CAMBRIDGE
International Education

Cambridge IGCSE™

PHYSICS **0625/51**

Paper 5 Practical Test **May/June 2026**

CONFIDENTIAL INSTRUCTIONS

7771828396

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

This document has **8** pages.

DC (WW/FC) 356680/2

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.

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, 2 and 3 and record the results on a spare copy of the question paper, clearly labelled 'supervisor's results'.

Question 1

Items to be supplied by the centre (per set of apparatus, unless otherwise specified)

(i) Metre ruler with a mm scale. See note 1.

(ii) Triangular block to act as a pivot for the metre ruler. This block is to stand on the bench.

(iii) 200 g mass labelled 'P'. See notes 2 and 3.

(iv) 300 g mass labelled 'Q'. See notes 2 and 3.

Notes

1 If the metre ruler has two scales in opposite directions, one scale must be taped over.

2 Any suitable masses that can rest on the metre ruler can be used.

3 The values of the mass or weight of P and Q must not be visible to the candidates.

Action at changeover

Remove the masses from the ruler.

Remove the ruler from the pivot.

Check that the apparatus is ready for the next candidate.

Information required by examiners

A sample set of numerical results, clearly marked 'supervisor's results', obtained out of sight of the candidates.

Question 2

Items to be supplied by the centre (per set of apparatus, unless otherwise specified)

(i) 3–4 V power supply. See note 2.

(ii) Switch. See note 2.

(iii) Ammeter capable of reading up to 1.00 A with a resolution of at least 0.05 A. See note 3.

(iv) Voltmeter capable of measuring the supply p.d. with a resolution of at least 0.1 V. See note 3.

(v) 55 cm of straight, bare nichrome wire, diameter 0.38 mm (28 swg) or similar resistance wire with resistance of approximately 8–10 Ω / m, taped to a 50 cm ruler. See note 4.

(vi) 2 × suitable terminals (e.g. crocodile clips), labelled 'B' and 'C', attached to the nichrome wire at the ends of the 50 cm ruler so that connections can be made to the circuit shown in Figure 2.1. See note 4.

(vii) Sufficient connecting leads to set up the circuit shown in Figure 2.1.

(viii) Approximately 55 cm of the same wire as used in **(v)** wound tightly on a wooden rod so that the turns do not touch each other. The coils must be taped along the length of the rod to prevent the coils unwinding. The diameter of the rod is not important, but should be approximately 0.8–1.6 cm.

(ix) 30 cm ruler, graduated in millimetres. Candidates may use their own.

Notes

1 The circuit is to be set up for the candidates as shown in Figure 2.1.

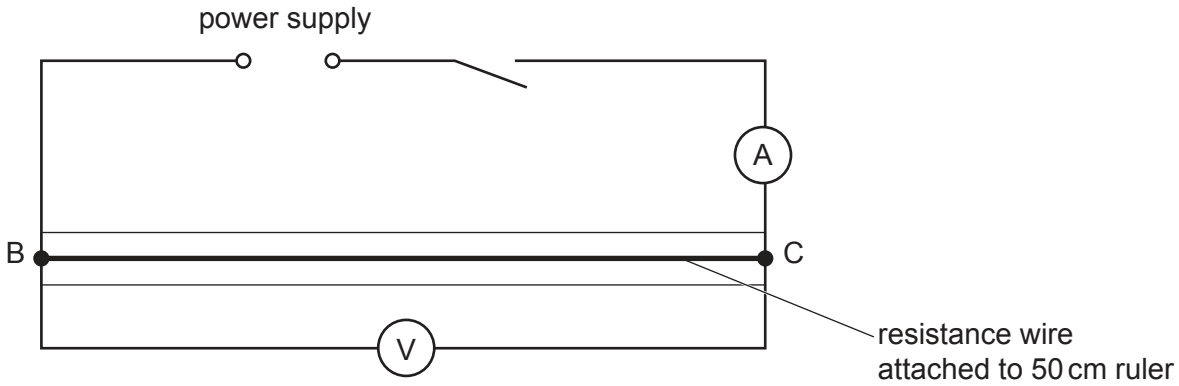

Figure 2.1

2 The following are suitable power sources:

- two 1.5 V dry cells in suitable holders connected in series
- three 1.2 V rechargeable cells in suitable holders connected in series
- d.c. power supply of 3–4 V.

