Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CHEMISTRY **0620/51**

Paper 5 Practical Test **May/June 2017**

MARK SCHEME

Maximum Mark: 40

Published

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Question	Answer	Marks
1(b)	initial and final readings completed correctly	**1**
	differences completed correctly	**1**
	all readings to 1 d.p.	**1**
	results comparable to the Supervisor's results	**1**
1(c)	red / brown / amber / orange	**1**
1(d)	(becomes) yellow / orange / paler	**1**
1(e)	yellow to blue / black	**1**
1(f)(i)	solution **C** is more concentrated	**1**
	a greater volume of thiosulfate was needed	**1**
1(f)(ii)	ratio of the candidate's differences from the table in **(b)**	**1**
1(g)	1.5 × value from table in **(b)** for Experiment 2	**1**
	unit: cm^3	**1**
1(h)(i)	2 sources of error, e.g.: • using a measuring cylinder to measure solution **C** / solution **D** • only carrying out the experiments once • going past the end-point	**2**
1(h)(ii)	2 meaningful improvements **related to (h)(i)**: • use a pipette / burette • repeat the experiment • improvement linked to going past the end-point	**2**

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Question	Answer	Marks
2(a)	green	**1**
2(b)	any 2 from: • turns black • condensation / drops of liquid formed • moves / jumps around	**2**
2(c)(i)	any 3 from: • blue (solution) • bubbles / fizz • limewater • milky	**3**
2(c)(ii)	blue	**1**
	precipitate	**1**
	(with excess) deep / royal blue solution / clear / precipitate dissolves	**1**
2(d)	blue-green	**1**

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Question	Answer	Marks
2(e)	copper / Cu^{2+}	**1**
	carbonate / CO_3^{2-}	**1**
2(f)	white	**1**
2(g)(i)	no reaction / no change	**1**
2(g)(ii)	yellow precipitate	**1**
2(h)	lilac	**1**
2(i)	potassium / K^+	**1**
	iodide / I^-	**1**

Question	Answer	Marks
3(a)	(red) litmus turns blue	**1**
3(b)(i)	heat / boil the mixture	**1**
	condense the vapour	**1**
3(b)(ii)	filter / decant	**1**
	wash residue (with water)	**1**
	dry	**1**

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