

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Ordinary Level

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CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	
PHYSICS			5054/03
Paper 3 Practi	cal Test	Oc	tober/November 2007
ANSWER BOO	OKLET		
			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.

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Total										

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

UNIVERSITY of CAMBRIDGE

International Examinations

Section A

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- 1 (a) determination of d
 - **(b)** diagram of the block in the water

(c) determination of $d_{\rm s}$

explanation of how you made sure that your value for $\emph{d}_{\rm S}$ was accurate

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

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2 (a) to (d)

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(e) record of r

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

		4	
3	(a) to (d	c) At the end of the examination, attach your card to the Answer Booklet between pages 4 and 5 with a piece of string.	For Examiner's Use
	(d) red	cord of the measurement of BX	
	(e) de	escription of a different experiment to confirm that X is the centre of mass	

5

Section B

4 (a) circuit diagram

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(b)	record of V_0			
(c)	record of R			
	record of V			
(d)	table of values of	of <i>R</i> and <i>V</i>		
(e)	using the grid o	n page 7 plot a graph o	f V/V on the y-axis aga	inst $R/k\Omega$ on the x -axis
(f)	(i) value of R	corresponding to 0.5 V_0		
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	(ii) resistance	of X with explanation		

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