Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CHEMISTRY **0620/53**

Paper 5 Practical Test **October/November 2016**

MARK SCHEME

Maximum Mark: 40

Published

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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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**
1(b)	table of results for Experiment 2 temperature boxes completed correctly results comparable to supervisor's	 **1** **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**
1(d)(ii)	value from graph shown clearly	**1** **1**
1(e)	room temperature or initial temperature from results table reaction has finished / stopped	**1** **1**
1(f)	more readings / points / data smoother curve / better or more accurate graph	**1** **1**
1(g)	polystyrene is an insulator / copper is a (good) conductor reduced heat losses	**1** **1**

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

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**