UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2012 question paper

for the guidance of teachers

0620 CHEMISTRY

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

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1 **(a)** experiment 1 all boxes completed (1)
results show a regular pattern (1) [2]

(b) experiment 2 all boxes completed (1)
results show a regular pattern (1) [2]

(c) all points correctly plotted (+/– ½ small square) (2), –1 for any incorrect
Should have a y axis:
linear scale and points extend over at least 4 big squares (8 cm) (1)
two × smooth lines (curved or straight) (2)
both lines labelled (1) [6]

(d) **(i)** value from graph (+/– ½ small square) (1) shown clearly (1) [2]

(ii) value from graph (+/– ½ small square) (1) shown clearly (1) [2]

(e) endothermic (1) [1]

(f) lower temperature (changes) (1)
greater volume/more water (1) [2]

(g) room temperature or initial temperature from table (1)
reaction finished/<u>all</u> dissolved/warms up (1) [2]

(h) more readings/points (1)
better graph/more reliable/more accurate/owtte (1) [2]

[Total: 21]

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2 **(a)** green (1) **reject**: any other colours, **ignore**: dark/light [1]

(b) (turns) black (1) condensation/drops at top of tube/steam/water (1)
limewater (1) milky/cloudy/white ppt (1) max 3 [3]

(c) **(i)** fizz/bubbles etc. (1)
blue solution/liquid (1) [2]

(ii) blue (1) **ignore**: qualifiers such as dark/light precipitate (1) [2]
blue precipitate (1) (ignore qualifiers such as dark/light)
dark/royal/deep blue (1) must be some indication it is darker than the ppt
solution/soluble/dissolves (1) [3]

(d) appearance: colourless (1)
smell: vinegar/pungent/sharp/sour/strong (1) [2]

(e) pH2–6 (1) [1]

(f) green or blue-green solution/liquid (1)
fizz/bubbles (1) [2]

(g) copper (1) carbonate (1) [2]

(h) acid/organic/ethanoic/acetic/vinegar [1]

[Total: 19]

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