CAMBRIDGE INTERNATIONS

Abride Con

## **NOVEMBER 2002**

## **INTERNATIONAL GCSE**

WARKSCHEME

**MAXIMUM MARK: 80** 

SYLLABUS/COMPONENT: 0625/3

PHYSICS (EXTENDED)

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3.6)	b c b(i) c	junction two meter of change high te rapidly any variation of the control of the	set-up, each state be balar est to pivot r 100 x dis er in cylindock until conce in value = mass/vol/cm² (a. a. of two metals named calibrated in temp. comperatures changing id physical	ch mass need before from root tance to der, read overed, read over the rea	at(marked pre reading k pre reading pivot = m value ead value ame of roce 88/24 s / 3 g/cm er ends to abelled es or read hange in value e.g. distar	point + lab gs can be ta gs can	rnative arrangement	angemention chart	s as 100 3 l pivot 2 at etc 2	C1	2 9 2 2 M2 4 C1, F	
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Page 2	Mark Scheme	Sylla 0625
·	IGCSE Examinations – November 2002	Sylla
		S.C.
		D.
E a(i) C ma	rked vertically under/at any peak (including on axis)	R1
5 a(i) C ma	rked on NEXT trough (either way)	1 B1
	wavelength	1 B1 3
(ii) <u>Hali a</u>	Wavelength	
b f = v/v	v or 340/1.3	C1
= 260		2 A1 2
		QT 5
	Marketine and the second of th	the state of the s
6 a(i) 43 ±1	0	1 A1
	r for this ray is 90	B1
	c is angle i (in denser medium)(giving angle r = 90°)	2 B1 3
b(i) 3 x 1	10 <sup>9</sup> m/s <sup>*</sup>	<u>L A1</u>
(ii) speed	I in air/speed in medium	₩ MI
` = 1 5	(no up to o)	2 MA
(iii) angle	i = 0 / along normal / at 90 to surface	<u> </u>
(iv) increa	ased/more/larger	<u> 1 B1 5</u>
	The state of the s	QT 8
7 a(i) steel		<u> 1 A1</u>
	bar in coil(switch on,leave,switch off)	I B1
(iii) to cor	ntrol/measure current or stop circuit/coil overheating	<u> 1 B1</u> 3
· ·		
b(i) R = 1		C1
	hms*	2 A1
(ii) P = 1		C1
= 48		2 A1
(iii) E = 4		C1
=240	J <sup>*</sup>	2 A1 6
		ì A4
c(i) 5 (V)		1 A1 C1
	of p.d.'s = circuit supply p.d. e + detail eg across each component/ in closed circuit etc	2 A1 3
a <u>nove</u>	e + detail eg across each component in closed circuit etc	QT 12
		Q1 12
8 a /magn	etic field from left to right/ N to S	1 B1 1
o a tinagin	out hold hold to right it to o	
b(i) move	ment at right angles/between poles, up or down	C1
	ally)down,stated or reference to arrow on diagram or label	
	on of Fleming's L.H.R. or interacting fields	2 A1 C1
	enation leading to correct direction e.g what funger ston	w 2 A1 4
	· · · · · · · · · · · · · · · · · · ·	
	oil instead of single wire	B1
	t coil on bearings	B1
	ge suitable contacts e.g slip/slit rings and commutator	2 B1 M2
·		QT 7

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				aCambr.	dge com
9 a(i) cu	ve upwards between plates		C1 -		.60
	ve upwards between plates + straight line	2	A1		177
	+, bottom -	1	B1		
	eft, arrow and C marking any point on the beam between X an	dP 1	B1 4	<u>L</u>	
	hode/heater, labelled		B1		
*	ode labelled		B1		- 11
	rect arrangement of cathode with anode cylinder		B1		
Sui	table power supplies to heater/ anode-cathode (either to score)	) 4	B1 4	<u> </u>	
			QT 8	3	
	f-life 4 days <sup>★</sup>	1	A1 1	L	
	east two points worked out		M1≠		
	table curve completed	2		2_	
	20 days little radioactivity left, after 1 day about 85% left		B1 1	<u> </u>	
d A	top line, A1/ bottom line A1	1	A2 2	2	
		٠.	QT 6	3	
	or OB (not e or Balone) PAPER T	TOTAL	80	)	
	Ax >> e/B+AY (C1)				

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