

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

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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;	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;	1 1
2(b)	yellow;	1
2(c)	sodium; bromide;	1 1
2(d)(i)	green;	1
2(d)(ii)	green; precipitate; with excess, (green) solution clears/precipitate dissolves;	1 1 1
2(d)(iii)	grey-green precipitate; insoluble;	1 1
2(d)(iv)	white; precipitate;	1 1
2(e)	chromium; chloride;	1 1

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Question	Answer	Marks
3	any 6 from:	6
	 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; 	