

Cambridge International Examinations Cambridge International General Certificate of Secondary Education

## CHEMISTRY

0620/53 October/November 2016

Paper 5 Practical Test MARK SCHEME Maximum Mark: 40

Published

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Question	Answer	Mark
1(a)	table of results for Experiment 1 temperature boxes completed correctly results comparable to supervisor's	1
1(b)	table of results for Experiment 2 temperature boxes completed correctly results comparable to supervisor's	1
1(c)	all points correctly plotted ± half a small square smooth line graphs labelled	2 1 1
1(d)(i)	value from graph - 60 s	1
1(d)(ii)	value from graph shown clearly	1
1(e)	room temperature or initial temperature from results table reaction has finished/stopped	1
1(f)	more readings/points/data smoother curve/better or more accurate graph	1
1(g)	polystyrene is an insulator/copper is a (good) conductor reduced heat losses	1

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Question	Answer	Mark
2(a)(i)	pH 0–3	1
2(a)(ii)	effervescence/bubbles/fizzes lighted splint 'pops'	1
2(a)(iii)	effervescence/bubbles/fizzes limewater turns milky	1
2(a)(iv)	white precipitate	1
2(b)(i)	pH 10–14	1
2(b)(ii)	white precipitate insoluble/no change	1
2(b)(iii)	brown precipitate	1
2(b)(iv)	green precipitate	1
2(c)	sulfuric acid	1
2(d)	calcium hydroxide	1

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Question	Answer	Mark
3	silica filter (the cleaner) wash the residue dry the residue water heat (the filtrate/cleaner) condense the vapour sodium carbonate heat to dryness/no liquid left (then solid) sodium carbonate is left OR heat until saturated then cool to crystallise/leave to crystallise	6