Centre Number	Candidate Number	Name

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

PHYSICS **5054/03**

Paper 3 Practical Test

May/June 2006

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.

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.

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1	
2	
3	
4	
Total	

This document consists of **6** printed pages and **2** blank pages.

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Section A

1 **(a)** **(ii)** determination of *L*

(iii) determination of *D*

(b) explanation of how you made sure that *L* was determined as precisely as possible

(c) **(ii)** record of *V*

(d) calculation of V_s

(e) calculation of $\frac{V_s}{V_s + V}$

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2 **(a)** **(ii)** determination of x

(b) explanation of how you made sure that the metre rule was vertical

(c) **(i)** time for 20 oscillations

(ii) statement of one precaution

(iii) calculation of T

(d) calculation of $\frac{T^2}{x}$

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3 **(a)** circuit diagram of the arrangement set up by the Supervisor

(b) record of I_1

(c) record of I_2

(d) record of I_T

(e) estimation of the resistance of R_2

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Section B

4 **(a)** **(i)** record of m_B

(iii) determination of m_W

(b) **(iii)** record of θ_R

(c) table of values of t and θ

(d) using the grid on page 7, plot a graph of θ / °C on the y-axis against t / s on the x-axis

(e) determination of the rate of rise of temperature at t = 150 s

(f) calculation of power using power = $(m_W c_W + m_B c_B) \times$ (rate of rise of temperature)

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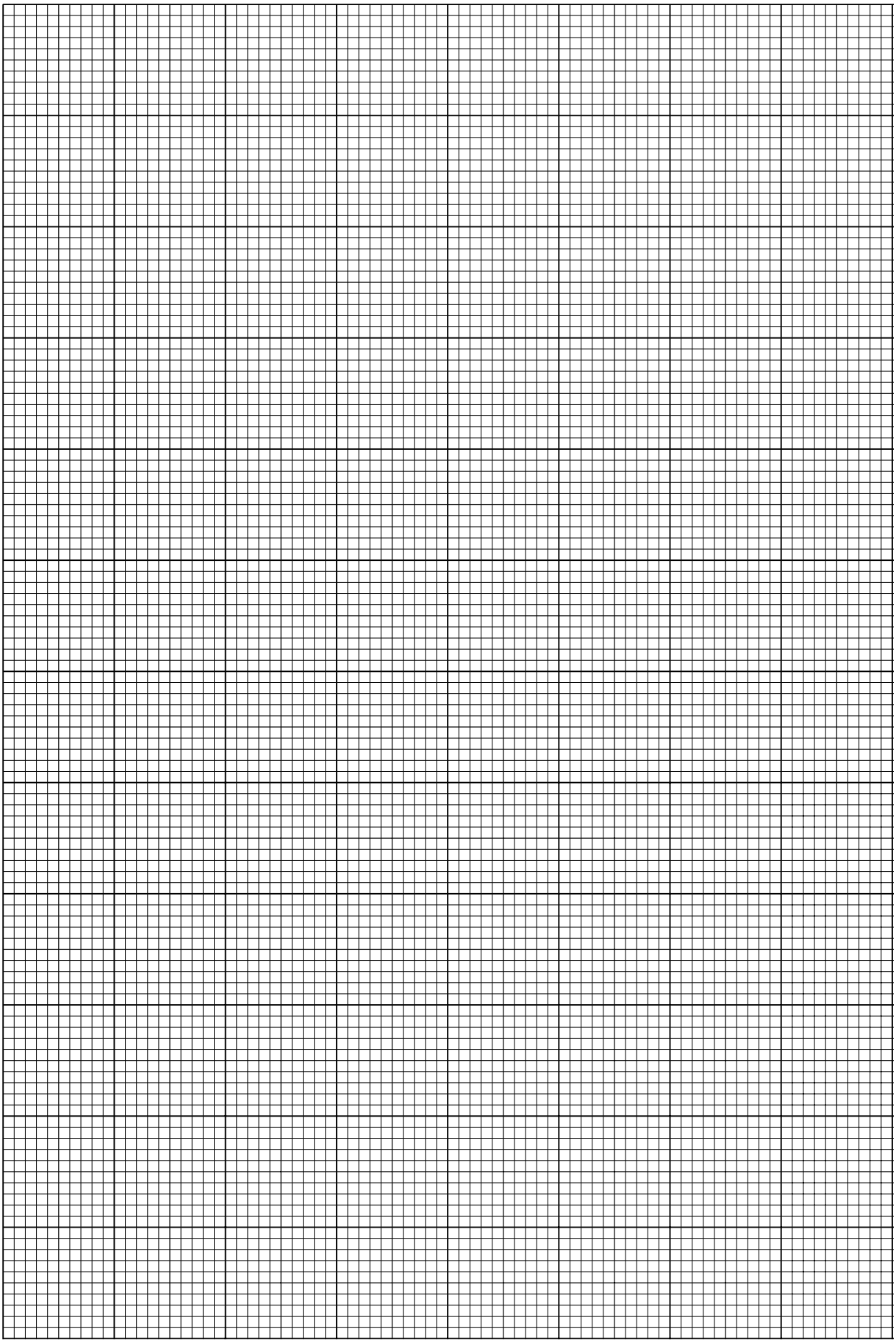

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