Where candidates are supplied with a power supply with a variable output voltage, the voltage setting should be set by the supervisor and fixed (e.g. taped).
The switch on the power supply should be left turned on and taped, and a separate switch included in the circuit so that candidates can switch the current on and off.

3 Either analogue or digital meters are suitable. Any variable settings should be set by the supervisor and fixed (e.g. taped). Spare meters must be available.

4 The wire must be attached to the 50 cm ruler as shown in Figure 2.2.

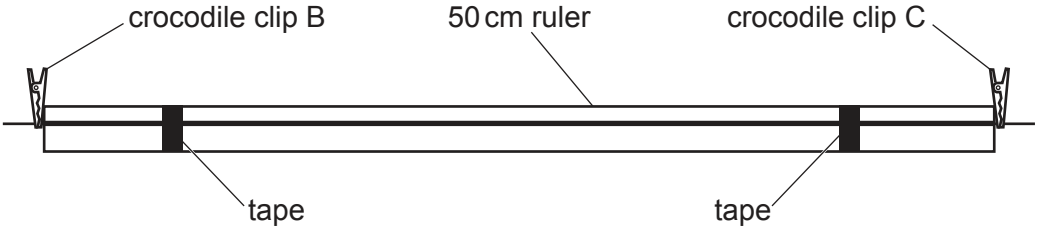

Figure 2.2

Action at changeover

Disconnect the resistance wire that is mounted on the wooden rod from the circuit.

Reconnect the circuit so that it is arranged as shown in Figure 2.1.

Check that the circuit works.

Open the switch.

Information required by examiners

A sample set of numerical results, clearly marked ‘supervisor’s results’, obtained out of sight of the candidates.

Question 3

Items to be supplied by the centre (per set of apparatus, unless otherwise specified)

(i) Converging lens, focal length between 14 cm and 16 cm, with a suitable holder.

(ii) Illuminated object with a triangular hole of height 1.5 cm (see Figure 3.1 and Figure 3.2). The hole is to be covered with thin translucent paper (e.g. tracing paper). See notes 1 and 2.

(iii) Metre ruler, graduated in mm.

(iv) Screen. A white sheet of stiff card, approximately 15 cm × 15 cm and fixed to a wooden support, is suitable. See Figure 3.3.

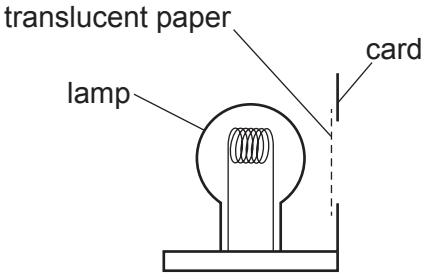

Figure 3.1

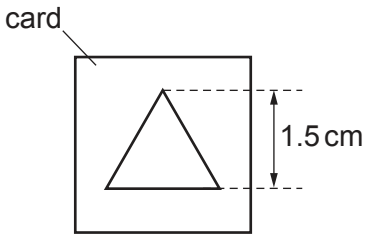

Figure 3.2

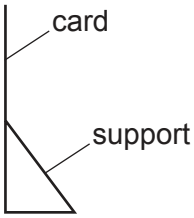

Figure 3.3

Notes

1 The filament lamp for the illuminated object should be a low voltage lamp, 24 W or greater, with a suitable power supply. An LED lamp with equivalent brightness can be used.

2 The centre of the triangular hole which forms the object and the centre of the lens in its holder must be at the same height above the bench.

3 The apparatus is to be situated away from direct sunlight.

4 Spare lamps must be available.

Action at changeover

Check that the apparatus is ready for the next candidate.

Information required by examiners

A sample set of numerical results, clearly marked ‘supervisor’s results’, obtained out of sight of the candidates.

Question 4

No apparatus is required for this question.

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.

Declaration

1 Each packet that I am returning to Cambridge International contains all of 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) .....

