UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the November 2004 question paper

0620 CHEMISTRY

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

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

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.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.

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Grade thresholds taken for Syllabus 0620 (Chemistry) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 5	40	32	27	23	20

The threshold (minimum mark) for B is set halfway between those for Grades A and C.
The threshold (minimum mark) for D is set halfway between those for Grades C and E.
The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.
Grade A* does not exist at the level of an individual component.

November 2004

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 40

SYLLABUS/COMPONENT: 0620/05

CHEMISTRY
Practical Test

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1 Table of results

initial temperatures completed (1) final temperatures completed (1)

decreasing (1) comparable to supervisors (2) **(5)**

(a) Graph. Points correctly plotted (3), -1 for each incorrect

straight line (1) **(4)**

(b) **(i)** temperature for 3.5 g from graph (1) indication (1) **(2)**

^{o}C (1) **(1)**

(ii) temperature for 6 g from graph (1) extrapolation (1) **(2)**

(c) endothermic (1) **(1)**

(d) lower temperature changes (1) more dilute/water to heat up (1) **(2)**

(e) larger surface area (1) dissolves faster/easier (1) **(2)**

(f) initial temperature from table ± 2 ^{o}C (1) room temperature/reaction finished (1) **(2)**

(g) change to apparatus e.g. insulation/burette/pipette etc. (1) **(1)**

sub total 22

2 **(a)** white (1) powder/crystals (1) not precipitate **(2)**

(b) indicator paper goes blue (1) red (1) smell/solid is smaller (1) **max 2 (2)**

white deposit (1) on tube e.g. top/side (1)

(c) pH 4-6 (1) **(1)**

(d) **(i)** white (1) precipitate (1) **(2)**

(ii) white (1) precipitate (1) **(2)**

(iii) pH greater than 7 (1) reference to smell/colour of indicator paper (1) **(2)**

(e) ammonia (1) **(1)**

(f) alkaline gas (1) ammonia named (2) sublimation (1) **max 2 (2)**

(g) ammonium (1) chloride (1) **(2)**

sub total 18

Total 40