UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

PHYSICS **5054/03**

Paper 3 Practical Test **October/November 2007**

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.
DO **NOT** WRITE IN ANY BARCODES.

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 your work securely together.

For Examiner's Use	
1	
2	
3	
4	
Total	

This document consists of **7** printed pages and **1** blank page.

UNIVERSITY *of* CAMBRIDGE
International Examinations

[Turn over

Section A

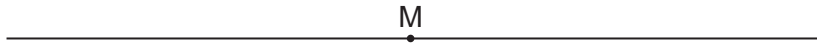**1** **(a)** determination of *d*

(b) diagram of the block in the water

(c) determination of d_s

explanation of how you made sure that your value for d_s was accurate

(d) calculation of $\dfrac{d_s}{d}$

2 **(a)** to **(d)**

M

(e) record of *r*

(f) calculation of *n* given that $n = \dfrac{\sin i}{\sin r}$

3   **(a)** to **(c)**   **At the end of the examination, attach your card to the Answer B** ...
                           between pages 4 and 5 with a piece of string.

(d) record of the measurement of BX

(e) description of a different experiment to confirm that X is the centre of mass

Section B

4 **(a)** circuit diagram

(b) record of V_0

(c) record of R

record of V

(d) table of values of R and V

(e) using the grid on page 7 plot a graph of V/V on the y-axis against $R/k\Omega$ on the x-axis

(f) **(i)** value of R corresponding to 0.5 V_0

(ii) resistance of X with explanation

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