



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Ordinary Level

**BIOLOGY**

**5090/03**

Paper 3 Practical Test

**October/November 2008**

CONFIDENTIAL INSTRUCTIONS

**1 hour 15 minutes**

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



If you have any problems or queries regarding these Instructions, please contact CIE  
by e-mail: International@cie.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.

This document consists of **4** printed pages, **2** blank pages and a Supervisor's Report.



**READ THESE INSTRUCTIONS FIRST**

These instructions give details of the apparatus required by each candidate for each experiment in this paper. A summary of the questions that will be presented to the candidates 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.

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 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 in the left margin where relevant.

**C** = corrosive substance

**F** = highly flammable substance

**H** = harmful or irritating substance

**O** = oxidising substance

**T** = toxic substance

**Instructions to Supervisors**

*Each candidate must be supplied with:*

**For question 1**

- (i) 2 identical plastic drinking cups, approximately 200 cm<sup>3</sup> capacity.
- (ii) Absorbent paper tissue, e.g. toilet paper or paper handkerchiefs, sufficient to wrap once around one of the cups.
- (iii) 2 elastic bands to hold the tissue in place around the cup.
- (iv) Medium sized or small beaker of cold water.
- (v) Plastic pipette for use with (iv).
- (vi) Cloths or paper towels.
- (vii) Supply of hot water (70°–80°C) available for Supervisor to dispense to candidates as requested, sufficient to three quarters fill both cups. The Supervisor should pour the water into the cups when requested.
- (viii) Thermometer (range –10° to 110°C).
- (ix) Sight of clock with minute hand, or equivalent digital timer.
- (x) 2 squares of card (postcard or filing card thickness) for use as lids on cups.

**Note:** The Supervisor should check that the cups do not have tissue on the bottom as it might make the cups unstable. Candidates should be warned to take great care with the hot water.

**For question 2**

- (i) Specimen labelled **W1** – a slice of banana, complete with skin and approximately 1 cm thick. The fruit should be under-ripe tinged with green and freshly sliced.
- (ii) Specimen labelled **W2** – a slice of cucumber, approximately 0.5 cm thick. Each slice must be seen to contain at least one seed and should also be freshly sliced.
- (iii) Cotton wool bud.
- (iv) Iodine in potassium iodide solution.
- (v) Hand lens.
- (vi) White tile.
- (vii) Ruler (mm).



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- 3 A plan of work benches, giving details of the candidate numbers of the places occupied by the candidates for each session, must be enclosed with the scripts. The space below can be used for this, or it may be on separate paper.

**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.

Signed.....

Name (in block capitals).....

Centre number.....

Centre name.....

If scripts are required by CIE to be despatched in more than one envelope, it is essential that a copy of the relevant Supervisor’s report and the appropriate seating plan(s) are sent inside **each envelope**.

