



Cambridge IGCSE[®] (9–1)

BIOLOGY

0970/05

Paper 5 Practical Test

For examination from 2019

SPECIMEN 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.

by email: info@cambridgeinternational.org

by phone: +44 1223 553554

by fax: +44 1223 553558

This document consists of **6** printed 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 experiments in Questions 1 and 2 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:

- (i) one large test-tube, labelled **A**;
- (ii) a glass delivery tube (preferably capillary tube), assembled as shown in Fig. 1.1, with one end attached to a rubber (gas-proof) bung to fit test-tube **A**;
- (iii) one large test-tube containing water, labelled **B**;

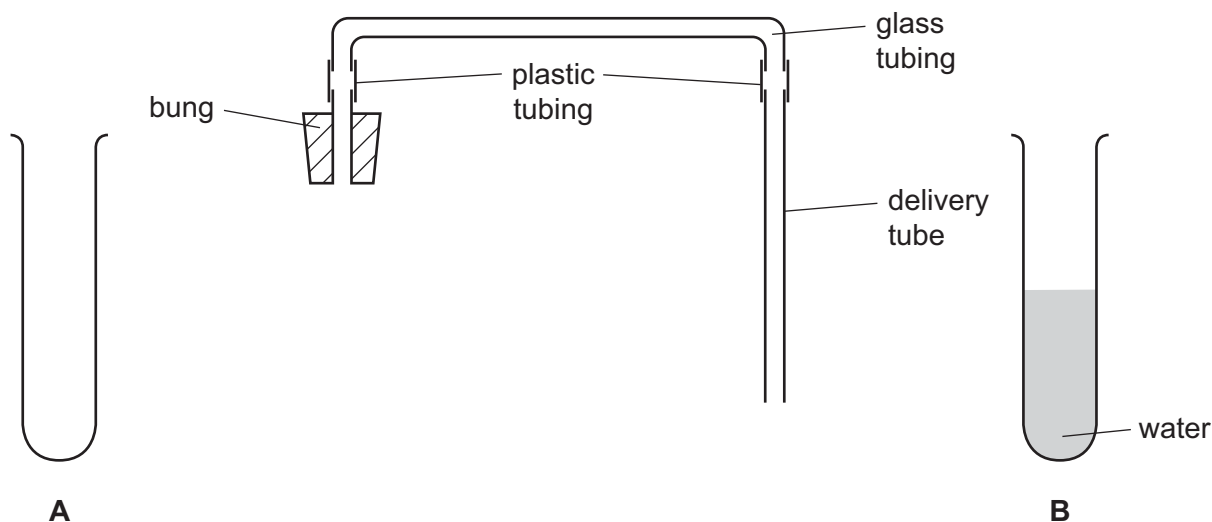


Fig.1.1

Fig. 1.1 shows the parts of the apparatus which the candidates will combine during the practical test.

- [H] (iv) three test-tubes with bungs, suitably supported, each containing 5 cm^3 of 6% (20 vol) hydrogen peroxide solution (prepared the previous day and stored in a light-proof container prior to the examination), labelled **hydrogen peroxide** solution;

When preparing the bulk solution prior to dispensing into test-tubes, add a small drop of detergent to the mixture.

- (v) eye protection;
- (vi) plastic gloves;
- (vii) 1 cm thick, transverse slice of sweet potato, with the outer skin intact and preferably of the yellow/orange variety (the cross-section of the slice should be at least $5\text{ cm} \times 3\text{ cm}$ and it should be freshly prepared, no more than 1 hour before the examination);
- (viii) means of cutting a 1 cm^3 cube, e.g. scalpel or small knife;
- (ix) white tile or similar for cutting on;

During the exam, the supervisor (NOT the invigilator) must do the experiments in Questions 1 and 2 and record the results on a spare copy of the question paper, clearly labelled 'supervisor's results'.

- (x) view of a clock or timer that allows the candidate to time minutes accurately;
- (xi) paper tissues/towels;
- (xii) empty container, labelled **waste washings**;
- (xiii) supply of water for washing;
- (xiv) means to support tubes such as test-tube rack or empty beakers;
- (xv) ruler with a mm scale.

Question 2

Each candidate should be provided with:

- (i) large, simple (undivided) dicotyledonous leaf about 10 cm in length, labelled **W1**.

It is essential that:

- the leaf has a petiole;
- the leaf blade is not more than 10 cm in length and no more than 6 cm wide;
- the upper surface is different to the lower surface, e.g. shiny, waxy;
- the leaf is not covered in hairs.

Suitable examples include rhododendron, oleander, *Smilax*, ginger, etc.

- (ii) hand lens;
- (iii) a 30 cm ruler with a mm scale.

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.

Space for supervisor to record results, if relevant, e.g. temperature of the laboratory; results for Question 1.

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 that practical session.
- 3 I have included details of difficulties relating to this 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)