Centre Number	Candidate Number	Name

CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

PHYSICS **5054/03**

Paper 3 Practical Test

October/November 2003

2 hours

ANSWER BOOKLET

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.

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

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Section A

1 **(a)** determination of the average value for t

(b) calculation of v using $v = \frac{2s}{t}$

(c) measurement of h and diagram to show how h was measured

(d) record of m

(e) **(i)** calculation of E_P using $E_P = mgh$ where $g = 9.8$ N/kg

(ii) calculation of E_K using $E_K = \frac{1}{2}mv^2$

(f) comment on the results obtained in **(e)**

2 **(a)** record of d

(b) determination of the distances x and y

(c) calculation of m using $m = \frac{100x}{y}$ grams

(d) determination of average values for w and t

record of l

(e) **(i)** calculation of V using $V = lwt$

(ii) calculation of ρ using $\rho = \frac{m}{V}$

3 **(a)** determination of the average value for F

(b) record of M_B and M_T

(c) calculation of W using $W = M_T g$, where $g = 9.8$ N/kg

(d) calculation of μ using $\mu = \frac{F}{W}$

(e) results for two 50 g masses

results for three 50 g masses

comment on the results obtained

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Section B

4 **(a)** diagram of the circuit that has been set up by the Supervisor

(b) record of I and V

(c) calculation of P using $P = IV$

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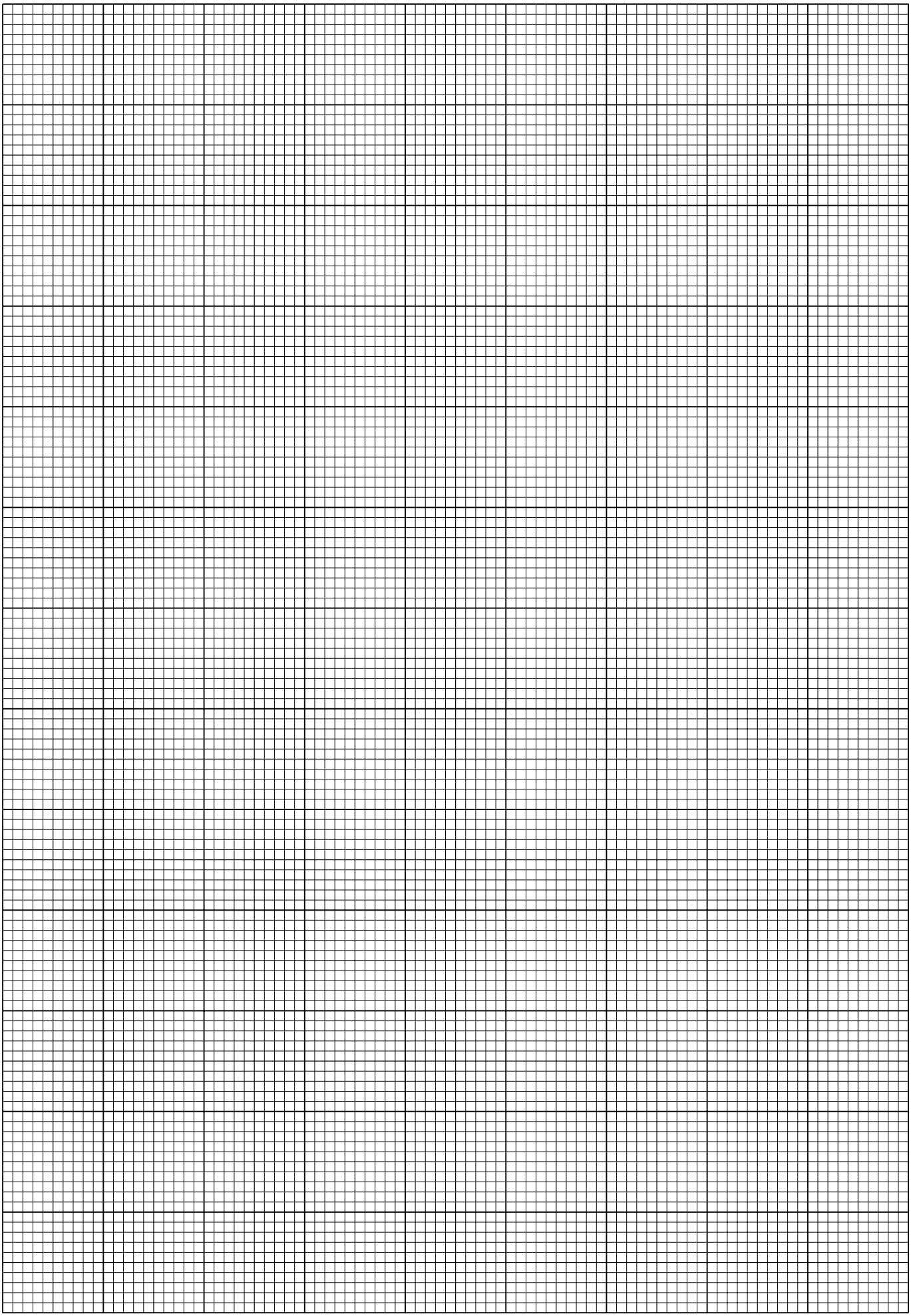
(d) table of values of l, I, V and P.

(f) using the grid on page 7, plot a graph of P/W on the y-axis against l/cm on the x-axis

(g) determination of l_M

(h) determination of the resistance corresponding to the length l_M



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