# www.papacambridge.com UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Ordinary Level

# BIOLOGY

Paper 3 Practical Test

October/November 2004

1 hour 15 minutes

5090/03

# CONFIDENTIAL INSTRUCTIONS

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

#### Instructions for preparing apparatus

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 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

**H** = harmful or irritating substance

**F** = highly flammable substance

**O** = oxidising substance

 $\mathbf{T} = toxic substance$ 

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.

This document consists of 2 printed pages and a Supervisor's report.

WEW UNIVEDRITY - CAMPDIDGE

#### **Instructions to Supervisors**

Each candidate must be supplied with:

#### For question 1

www.papaCambridge.com Approximately 20 cm<sup>3</sup> of each of the 4 solutions labelled by the identifying letter only.

- Α approximately 5 g of dried albumen or the white of a fresh egg, dissolved in 1 dm<sup>3</sup> of solution. This should be checked to ensure that a positive result is given with the biuret reagent(s) supplied.
- approximately 10 g glucose in 1 dm<sup>3</sup> of solution. В
- С water.
- D a few drops of liquid soap added to water - sufficient to cause sulphur powder to sink when placed on the surface, please check that it does.

Tap water may be used for all of the solutions.

Each of the solutions should be very faintly discoloured by the addition of, for example, a trace of Bovril or Marmite or tea.

A small amount, approximately 1 g, of powdered sulphur, on a piece of paper, e.g. filter paper, labelled 'sulphur'.

6 test-tubes.

A means of labelling test-tubes.

A test-tube rack.

A test-tube holder.

A waterbath and heater.

A spatula or wooden splint.

Benedict's solution, labelled as such and with a means of dispensing small amounts.

Biuret reagent(s), labelled as such and with a means of dispensing small amounts.

Access to tap and sink.

Sight of clock.

Paper towels.

#### For question 2

Specimen **P** A prawn which may be either fresh, or of the type sold 'complete and ready cooked' in a (super)market, provided that the specimens are reasonably complete with legs, eyes, antennae and tail.

A hand lens.

A ruler (mm).

# www.papaCambridge.com This form should be completed and sent to the examiner with the scripts.

# **REPORT ON PRACTICAL BIOLOGY**

### **General Certificate of Education Ordinary Level**

#### **October/November Session 2004**

The Supervisor or Teacher responsible for the subject should provide the following information.

1 Was any difficulty experienced in providing the necessary materials? If so, give brief details.

- 2 Give details of any difficulties experienced by particular candidates, giving names and candidate numbers. Reference should be made to:
  - (a) difficulties arising from faulty specimens;
  - (b) accidents to apparatus or materials;
  - (c) any other information that is likely to assist the Examiner, especially if this cannot be discovered from the scripts.

Other cases of individual hardship, e.g. illness or disability, should be reported direct to CIE on the normal 'Special Consideration Form' as detailed in Part 6 of the Handbook for Centres.

www.papaCambridge.com 3 A plan of work benches, giving details of the candidate numbers of the places occ candidates for each session, must be enclosed with the scripts. The space below can b 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**.