



Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

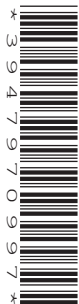
BIOLOGY

0610/52

Paper 5 Practical Test

February/March 2019

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.

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.

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This document consists of **6** printed pages and **2** blank pages.

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	MH	moderate hazard
HH	health hazard	T	acutely toxic
F	flammable	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 their 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
	pieces of dry cloth stained with food dye	4
	glass rod	1
	white tile approximately 10 cm × 10 cm	1
	marker pen to write on the white tile	1
	stop-clock	1
refer to packaging	100 cm ³ of bio washing solution in a 250 cm ³ beaker labelled bio	1
refer to packaging	100 cm ³ of non-bio washing solution in a 250 cm ³ beaker labelled non-bio	1
	100 cm ³ of distilled water in a 250 cm ³ beaker labelled water	1
	forceps	1 pair
	gloves	1 pair
	eye protection	1
	paper towels	6

Preparation of materials

Stained cloth

Cut white cotton fabric into pieces that measure approximately 5 cm × 5 cm. Place the pieces of white cotton cloth into a solution of food dye. An intense colour such as red or blue is suitable. The food dye can be diluted by 50% but must be concentrated enough to stain the fabric.

Stir the cloth into the food dye solution so it is completely immersed and then leave for at least one hour.

Dry the pieces of cloth in a drier, or leave to air-dry for at least 24 hours. The cloth pieces must be completely dry when presented to candidates.

Bio washing solution

Dissolve approximately 20g of biological washing powder or liquid in 1 dm³ of warm tap water.

Non-bio washing solution

Dissolve approximately 20 g of non-biological washing powder or liquid in 1 dm³ of warm tap water. If non-biological washing powder is not available dish-washing liquid or liquid hand soap are suitable alternatives.

Once prepared, the solutions for candidates do not need to be kept warm. Solutions can be provided to candidates at room temperature.

Question 2

Each candidate should be provided with:

hazard	materials and apparatus	quantity per candidate
	30 cm transparent plastic ruler	1

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Supervisor's report

Syllabus and component number

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Centre number

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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.

Declaration

- 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 *special consideration form*.

Signed (supervisor)

Name (in block capitals)