CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2014 series

0620 CHEMISTRY

0620/53 Paper 5 (Practical), maximum raw mark 40

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1 (a) Table of results for Experiment 1

all temperature boxes completed (1)

comparable to supervisors: max temp change +/– 3°C of supervisor (1) [2]

(b) Table of results for Experiment 2

all temperature boxes completed (1)

comparable to supervisors: max temp change +/– 3°C of supervisor (1) [2]

(c) bubbles / fizz / effervescence (1) [1]

(d) all points correctly plotted (3) $^{+}/_{-}$ half small square, –1 for any incorrect

smooth line graphs (2)

labels (1) [6]

(e) (i) value from graph $^{+}/_{-}$ half small square (1) shown clearly on graph (1) [2]

(ii) value from graph $^{+}/_{-}$ half small square (1) shown clearly on graph (1) [2]

(f) endothermic (1) [1]

(g) M is a carbonate / hydrogen carbonate / carbon dioxide given off (1) [1]

(h) lower temperature changes (1)

temp change is half experiment 1 (1) [2]

(i) room temperature or initial temperature from table (1)

reaction finished / exchange of heat energy with surroundings (1) [2]

(j) more readings / points (1) [1]

[Total: 22]

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2 tests on solid **P**

(a) black (solid / powder) see part **(d)**

(b) (i) (turns) blue (solution) (1) [1]

(ii) blue (1) precipitate(1) [2]

(iii) brown (1) white / cream precipitate(1) [2]

(c) green (1) (allow blue / green but not just blue) [1]

blue precipitate (1) dark / royal / deep blue (1)

solution / soluble / dissolves(1) [3]

tests on solid **Q**

(d) brown / red (solid / powder) (1) must have **(a)** and **(d)** correct [1]

(e) (i) blue solution (1) red / brown solid (1) [2]

(ii) blue precipitate (1) [1]

(iii) deep blue (1) solution (1) [2]

(f) copper (1) oxide (1) [2]

(g) copper (1) [1]

[Total: 18]

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