CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2014 series

0653 COMBINED SCIENCE

0653/52

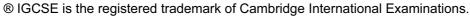
Paper 2 (Practical Test), maximum raw mark 30

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.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2014 series for most Cambridge IGCSE[®], Cambridge International A and AS Level components and some Cambridge O Level components.





Page 2	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2014	0653	52

1 (a) full set of results (colours) recorded for tube A; full set of results (colours) for tube B; correct trend for tube A (later samples are brown/orange); (check Supervisors results) correct trend for tube **B** (all blue-black); [4] (b) amount of starch reduces/no starch by end of experiment; brown colour appears when no more starch present; starch (is) digested/starch (is) broken down by the amylase; [3] (c) (i) starch is still present; [1] (ii) amylase is, denatured/not working/inactive; starch is not broken down; [2] [Total 10] 2 (a) (i) initial temperature of P recorded to nearest 0.5°C; [1] (ii) sensible final temperature of **P** (expect increase of 2–4 °C); [1] (iii) sensible final temperature of **Q** (expect decrease of 1–2°C); [1] (b) both temperature changes correct (ignoring signs); both signs correct; [2] (c) (i) blue ppt.; dark blue solution/deep blue solution/purple solution; copper/Cu²⁺/copper(II); (depends on observation of blue) (**not** Cu) [3] (ii) sodium hydroxide solution AND blue ppt.; [1] (iii) white ppt. AND chloride; [1]

[Total: 10]

Р	age 3	Mark Scheme	Syllabus	Paper
		Cambridge IGCSE – October/November 2014	0653	52
3	(a) (i)	sensible l ₀ (check Supervisors values) recorded to the nearest milling	metre ;	[1]
	(ii)	values of m (100 g) and l /present in the table;		[1]
	(iii)	extension calculated correctly (for 100 g);		[1]
	(iv)	all readings present of mass and length present; all lengths increasing down the table; all extensions correct;		[3]
	` 4 p	table choice of linear scales ; oints plotted correctly to $\pm{}^{1\!\!/}_{2}$ small square ; od best fit straight line judgement <code>through origin</code> ;		[3]
	(c) (dir	rectly) proportional ;		[1]
				[Total: 10]