

International General Certificate of Secondary Education
CAMBRIDGE INTERNATIONAL EXAMINATIONS

CHEMISTRY

0620/5

PAPER 5 Practical Test

INSTRUCTIONS

OCTOBER/NOVEMBER SESSION 2002

1 hour 15 minutes

Great care should be taken that any confidential information given does not reach the candidates either directly or indirectly.

The teacher responsible for preparing the examination is **not** allowed to consult the question paper before the examination. Teachers should, as a part of the preparation of the examination requirements, perform any tests indicated on page 2 in order to satisfy themselves that the supplied materials are satisfactory.

The standard Report Form to be included with the scripts is given on pages 3 and 4. Please detach and enclose it with the scripts. If scripts are to be despatched in more than one envelope, it is essential that a copy of the Supervisor's Results and the Report Form are sent inside **each** envelope.

More material may be issued if required, without penalty, but this should not be necessary. Safety spectacles may be provided if considered necessary.

If you have any problems or queries regarding these Instructions, please contact CIE

by e-mail: International@ucles.org.uk,

by phone: +44 1223 553554,

by fax: +44 1223 553558,

stating the Centre number, the nature of the query and the syllabus number quoted above.

These instructions consists of 4 printed pages.

For Question 1

Each candidate will need the following:

- (a) a 25 cm³ measuring cylinder;
- (b) four boiling tubes (about 200 mm x about 25 mm);
- (c) 1 g samples of zinc powder, iron powder and copper powder. A 0.5 g sample of magnesium powder – all clearly labelled;
- (d) approximately 100 cm³ of sulphuric acid of concentration 1 mol/dm³;
- (e) a Bunsen burner;
- (f) splints;
- (g) one stirring thermometer, covering the range 0 °C to 100 °C;
- (h) 20 cm³ of aqueous copper(II) sulphate of concentration 0.2 mol/dm³;
- (i) a 0.2 g sample of magnesium powder labelled '0.2 g magnesium powder';
- (j) one 10 cm³ measuring cylinder.

A 1 g sample of zinc powder when added to 15 cm³ of sulphuric acid should give a temperature rise between 2 °C and 4 °C.

For Question 2

Each candidate will require:

- (a) a stoppered test-tube containing about 10 cm³ of cyclohexane, labelled liquid **F**;
- (b) a stoppered test-tube containing about 10 cm³ of aqueous potassium iodide, labelled liquid **G** of concentration 0.1 mol/dm³;
- (c) two stoppered, dry test-tubes, each containing one crystal of iodine, labelled as such. (The Supervisor should advise the candidates not to touch the crystals);
- (d) two dry watch glasses;
- (e) aqueous nitric acid, labelled as such of concentration 2 mol/dm³;
- (f) solutions of aqueous lead(II) nitrate and aqueous silver nitrate, labelled as such, of sufficient concentration to give a positive halide test;
- (g) teat pipettes;
- (h) rack of test-tubes;
- (i) distilled water;
- (j) Bunsen burner;
- (k) splints.

Note. Labels do not need to include concentrations.

This form must be completed and returned in the envelope with the scripts.

REPORT ON PRACTICAL CHEMISTRY

NOVEMBER 2002

1 (a) Supervisor's Results

It is recommended that the Supervisor should be a chemistry teacher.

The Supervisor is asked to carry out the experiments in Questions 1 and 2 and to record the results on a spare copy of the question paper clearly labelled 'Supervisors's Results'. Failure to enclose these results and this report form may lead to candidates being unavoidably penalised.

(b) The Candidate Numbers of candidates in each session were:

First Session

Second Session

2 The Supervisor is invited to report details of any difficulties experienced by candidates giving names and Candidate Numbers. The report should include reference to:

- (a) any general difficulties encountered in making preparations for the examination;
- (b) difficulties due to faulty apparatus or materials;
- (c) accidents to apparatus or materials.

Other cases of individual hardship, e.g. illness, temporary disability, should be reported direct to UCLES on the normal *Application for Special Consideration* form.

NAME OF CENTRE.....

CENTRE NUMBER.....

SIGNED.....

Supervisor

DECLARATION (to be signed by the Principal)

The preparation of the practical examination has been carried out so as to maintain fully the security of the examination.

NAME

(in block capitals)

SIGNED(Principal)