www.xirenepalers.com

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the November 2005 question paper

0652 PHYSICAL SCIENCE

0652/06

Paper 6

maximum raw mark 60

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

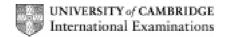
All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the Report on the Examination for this session.

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

CIE is publishing the mark schemes for the November 2005 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



Page 1		Mark Scheme IGCSE – November 2005			Syllabus	Paper	
1	(a)	floats, moves around, dissolves, fizzing, rise in temperature (any 2)				6 [2]	
	(b)	turns purple/mauve (NOT blue)				[1]	
	(c)	(i)	sodium hy	droxide or NaC	ЭH		
		(ii)	sodium ch	loride or NaC <i>l</i>			
		(iii)	silver chlo	ride or AgC <i>l</i>			[3]
	(d)	` ,	onium chlor	_			[1]
	(e)	(i)		er funnel with pa	aper (1)		
	(-)	(ii)	and precip	bitate in the pap /black-blue			[2] [1]
						Total 10	0 marks
2	(a)	(i)	1.8,	0.6,	1.2 (no tolerance)	[3]
		(ii)	any one so (columns 2	witch 2 and 3 may be	•	wo switches	[2]
		(iii)	R = V/I, 3/	0.6 = 5 ohms (0	OR 3.0/2 x 1.2	2, OR 3.0/1.8 x 3)	[1]
	(b)	all three lamps in series (1) with other components (1)				[2]	
	(c)	(i)	greater res must be m	•	ole circuit) OV	VTTE but resistar	nce [1]
		(ii)	lamp in the	e parallel circuit	t is brighter	OWTTE	[1]
						Total 10	0 marks
3	(a)	(i)	102.7				
		(ii)	98.4				
		(iii)	4.3 (ecf)	(no tolerand	ce)		[3]
	(b)	(i)	bubbling c	or effervescence	e or fizzing		
		(ii)	bubbling s	stops			
		(iii)	pink or bro	own or red			[3]
	(c)	(i)	101.5		(no t	olerance)	
		(ii)	101.5 - 98	.4 = 3.1 (ecf)			[2]

Page 2		Mark Scheme Sy		Paper		
g v =		IGCSE – November 2005	0652	6		
	(d)	$3.1 \times 100/4.3$ (1) = 72% (ecf) (1)	Total 1	[2] 0 marks		
4	(a)	20°, 30°. +/- 1°		[2]		
	(b)	0.18, 0.39, 0.69, 1.03 0.25, 0.56, 1.00 (accept 1.0 but not "1"), 1.56 m all +/- 0.02 m 7 or 8 correct (4), 5 or 6 correct (3) 3 or 4 correct (2), 2 or 1 correct (1)		[4]		
	(c)	Any use of the data to show a greater distance in same time interval.	n the	[2]		
	(d)	d) The ball, has a greater force acting on it in the direction of the slope OR there is a greater acceleration OWTTE				
		REJECT the force of gravity is increased		[1]		
	(e)	Change in friction		[1]		
			Total '	10 marks		
5	(a)	(ii) acid gas (1)				
		(iii) turned cloudy/milky (1)		[2]		
	(b)	(i) water (of crystallisation) given off (1)				
		(iii) no oxygen (1)				
		(iv) turned red (1)		[3]		
	(c)	test-tube with solid, red litmus <u>in mouth of tube</u> (essential)		[1]		
	(d)	light splint and blow out, hold in gas at mouth of	tube	[1]		
	(e)	dissolve in water and add (aqueous) sodium hyd green ppt (turning brown) = iron(II) (1) brown ppt = iron(III)(1)	roxide (1)	[3]		
			Total 1	0 marks		
6	(a)	(i) 76, 64g: 38, 36 s (no tolerance)		[4]		
		(ii) 1.9, 1.8 s (both correct)		[1]		

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – November 2005	0652	6

(b) axes correctly labelled and suitable scale chosen (1) all points plotted accurately (1) straight line drawn, best fit, not joining points (1) (-1 mark if axes reversed) [3]
(c) no effect OWTTE [1]
(d) length of pendulum (string) increased change in gravitational acceleration (e.g. on the moon) [1]

Total 10 marks