UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2010 question paper for the guidance of teachers

0620 CHEMISTRY

0620/53

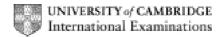
Paper 5 (Practical), maximum raw mark 40

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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1 (a) Table of results for Experiment 1 volume of acid box completed correctly (1) comparable to supervisors (1)

comparable to supervisors (1) (b) Table of results for Experiment 2 volume of acid box completed correctly (1) comparable to supervisors (1) -1 if not 1 decimal place [4] [2] (c) pink (1) to colourless (1) not clear [1] (d) (i) hydroxide (ii) neutralisation [1] (e) (i) experiment 2 [1] [1] (ii) experiment 2 2× volume experiment 1 (iii) alkaline solution **G** more concentrated/stronger (1) or converse 2× as concentrated (2) [2] (f) half value from table result for experiment 2 (1) cm³ (1) half volume of **G** used (1) max 2 [2] (g) (i) two sources of error e.g. using a measuring cylinder to measure alkalis/going past end point owtte [2] (ii) two meaningful improvements related to above e.g. use a pipette/burette/repeat experiment or use different indicator [2] [Total: 18] (a) white/colourless crystals [1] (b) melts/turns into a liquid owtte (1) crackles (1) pH paper turns blue/ pH > 7 (1) [2] smell (1) max 2 (c) (i) white (1) precipitate (1) [2] (ii) no change/no reaction owtte [1]

[2]

(iii) pungent/smelly (gas) (1)

indicator paper turns blue or pH > 7 (1)

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•		IGCSE – October/November 2010	0620	53
(d)	condensa	ns white/colour fades (1) ation at top of tube (1) as (1) max 2		[2]
(e)	(i) gree	en (1) precipitate (1)		[2]
	(ii) white	e precipitate		[1]
	(iii) (mar	nganate) turns colourless/yellow/orange/brown		[1]
(f)	steam (1 heat give solid turn			[2]
(g)	ammonia	a ·		[1]
(h)	ammoniu	um (1) sulfate (1)		[2]
(i)	iron (1) (II) (1) sulfate (1)		[3]

[Total: 22]