



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CHEMISTRY

0620/62

Paper 6 Alternative to Practical

October/November 2016

MARK SCHEME

Maximum Mark: 40

Published

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This document consists of **5** printed pages.



Page 2	Mark Scheme	Syllabus	Paper
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Question	Answer	Mark
1(a)	(liebig) condenser tripod	1 1
1(b)	sodium chloride crystals: C water: D silver chloride: A	1 1 1
1(c)	chromatography	1

Question	Answer	Mark
2(a)	table of results volume boxes completed correctly (30), 44, 57, 62, 78, 85, 88, 89, 90, 90	2
2(b)	all points correctly plotted smooth line graph	2 1
2(c)(i)	point at 60 s / 62 cm ³ / fourth point / measurement 4	1
2(c)(ii)	misread measuring cylinder / read too early	1
2(c)(iii)	value from graph (68–70) shown clearly	1 1
2(d)	the Reaction has finished all the <u>acid</u> has reacted / HCl is the limiting factor	1 1
2(e)(i)	value from graph or table (57–44 = 13 cm ³)	1
2(e)(ii)	13 / 20 = 0.65 cm ³ /s	1 1

Page 3	Mark Scheme	Syllabus	Paper
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Question	Answer	Mark
2(f)	steeper curve to same level	1 1
2(g)	air is displaced (when the acid is added)	1
2(h)	improvement explanation use a burette / graduated pipette / gas syringe improves accuracy OR use cotton thread to hold a test-tube (containing the acid) in the flask no air is collected OR repeat the experiment take average / more frequent readings	1 1

Page 4	Mark Scheme	Syllabus	Paper
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Question	Answer	Mark
3(a)(i)	pH 1–3	1
3(a)(ii)	solid disappears / dissolves blue / green colour	1 1
3(a)(iii)	solid dissolves limewater turns milky	1 1 1
3(a)(iv)	white precipitate	1
3(b)	iron(III) nitrate	1 1

Page 5	Mark Scheme	Syllabus	Paper
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Question	Answer	Mark
4	<p>clean/sandpaper the metal ring</p> <p>dissolve copper(II) sulfate in water/copper(II) sulfate solution</p> <p>set up circuit/switch on electricity/complete circuit</p> <p>copper rod anode(+ve electrode)</p> <p>metal ring cathode(–ve electrode)</p> <p>rotate the metal ring/agitate</p> <p>remove the metal ring, wash and dry</p>	6