

## **Cambridge International Examinations**

Cambridge Ordinary Level

BIOLOGY 5090/32

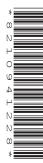
Paper 3 Practical Test

May/June 2015

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 **5** printed pages and **3** blank pages.

DC (CW) 108415 © UCLES 2015



[Turn over

#### 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.

 $\mathbf{C}$  = corrosive substance  $\mathbf{F}$  = highly flammable substance

**H** = harmful or irritating substance **O** = oxidising substance

T = toxic substance N = harmful to the environment

Centres are reminded that they are **not** permitted to open the question paper envelopes before the examination. There are **no** exceptions to this. Centres are also referred to the Handbook for Centres which covers Security of Question Papers and Examination Materials and Practical Examinations in Science Subjects.

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 the Product Manager as soon as possible by e-mail to 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) Six bean seeds, previously soaked in water for 4 days in a cool place in a container (eg. petri dish), labelled **BEAN SEEDS** (runner beans, broad beans, dwarf (French) beans and mung beans are all suitable).
- [H] (ii) Beaker containing approximately 25 cm<sup>3</sup> of 10 volume (3%) hydrogen peroxide, labelled **HYDROGEN PEROXIDE**.

Hydrogen peroxide is HARMFUL and an oxidising agent. It should be kept away from naked flames.

- (iii) Scalpel, knife or single-edged razor blade.
- (iv) Rack containing 4 large test-tubes.
- (v) Glass-writing pencil ('Chinagraph') or similar.
- (vi) 10 cm<sup>3</sup> plastic syringe, or pipette, for measuring 5 cm<sup>3</sup> volumes.
- (vii) White tile or similar.
- [H] (viii) Dropper bottle containing iodine in potassium iodide solution (1%), labelled IODINE SOLUTION.

lodine solution is HARMFUL.

- (ix) Hand lens (preferably  $\times$  10).
- (x) mm ruler.
- (xi) Paper towels to clear up spills.
- (xii) View of a clock or timer.
- (xiii) Plastic gloves.

The Supervisor should carry out Question 1 on the day of the examination, out of view of the candidates and complete the section in the Supervisor's Report.

# **BLANK PAGE**

# **BLANK PAGE**

### **BLANK PAGE**

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cie.org.uk after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

5090/32/CI/M/J/15

© UCLES 2015

## This form should be completed and sent to the Examiner with the scripts.

### SUPERVISOR'S REPORT

## **Cambridge Ordinary Level**

## May/June Session 2015

Tho	Cuparviaar or	toochar room	anaible for the	aubicat abould	nravida tha f	allowing information
ıne	Subervisor or	teacher respo	onsible for the	subject snouja i	proviae the to	ollowina information.

Ple	ase record the following:			
	part of bean seed	observations		
	testa			
_	cotyledons			
Res	sults of test for starch.			
Re:	sults of test for starch.			
 		es experienced by particular candidates, giving names and can be made to:		

Other cases of individual hardship eg. 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.



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.					
<b>Declaration</b> (to be signed by the Principal	)				
The preparation of this practical examination of the examination.	ion has been carried out so as to maintain fully the security				
	Signed				
Name (in block ca	apitals)				
Centre r	number				
Centre name					
	ched in more than one envelope, it is essential that a copy of opropriate seating plan(s) are inside <b>each envelope</b> .				

X

© UCLES 2015 5090/32/CI/M/J/15