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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

PHYSICS **5054/03**

Paper 3 Practical Test October/November 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.

Answer **all** questions.
All of your answers should be written in this Answer Booklet: scrap paper must **not** be used.
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.

For Examiner's Use	
1	
2	
3	
4	
Total	

Section A

- 1 (a) determination of D
- (b) description, including diagram, of how you made sure that an accurate value was obtained for D
- (c) determination of T
- (d) diagram to show how T was determined
- (e) calculation of f using $f = \frac{D^2}{4.16 T}$

2 (a) record of I and V

(b) calculation of the resistance of the LDR

(c) record of the second set of values of I and V

(d) calculation of the second resistance of the LDR

(e) conclusion based on observations

3 (a), (b) and (c)

X

(d) record of the angle of reflection

(e) reason why the line CD may not meet the horizontal line at X

Section B

4 (a) record of x and determination of t

(b) calculation of w and v

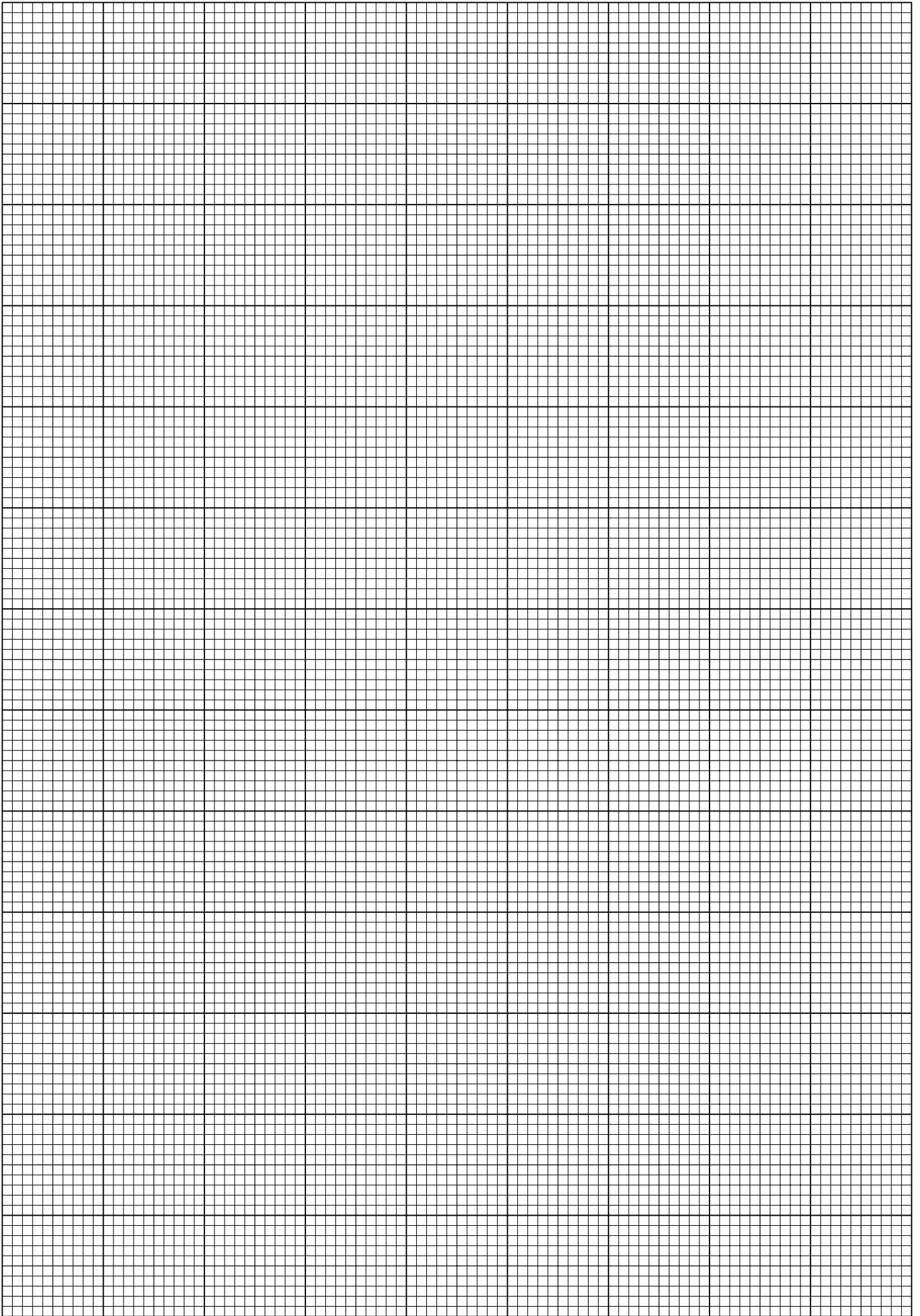
(c) and (d) table of values of x , recorded times, t , w and v

$x/$	recorded times /	$t/$	$w/$	$v/$

(e) using the grid on page 7 plot a graph of $v/(\text{cm/s})$ on the y -axis against t/s on the x -axis

(f) description of the acceleration of the sphere, with explanation

(g) determination of the average rate of change of velocity with time



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