 1 1 1 1 1
4.		V in V k in V/m, V/cm or V/mm correct x values (0.200, 0.400, 0.800 m) all x to nearest mm x consistent sf evidence of V to better than 0.5 V all V to better than 0.5 V 3 k values Check second k value, correct all k to 2 sf OR all k to 3 sf all k same to within 10% (voltage increases with length)	1 1 1 1 1 1 1 1 1