Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CHEMISTRY **0620/51**

Paper 5 Practical Test **May/June 2016**

MARK SCHEME

Maximum Mark: 40

Published

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Abbreviations used in the Mark Scheme

- ; separates marking points
- / separates alternatives within a marking point
- **OR** gives alternative marking point
- **R** reject
- **I** ignore mark as if this material was not present
- **A** accept (a less than ideal answer which should be marked correct)
- **COND** indicates mark is conditional on previous marking point
- owtte or words to that effect (accept other ways of expressing the same idea)
- max indicates the maximum number of marks that can be awarded
- ecf credit a correct statement that follows a previous wrong response
- ( ) the word / phrase in brackets is not required, but sets the context
- ora or reverse argument

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Question	Answer	Marks
1(a)	**M1** initial and final readings completed correctly; **M2** all readings to 1 decimal place; **M3** differences completed correctly; **M4** both results comparable to supervisor's;	**4** 1 1 1 1
1(b)	initial, final readings and difference completed correctly; both results comparable to supervisor's;	**2** 1 1
1(c)	blue to colourless;	**1**
1(d)	bubbles / fizzing / effervescence;	**1**
1(e)	Experiment 2;	**1**
1(f)	use a pipette / burette;	**1**
1(g)	**M1** effect on results: none; **M2** reason: no change in concentration;	**2** 1 1
1(h)(i)	2:1;	**1**
1(h)(ii)	acid **B** is double the concentration of acid **A** ora / acid **B** is more concentrated ora;	**1**
1(i)	**M1** appropriate named method that would work; **M2** reagents; **M3** result;	**2** 1 1 1
1(j)	named protective clothing, e.g. goggles / gloves / lab coat;	**1**

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Question	Answer	Marks
2(a)(i)	pH 7;	**1**
2(a)(ii)	cream; precipitate;	**2** 1 1
2(b)	yellow;	**1**
2(c)	sodium; bromide;	**2** 1 1
2(d)(i)	green;	**1**
2(d)(ii)	green; precipitate; with excess, (green) solution clears / precipitate dissolves;	**2** 1 1 1
2(d)(iii)	grey-green precipitate; insoluble;	**2** 1 1
2(d)(iv)	white; precipitate;	**2** 1 1
2(e)	chromium; chloride;	**2** 1 1

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Question	Answer	Marks
3	any 6 from: • weigh calcium; • heat / burn; • with lid / cover; • allow air to enter / lift lid; • cool; • reweigh calcium oxide; • reheat to constant mass; • calculate / find the difference;	**6**

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