UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

PHYSICS **5054/03**

Paper 3 Practical Test **May/June 2007**

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.
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.
DO **NOT** WRITE IN ANY BARCODES.

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 all work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use	
1	
2	
3	
4	
Total	

This document consists of **7** printed pages and **1** blank page.

Section A

1 **(a)** record of v

(b) **(i)** statement of one difference between the two images

(ii) record of x

record of y

(c) calculation of f using $f = \frac{(v - x)\, y}{x + y - v}$

2 **(a)** determination of l

determination of w

determination of T

(b) record of M

calculation of ρ using $\rho = \frac{M}{lwT}$

(c) **(i)** record of N

(ii) determination of t

determination of m

3 **(a)** **(i)** explanation, with the aid of a diagram, of how you made sure that the metre rule was vertical

(b) record of h_1

determination of an accurate value for h_2

(c) **(i)** calculation of the loss in gravitational potential energy

(ii) calculation of the gain in the gravitational potential energy

(iii) calculation of the loss of energy

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Section B

4 **(a)** circuit diagram

(b) record of I_0

(c) record of R

record of I

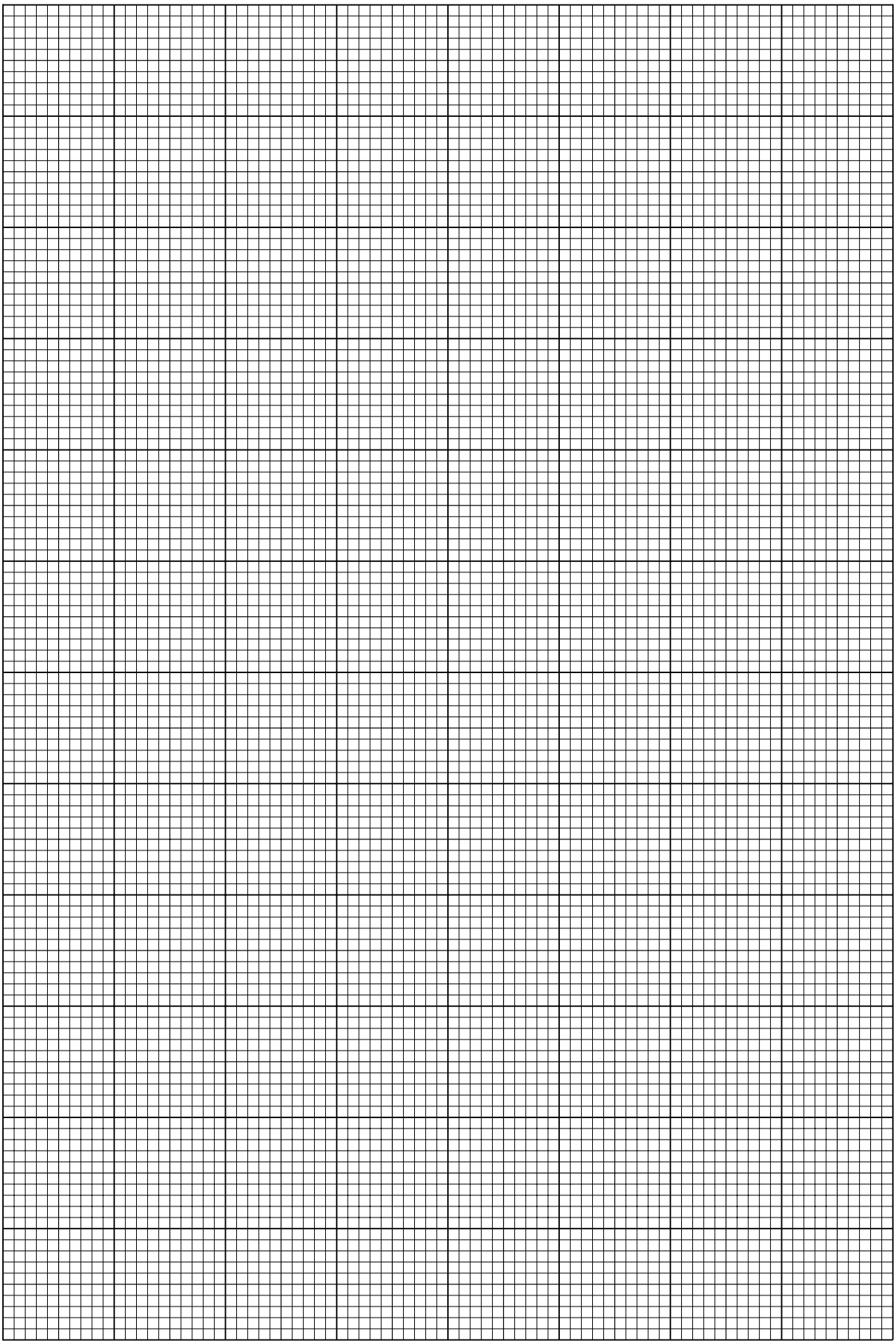
(d) table of values of R and I

(e) using the grid on page 7, plot a graph of I/A on the y-axis against R/Ω on the x-axis

(f) value of R corresponding to 0.5 I_0

resistance of X

explanation



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