**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

**0620/52** 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)
blue precipitate (1) (ignore qualifiers such as dark/light) [2]

**(iii)** 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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