UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2012 question paper for the guidance of teachers

0620 CHEMISTRY

0620/63

Paper 6 (Alternative to Practical), maximum raw mark 60

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 May/June 2012 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

	Page 2	Mark Scheme: Teachers' version IGCSE – May/June 2012	Syllabus 0620	Paper 63
1	(a) toot/dron	pping pipette/dropper (1) allow: pipette	0620	
•	(a) teatrorop		[1]	
	` '	ore would have larger surface area (1) ic oxide would have formed/faster decomposition (1)		[2]
	(c) sulfuric (1)		[1]
	(d) filtration	(1)		[1]
	(e) add mag	nesium (1) allow: electrolysis		[1]
				[Total: 6]
2	bromine (wat colourless (1 aqueous silv yellow precip named indica			
		r change/pH/blue precipitate (1)		[6]
				[Total: 6]
3		completed correctly 5, 52, 56, 54, 60, 60 –1 for each incorrect		[3]
		otted correctly (3) -1 for each incorrect curve (1)		[4]
	(c) point at	100 seconds/54 cm³/point 6 (1) off curve/owtte (1)		[2]
	(d) 20 cm ³ ±	small square (1) indication on graph (1)		[2]
	(e) reaction	finished/all peroxide decomposed owtte (1)		[1]
	(f) (i) in a	n ice bath (1) allow : in a refrigerator		[1]
	(ii) curv	re less steep (1) to same level (1)		[2]
				[Total: 15]

	Page 3		Mark Scheme: Teachers' version	Syllabus	Paper
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4	(a)	pipette	/burette (1)		[1]
	(b)	(i) me	ethyl orange/phenolphthalein/litmus (1) not : Universal	Indicator	
		(ii) ye	llow/pink to orange or pink/colourless (1)		[2]
	(c)	nitric a	cid (1) more volume added than sodium hydroxide (1)		[2]
	(d)		experiment (1) without indicator (1) ate solution (1)		[3]
		•			[Total: 8]
5	(c)	hubble	s/fizz/effervescence (1)		
3	(C)		ter (1) milky (1)		[1] [2]
	(d)	(i) blu	ue (1) precipitate (1)		[2]
			ne precipitate (1) rk/deep blue (1) solution/dissolves (1)		[1] [2]
	(e)	barium	/calcium (1) chloride (1) not : chlorine ions		[2]
					[Total: 10]
6	(a)	Bunser	n burner (1) ignore : switch		[1]
	(b)	labels	on correct positions (1)		[1]
	(c)	(i) bu	lb lights/idea of molten lead (1)		
		(ii) bu	lb goes out/no fizz (1)		[2]
	(d)	pressu	re of gas build up/explode owtte (1)		[1]
	(e)	iodine 1	formed (1) not : iodide from iodide ions (1)		[2]
	(f)		upboard/well ventilated area (1) gloves if reason specified ignore : goggles		[1]
		anow (giovos ii reason specilieu - ignore , goggies		
					[Total: 8]

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known mass/weight (1) of each fertiliser (1)
add to same amount of soil (1)
bean (1) water (1)
leave for specified time (1) observe plant growth/effect (1)
comparison/conclusion (1) max 7

[7]

[Total: 7]