UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2009 question paper for the guidance of teachers

0620 CHEMISTRY

0620/06

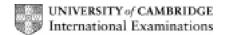
Paper 6 (Alternative to Practical), maximum raw mark 60

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.

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	Page 2		Mark Scheme: Teachers' Version	Syllabus	Paper	
			IGCSE – May/June 2009	0620	06	
1	(a)	balance (1) stirring/(glass) rod/stirrer (1) not thermometer beaker (1)				
	(b)	(i) exc	ess (1) not residue		[1	
		` '	tion/decant (1) sieve/strain/centrifuge		[1	
	(c)	heat/evaporate (1) to crystallising point or description e.g. using glass rod (1)				
2	(a)	to reach room temperature/be at same temperature owtte (1)				
	(b)) insulator/to minimise heat loss (1)				
	(c)	exothermic (1)				
	(d)	(i) 40 c	m ³ volume of acid (1)		[1]	
		(ii) two	straight lines, missing error point (1) extended to int	tersect (1)	[2]	
		(iii) 22.5	5 +/- 0.5 (1) or read from graph cm ³ (1)		[2]	
3	(a)	add dilut	e acid (1) fizz, no fizz (1) or correct chloride test		[2]	
	(b)	litmus pa	aper/named indicator (1) turns blue (1) bleached (1)		[3]	
	(c)		nydroxide/ammonia (solution) (1) green (precipitate) precipitate) (1)	(1)	[3]	
4	(a)	Table of results				
		final tem	perature boxes correctly completed (2) 24 31	3 40 51 60 3 38 47 54 2 39 49 57	[5 <u>]</u>	
	(b)	5 points correctly plotted (3), -1 for any incorrect smooth line graph (1)			[4]	
	(c)	(i) exp	eriment 5 (1)		[1]	
		` '	e energy owtte (1) particles move faster (1) more kin e collisions (1)	netic energy = 2	[3]	

Mark Scheme: Teachers' version

Syllabus

Paper

Page 2

	Page 3		Mark Scheme: Teachers' version	Syllabus	Paper			
			IGCSE – May/June 2009	0620	06			
	(d)	[1]						
	(e)	(e) (i) value from graph approx 20 (1) unit (1) extrapolation shown (1)						
		(ii) curv	ve sketched on grid below original curve (1)		[1]			
	(f)	(f) change e.g. use of data logger/colourimeter (1) or use of lagging/insulation /repeat experiments or more values/use a burette or pipette						
		[2]						
5	test	ests on solid S						
	(c)	(i) blue	e precipitate (1)		[1]			
		(ii) blue	e (1) precipitate (1)		[2]			
		diss	colves/clears (1) deep/royal blue (1)		[2]			
		(iii) whit	te (1) precipitate (1)		[2]			
	(f)	(i) V is	more reactive or converse (1)		[1]			
		(ii) oxyg	gen (1)		[1]			
	(g)	(g) catalyst/transition metal/manganese oxide any two points (2)V is a better catalyst = 2						
6	(a)	(a) add water (1) crush/mix/warm (1) filter/decant or pipette off liquid/sieve (1)						
	(b)	add indid	cator solution to acid (and note colour) (1) cator solution to alkali or named alkali (and note colo on e.g. colours should be different owtte (1)	our) (1) not base	[3]			