Centre Number	Candidate Number

Candidate Name _____

International General Certificate of Secondary Education
CAMBRIDGE INTERNATIONAL EXAMINATIONS

PHYSICS 0625/5

PAPER 5 Practical Test
ANSWER BOOKLET

MAY/JUNE SESSION 2002
1 hour 15 minutes

TIME 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided at the top of this page.
Answer **all** questions.
Write your answers in the spaces provided in the Answer Booklet.

This Answer Booklet consists of 8 printed pages and 4 blank pages.

SP (NF/SLC) S26287/2

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

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1

(c) a = ...

b = ...

[4]

(d) Calculation of M, where $M = \frac{kb}{a}$ and $k = 100\,\text{g}$.

M = ... [2]

(e) Explanation of how you could judge that the centre of the 100 g mass was directly above the 10.0 cm mark

[2]

(f) a = ...

b = ...

M = ...

[3]

(g) Calculation of the average of the two values of M

average value of M = ...

[4]

2 Method 1

(a) – **(d)**

time/s	total volume of cold water added/cm^3	temperature/°C
0	0	
30		
60		
90		
120		
150		

[5]

Method 2

(f) Record of the temperature of the hot water .....

(h) Record of the temperature of the mixture of hot and cold water ..... [3]

(i) Tick the appropriate box.

☐ Method 1 produces the larger temperature drop.

☐ Method 2 produces the larger temperature drop.

☐ Methods 1 and 2 produce the same temperature drop.

[1]

Justification .....

.....

.....[2]

(j)

Modification 1

.....

.....

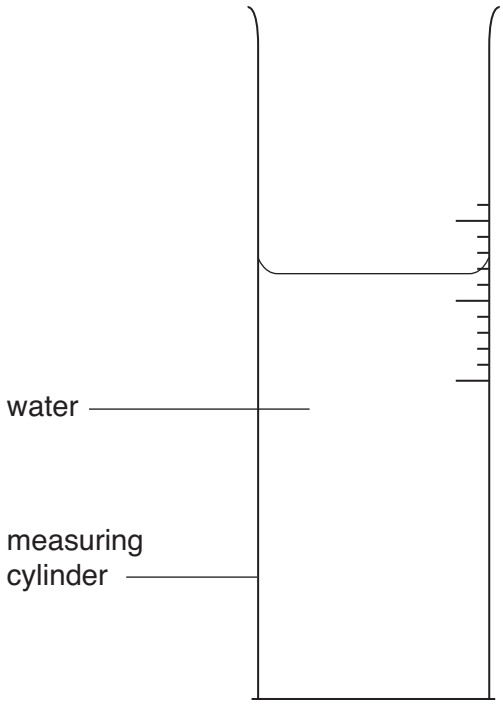
Modification 2

.....

.....

[2]

(k)



[2]

3

(b), **(d)**, **(e)**

u/cm	v/cm

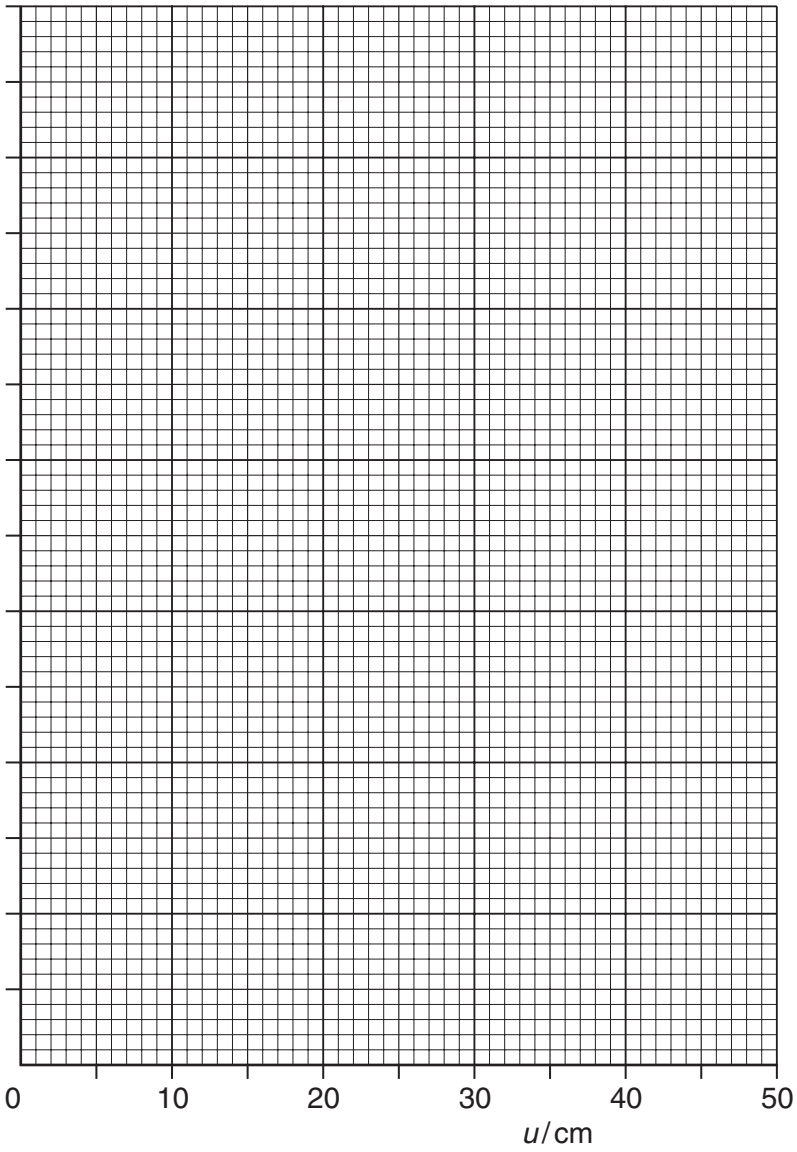
[4]

(g) u_0 = ... [2]

(h) Calculation of f using the equation $f = u_0/2$

f = ... [2]

(f), (g)



[7]

4

(a) Record of I .....

Record of V_1 .....

(b) Record of V_2 .....

[4]

(c) Calculation of V_1/V_2

V_1/V_2 = ... [3]

(d) Calculation of R_1 using $R = V/I$

R_1 = ...

Calculation of R_2 using $R = V/I$

R_2 = ... [2]

(e) Calculation of R_1/R_2

R_1/R_2 = ... [2]

(f) Within the limits of experimental error, the values of V_1/V_2 and R_1/R_2 are

.....[1]

(g) Circuit diagram

[3]

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