



**BIOLOGY**

**5090/32**

Paper 3 Practical Test

**October/November 2018**

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 queries regarding these Confidential Instructions, please contact Cambridge stating the Centre number, the nature of the query and the syllabus number quoted above.

email            info@cie.org.uk  
phone           +44 1223 553554  
fax               +44 1223 553558

This document consists of **5** printed pages and **3** blank pages.

## INSTRUCTIONS FOR PREPARING APPARATUS

These Confidential 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.**

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 suitable eye protection 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

**HH** health hazard

**F** flammable

**N** hazardous to the aquatic environment

**MH** moderate hazard

**T** acutely toxic

**O** oxidising

Centres are reminded that they are **not** permitted to open the Question Paper envelopes before the examination. There are **no** exceptions to this. Centres should also refer to the Cambridge Handbook.

If there are any difficulties with any aspect of setting up this practical examination that the Centre is not able to resolve, it is essential for Centres to contact Cambridge as soon as possible by email to [info@cie.org.uk](mailto:info@cie.org.uk), by fax to +44 1223 553558 or by phone to +44 1223 553554.

**SUPERVISOR'S INSTRUCTIONS – CONFIDENTIAL**

Each candidate should be provided with:

**Question 1**

- (i) 100 cm<sup>3</sup> of fresh cow's milk in a small beaker or container labelled **milk**
- (ii) 50 cm<sup>3</sup> of live natural, unflavoured yoghurt in a small beaker or container labelled **live yoghurt**
- (iii) small beaker to hold 100 cm<sup>3</sup>
- (iv) syringe capable of accurately measuring 2.5 cm<sup>3</sup>
- (v) measuring cylinder to accurately measure 50 cm<sup>3</sup>
- (vi) stirring rod
- (vii) wax pencil or other suitable method for labelling glassware
- (viii) pH indicator paper (pH range 1-14) and colour chart. Check that this is able to distinguish between the pH of milk and live natural yoghurt.
- (ix) paper towels

**Question 2**

- (i) ball of plasticine approximately 3 cm in diameter
- (ii) ruler (mm)
- (iii) two toothpicks (wood or plastic) with sharp points





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**This form should be completed and sent to Cambridge with the scripts.**

**SUPERVISOR'S REPORT**

**Cambridge Ordinary Level**

**October/November 2018**

*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 with specimens or materials;
  - (b) accidents to apparatus or materials;
  - (c) assistance provided in case of colour blindness;
  - (d) 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 Cambridge on the normal Special Consideration Form as detailed in the Cambridge Handbook.

- 3 During the examination, the Supervisor should, **out of sight of the candidates**, carry out **Question 1(a)** using the same apparatus and reagents as the candidates. These results should be written in the Supervisor's Report which should be enclosed with the candidates' scripts. If the scripts are in several packets, please ensure that a copy of the Supervisor's Report is enclosed with each packet of scripts.

- 4 Enclose a seating plan of work benches with the scripts, giving details of the candidate numbers for the places occupied by the candidates for each session.

Temperature of examination room .....°C

Results for **Question 1(a)**:

sample	observations	pH
milk		
yoghurt-milk mixture		
live yoghurt		

**Declaration** (to be signed by the Supervisor)

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 Cambridge 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**.