UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2007 question paper

0620 CHEMISTRY

0620/05 Paper 5 (Practical Test), maximum raw mark 40

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All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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UNIVERSITY of CAMBRIDGE
International Examinations

1 Table of results

For all Experiments
Initial temperature boxes correctly completed (1)
Final temperature boxes correctly completed (1)
Differences correctly completed (1)
Each experiment comparable to Supervisor ± 3 °C, 4 × 1 = (4) [7]

(a) rapid/fast/violent (1) bubbles/fizz (1) [2]

(b) appropriate scale for y axis (1)
4 bars correctly drawn (2), –1 for incorrect bar, no labels = 1 [3]

(c) compare candidates results

(i) Experiment 1 (1) [1]

(ii) Experiment 4 (1) [1]

(d) correct reference to particle size/surface area (1)
different chemicals used/calcium oxide is more reactive with hydrochloric acid than calcium carbonate (1) [2]

(e) hydrochloric acid (1) solid all gone at end of reaction (1) [2]

(f) temperature changes would be smaller/less (1)
larger volumes of acid (1) [2]

[Total: 20]

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2 **(a)**

liquid	colour	pH
P	red/pink	1-3
Q	purple/blue	11-14
R	yellow/orange/red	1-6
S	red	1-3

Colours correct (1), compare supervisor's pH values correct (1) [2]

(b) **(i)** bubbles/fizz (1)
lighted splint (1) pops (1) [3]

(ii)

Q	no reaction/change (1)
R	bubbles/fizz
S	bubbles/fizz (1)

[2]

(c) bubbles/fizz (1)
limewater (1) milky (1) [3]

(d) white (1) precipitate (1) [2]

(e) green (1) precipitate (1) [2]

(f) hydrogen (1) [1]

(g) carbon dioxide (1) [1]

(h) hydrochloric acid/HCl (1) [1]

(i) alkali (1) or sodium hydroxide (2) [2]

(j) <u>weak</u> acid (1) [1]

[Total: 20]

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