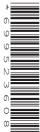


Cambridge IGCSE[™]

BIOLOGY 0610/51

Paper 5 Practical Test May/June 2020

CONFIDENTIAL INSTRUCTIONS



This document gives details of how to prepare for and administer the practical exam.

The information in this document and the identity of any materials supplied by Cambridge International are confidential and must NOT reach candidates either directly or indirectly.

The supervisor must complete the report at the end of this document and return it with the scripts.

INSTRUCTIONS

 If you have any queries regarding these confidential instructions, contact Cambridge International stating the centre number, the syllabus and component number and the nature of the query.
 email info@cambridgeinternational.org
 phone +44 1223 553554

General information about practical exams

Centres must follow the guidance on science practical exams given in the Cambridge Handbook.

Safety

Supervisors must follow national and local regulations relating to safety and first aid.

Only those procedures described in the question paper should be attempted.

Supervisors must inform candidates that materials and apparatus used in the exam should be treated with caution. Suitable eye protection should be used where necessary.

The following hazard codes are used in these confidential instructions, where relevant:

C corrosive
 HH health hazard
 F flammable
 MH moderate hazard
 T acutely toxic
 O oxidising

N hazardous to the aquatic environment

Hazard data sheets relating to substances used in this exam should be available from your chemical supplier.

Before the exam

- The packets containing the question papers must **not** be opened before the exam.
- It is assumed that standard school laboratory facilities, as indicated in the *Guide to Planning Practical Science*, will be available.
- Spare materials and apparatus for the tasks set must be available for candidates, if required.

During the exam

- It must be made clear to candidates at the start of the exam that they may request spare materials and apparatus for the tasks set.
- Where specified, the supervisor must perform the experiments and record the results as instructed.
 This must be done out of sight of the candidates, using the same materials and apparatus as the candidates.
- Any assistance provided to candidates must be recorded in the supervisor's report.
- If any materials or apparatus need to be replaced, for example, in the event of breakage or loss, this must be recorded in the supervisor's report.

After the exam

- The supervisor must complete a report for each practical session held and each laboratory used.
- Each packet of scripts returned to Cambridge International must contain the following items:
 - the scripts of the candidates specified on the bar code label provided
 - the supervisor's results relevant to these candidates
 - the supervisor's reports relevant to these candidates
 - seating plans for each practical session, referring to each candidate by candidate number
 - the attendance register.

Specific information for this practical exam

During the exam, the supervisor (NOT the invigilator) must do the experiment in Question 1 and record the results on a spare copy of the question paper, clearly labelled 'supervisor's results'.

Question 1

Each candidate should be provided with:

hazard	materials and apparatus	quantity per candidate
	large test-tubes (150 × 25 mm)	3
	test-tube rack or other means of supporting four large test-tubes	1
	empty 250 cm ³ glass beaker labelled water-bath	1
	4% solution of glucose in a beaker labelled 4% glucose solution	50 cm ³
	distilled water in a beaker labelled distilled water	50 cm ³
	large test-tube containing 10 cm ³ of 4% glucose solution labelled D	1
	Benedict's solution in a beaker labelled Benedict's solution	50 cm ³
	5 cm ³ syringe	3
	supply of water at approximately 80 °C Candidates will raise their hand when they are ready for the hot water for their water-bath.	approximately 200 cm ³
	thermometer, -10°C to +110°C at 1°C graduations	1
	permanent marker pen	1
	paper towels	4
	stop-clock	1
	suitable eye protection	1
	gloves	1 pair

Preparation of materials

4% glucose solution

Sprinkle $40\,\mathrm{g}$ of glucose gradually onto $500\,\mathrm{cm}^3$ distilled water and stir until dissolved. Add distilled water to make up to a total volume of $1\,\mathrm{dm}^3$.

This can be prepared two days before the examination and stored in a cool place.

Benedict's solution

This can be purchased from a commercial supplier. Qualitative Benedict's reagent used in food tests will be suitable.

Question 2

Each candidate should be provided with:

hazard	materials and apparatus	quantity per candidate	
	30 cm transparent ruler marked in mm	1	

© UCLES 2020 0610/51/CI/M/J/20

BLANK PAGE

6

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 Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

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

Supervisor's report

Syllabus and component number			/		
Centre number					
Centre name	 	 		 	
Time of the practical session	 	 		 	
Laboratory name/number	 	 		 	

Give details of any difficulties experienced by the centre or by candidates (include the relevant candidate names and candidate numbers).

You must include:

- any difficulties experienced by the centre in the preparation of materials
- any difficulties experienced by candidates, e.g. due to faulty materials or apparatus
- any specific assistance given to candidates.

	_		_	
Dec	la	rat	i۸	n

Dec	ciaration
1	Each packet that I am returning to Cambridge International contains the following items:
	the scripts of the candidates specified on the bar code label provided
	the supervisor's results relevant to these candidates
	the supervisor's reports relevant to these candidates
	seating plans for each practical session, referring to each candidate by candidate number
	the attendance register
2	Where the practical exam has taken place in more than one practical session, I have clearly labelled the supervisor's results, supervisor's reports and seating plans with the time and laboratory name/number for each practical session.
3	I have included details of difficulties relating to each practical session experienced by the centre or by candidates.
4	I have reported any other adverse circumstances affecting candidates, e.g. illness, bereavement or temporary injury, directly to Cambridge International on a <i>special consideration form</i> .
Sigı	ned (supervisor)
Nar	me (in block capitals)

© UCLES 2020 0610/51/CI/M/J/20