

**International General Certificate of Secondary Education  
CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**CHEMISTRY**

**0620/5**

PAPER 5 Practical Test

CONFIDENTIAL INSTRUCTIONS

**MAY/JUNE 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, carry out 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 of 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](mailto: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.

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**These instructions paper consists of 4 printed pages.**



**For Question 1**

*Each candidate will need the following.*

- (a) one 50 cm<sup>3</sup> measuring cylinder;
- (b) one 50 cm<sup>3</sup> burette;
- (c) one or more 250 cm<sup>3</sup> conical flasks;
- (d) 100 cm<sup>3</sup> of 0.1 mol/dm<sup>3</sup> aqueous iron(II)ammonium sulphate, made up in dilute sulphuric acid, labelled 'aqueous iron(II) ions';
- (e) 100 cm<sup>3</sup> of 0.02 mol/dm<sup>3</sup> aqueous potassium manganate(VII), labelled 'solution A';
- (f) 100 cm<sup>3</sup> of 0.04 mol/dm<sup>3</sup> aqueous potassium manganate(VII), labelled 'solution B';
- (g) two 100 cm<sup>3</sup> beakers;
- (h) aqueous sodium hydroxide, labelled as such, of concentration 1.0 mol/dm<sup>3</sup>;
- (i) distilled water.

**For Question 2**

*Each candidate will need the following:*

- (a) a stoppered test-tube, labelled **S**, containing about 1 g of copper(II) oxide
- (b) a stoppered test-tube, labelled **T**, containing about 1 g of manganese(IV) oxide;

Candidates will require access to the following for the qualitative analysis:

- (c) '5 volume' aqueous hydrogen peroxide labelled as such;
- (d) aqueous hydrochloric acid, labelled as such, of concentration 2 mol/dm<sup>3</sup>;
- (e) aqueous sodium hydroxide, labelled as such, of concentration 1.0 mol/dm<sup>3</sup>;
- (f) aqueous ammonia, labelled as such, of concentration 1.0 mol/dm<sup>3</sup>;
- (g) blue litmus papers;
- (h) distilled water;
- (i) rack of test-tubes,;
- (j) teat pipettes, spatulas;
- (k) Bunsen burner, splints and matches.

**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

JUNE 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 'Supervisor'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 this practical examination has been carried out so as to maintain fully the security of the examination.

NAME .....  
(in block capitals)

SIGNED .....(Principal)