



Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

COMBINED SCIENCE

0653/51

Paper 5 Practical Test

October/November 2017

MARK SCHEME

Maximum Mark: 30

Published

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Question	Answer	Marks
1(a)(i)	result for 4% recorded ;	1
1(a)(ii)	full set of results recorded ; all readings present in whole seconds for all readings present ; increases in time down the table ;	3
1(b)(i)	suitable linear scale using at least half the grid ; all 4 points correctly plotted $\pm$ half small square ; best-fit line ;	3
1(b)(ii)	decreasing concentration increases time ORA ;	1
1(c)	all temperatures between 0 and 100 inclusive ; at least 3 between 10 and 50 inclusive ;	2

Question	Answer	Marks
2(a)(i)	filtrate and residue correctly labelled ;	1
2(a)(ii)	blue / purple and 10–12 ;	1
2(a)(iii)	milky / white ppt ;	1
2(b)(i)	blue ppt ; dark(er) blue solution ; (J is) copper (nitrate) ;	3
2(b)(ii)	(slight) blue ppt. / blue solid ;	1
2(c)(i)	sodium hydroxide ;	1
2(c)(ii)	(H is) calcium (oxide) ; H + water gives limewater for CO ₂ test in (a)(iii) / F is limewater / calcium oxide reacts exothermically with water / H and water has pH > 7 ;	2

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Question	Answer	Marks
3(a)(i)	V and I recorded in table for 0 cm ; $V < 2.5 \text{ V}$ and $I < 1.0 \text{ A}$;	2
3(a)(ii)	all values recorded ; V values decreasing ; I values decreasing ; either V to at least 1 d.p. or / to at least 2 d.p. ;	4
3(b)	all power values correct ; power values decreasing ;	2
3(c)	no / yes (to match results) and actual values used to show relationship / reference to how P changes with I ; doubling I does not double P (for no) / doubling I doubles P (for yes) or P/I not constant (for no) or P/I constant (for yes) ;	2