UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Ordinary Level

PHYSICS 5054/03

Paper 3 Practical Test

May/June 2005

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.

For Examiner's Use					
1					
2					
3					
4					
Total					

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

SP (MML 8112 3/04) S80964/4 © UCLES 2005



BLANK PAGE

Section A

- 1 (a) determination of l
 - **(b)** calculation of *D* given that $D = \frac{l}{4\pi}$
 - (c) record of d

record of h

(d) record of M

calculation of approximate density using

approximate density =
$$\frac{8 M}{\pi D (D - d) (D + 4 h)}$$

https://xtremepape.rs/

- 2 (a) record of cooling time for 100 cm³ beaker
 - **(b)** record of cooling time for 250 cm³ beaker
 - (c) precaution 1

precaution 2

(d) beaker in which the water cools more rapidly

reason

3 (a) (b) and (c)

V/	I/	R/

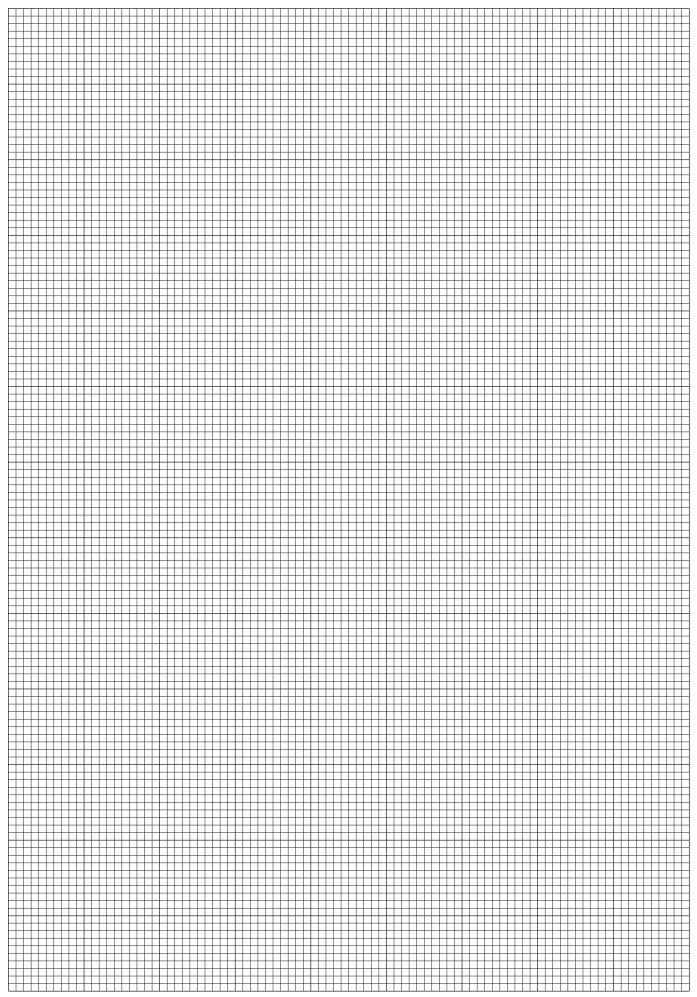
space for working

(d) comment on the results

Section B

					_							
((a)	record of h										
		explanation vertical	and	diagram	showing	how	you	ensured	that the	height	measured	was
((b)	determinatio	n of	Т								
((c) a	and (d)					1			1		
										1		

- (e) using the grid on page 7, plot a graph of T^2/s^2 on the *y*-axis against h/cm on the *x*-axis
- (f) determination of G



BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.