

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

**BIOLOGY**

**0610/05**

PAPER 5 Practical Test

**CONFIDENTIAL INSTRUCTIONS**

**October/November 2003**

1 hour

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

**Instructions for preparing apparatus**

These instructions detail the apparatus required by each candidate for each experiment in this paper. A summary of the questions that will be presented to the candidate is included, where appropriate, to allow the Biology teacher to test the apparatus appropriately. **No access to the question paper is permitted in advance of the examination session.**

If a candidate breaks any of the apparatus, or loses any of the material supplied, the matter should be rectified and a note made in the Supervisor's Report.

It is assumed that the ordinary apparatus of a science laboratory will be available, including a supply of purified water (distilled or deionised).

If arrangements are made for different sessions for different groups of candidates, care must be taken to ensure that the different groups of candidates are effectively isolated so that **no information passes between them.**

Supervisors are advised to remind candidates that **all** substances in the examination should be treated with caution. Pipette fillers and safety goggles should be used where necessary.

In accordance with the COSHH (Control of Substances Hazardous to Health) Regulations, operative in the UK, a hazard appraisal of the examination has been carried out.

The following codes are used where relevant.

**C** = corrosive substance

**F** = highly flammable substance

**H** = harmful or irritating substance

**O** = oxidising substance

**T** = toxic substance

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.

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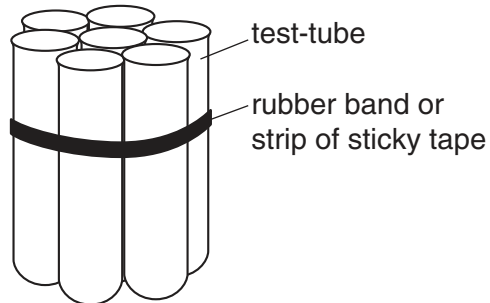
**These instructions consist of 2 printed pages.**



Each candidate must be provided with the following apparatus and materials:

### Question 1

- (i) 8 similar test-tubes (7 grouped together with a rubber band or strip of sticky tape as shown in the diagram below, and one single test-tube).



- (ii) 2 containers to support the tubes.  
(iii) 2 thermometers (0 to 100°C).  
(iv) A ruler (mm).  
(v) A stopclock or view of a clock with a second hand.  
(vi) A supply of hot water, 60–65 °C, in large water-bath or from a tap.

**Candidates will need about 250 cm<sup>3</sup> each and they will raise their hand when they are ready to receive the hot water.**

### Question 2

- (i) A preserved locust or beetle, labelled **W1**.  
(ii) A hand lens.  
(iii) A preserved butterfly or moth with intact wings and antennae, labelled **W2**.  
(iv) The same ruler as in Question 1.

### Safety

**Teachers are expected to instruct candidates to take such precautions as are laid down or advised by their Education/Authority/School or College.**