

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE
Joint Examination for the School Certificate
and General Certificate of Education Ordinary Level

BIOLOGY

5090/3

PAPER 3 Practical Test

INSTRUCTIONS

OCTOBER/NOVEMBER SESSION 2001

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.

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.

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.**

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 consist of 2 printed pages.

Question 1

Each candidate will require:

- (i) a piece of celery, approximately 10 cm long (kept fresh in an enclosed container until just before the start of the examination);
- (ii) a scalpel or a sharp knife;
- (iii) a beaker, medium size, (or similar container);
- (iv) a hand lens;
- (v) access to a supply of blue or black ink or stain, in a container with a dropper;
- (vi) access to a supply of iodine solution, in a container with a dropper;
- (vii) access to a tap and sink;
- (viii) sight of a clock, with a second hand;
- (ix) a white tile.

Question 2

Each candidate will require:

- (i) approximately 60 (± 3) grains of cooking rice; (This should be a 50-50 mixture of two kinds of rice:
 - 1. short grained 'Pudding' rice;
 - 2. long grained rice.

These are to be counted out separately, then mixed for the candidates' use.)

- (ii) a small sheet, approximately A5 size, of black paper;
- (iii) a ruler (mm).