

Candidate Name _____

Centre Number	Candidate Number

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

**Joint Examination for the School Certificate
and General Certificate of Education Ordinary Level**

PHYSICS

5054/3

PAPER 3 Practical Test

ANSWER BOOKLET

OCTOBER/NOVEMBER SESSION 2001

2 hours

TIME 2 hours

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this answer booklet.

FOR EXAMINER'S USE	
1	
2	
3	
4	
TOTAL	

This answer booklet consists of 7 printed pages and 1 blank page.

1 (a) description of the method used to find the volume

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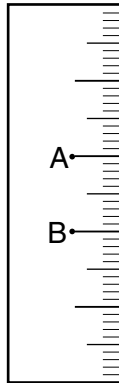
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(b) (i) record of the measurements taken

(ii) calculation of the density using density = $\frac{\text{mass}}{\text{volume}}$

- 2 (a) In the space below there is a mm scale. Follow the instructions given in the question paper in order to produce a magnified image of the scale.



- (d) record of u , h_0 , and h_1 .

- (e) calculation of m using $m = \frac{2h_1}{h_0}$

- (f) calculation of f using $f = \frac{mu}{m - 1}$

3 (b) record of the measurements taken to determine e

(c) record of the measurements taken to determine T

(d) calculation of g using $g = \frac{4\pi^2 e}{T^2}$

4 (a) circuit diagram

(b) record of I and V

(c) calculation of R using $R = \frac{V}{I}$

(d) table of values of I , V and R

(e) using the grid opposite plot a graph of R/Ω (y -axis) against I/mA (x -axis)

(f) determination of the values for the resistance of the lamp

at 10 mA.....

at 40 mA.....

(g) reason for the different values obtained in (f)

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