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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

PHYSICS **5054/03**

Paper 3 Practical Test October/November 2005

ANSWER BOOKLET **2 hours**

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen in the spaces provided on this Answer Booklet.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
All of your answers should be written in this Answer Booklet: scrap paper must **not** be used.

Answer **all** questions.
Graph paper is provided in this Answer Booklet. Additional sheets of graph paper should be used only if it is necessary to do so.
At the end of the examination, fasten any additional answer paper used securely to this Answer Booklet.

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

For Examiner's Use	
1	
2	
3	
4	
Total	

Section A

1 (a) record of l

(b) record of N

(c) determination of D

(d) record of M

calculation of density using approximate density = $\frac{4MN}{\pi^2 l^2 D}$

2 (a) determination of e_1

description and diagram to show how e_1 was determined

(b) determination of e_2

(c) calculation of ρ given that $\rho = \frac{e_1}{e_1 - e_2} \times 1.00 \text{ g/cm}^3$

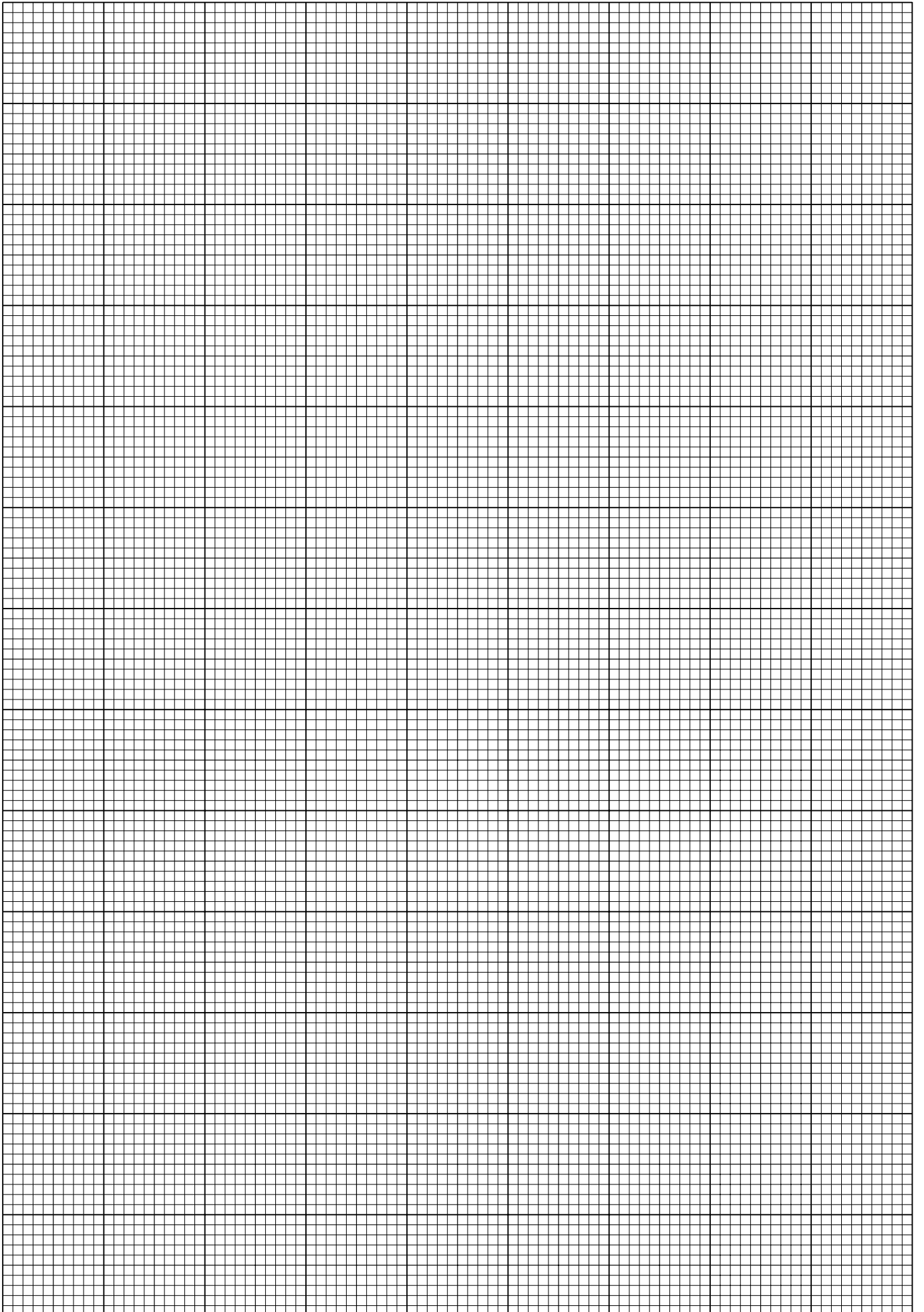
- 3 (a) record of I and V for resistor X
- (b) record of I and V for resistor Y
- (c) statement and explanation of which resistor has the higher resistance
- (d) (i) record of I and V for the parallel combination
- (ii) comment on the results obtained

Section B

4 (a) and (b)

- (c) using the grid on page 7, plot a graph of temperature on the y -axis against time on the x -axis
- (d) determination of G

This question continues on page 8 after the grid.



(e) record of V

(f) statement of two precautions taken in the experiment

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