

## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

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| CANDIDATE<br>NAME      |  |                     |                       |  |
|------------------------|--|---------------------|-----------------------|--|
| CENTRE<br>NUMBER       |  | CANDIDATE<br>NUMBER |                       |  |
| PHYSICS 0625/05        |  |                     |                       |  |
| Paper 5 Practical Test |  | Octo                | October/November 2007 |  |
| ANSWER BOOKLET         |  |                     | 1 hour 15 minutes     |  |

## **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.

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

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

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 any additional answer paper used securely to this Answer Booklet. The number of marks is given in brackets [ ] at the end of each question or part question.

| For Examiner's Use |  |
|--------------------|--|
| 1                  |  |
| 2                  |  |
| 3                  |  |
| 4                  |  |
| Total              |  |

This document consists of 6 printed pages and 2 blank pages.



- 1 (a) Record of  $\theta_0$  .....
  - (c) (e)

| t/  | $\theta$ / |
|-----|------------|
| 0   |            |
| 30  |            |
| 60  |            |
| 90  |            |
| 120 |            |
| 150 |            |
| 180 |            |
| 210 |            |
| 240 |            |
| 270 |            |
| 300 |            |

[3]

(f) (i) Calculation of  $T_1$ 

*T*<sub>1</sub> = .....

(ii) Calculation of  $T_2$ 

*T*<sub>2</sub> = .....

[2]

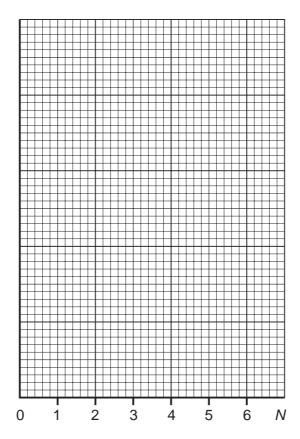
| (g) (i) | Statement and explanation   |
|---------|-----------------------------|
|         | Statement                   |
|         | Explanation                 |
|         | [1]                         |
| (ii)    | Three variables             |
|         | 1                           |
|         | 2                           |
|         | 3                           |
| (h) One | e addition to the apparatus |
|         | [1]                         |
|         | [Total: 10]                 |

- **2 (a)** Record of  $h_0$  .....
  - (b) (d)

| Number N of paper clips | <i>h</i> /mm | d/mm |
|-------------------------|--------------|------|
| 1                       |              |      |
| 2                       |              |      |
| 3                       |              |      |
| 4                       |              |      |
| 5                       |              |      |
| 6                       |              |      |

[4]

(e)



[4]

- (f) Record of h<sub>n</sub> .....
- (g) Determination of the number of paper clips

Number of paper clips = .....

[2]

[Total: 10]

| (a) | (6)                         |     |
|-----|-----------------------------|-----|
| Red | cord of I                   |     |
| Red | cord of $I_1$               |     |
| Red | cord of $I_2$               |     |
| Red | cord of $I_3$               | [4] |
| (d) | Statement                   |     |
|     |                             |     |
|     |                             |     |
|     | Reason                      |     |
|     |                             |     |
|     |                             | [1] |
| (e) | How you would vary $I$      |     |
|     |                             |     |
|     |                             | [1] |
| (f) | Record of V                 | [1] |
| (g) | Calculation of resistance R |     |
|     |                             |     |
|     |                             |     |
|     | R =                         | [2] |
| (h) | (i) Record of $V_a$         |     |
|     | (ii) Record of $V_b$        | [41 |
|     |                             | [1] |

[Total: 10]

| 4 | (f) – | (h)  | Record of x  |     |
|---|-------|------|--|-----|
|   |       |      | Record of h  |     |
|   |       |      | Calculation of <i>n</i>                                  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      | <i>n</i> =   |     |
|   |       |      | <i>II</i> –  | [5] |
|   | (i) – | (j)  | Record of x  |     |
|   |       |      | Record of h  |     |
|   |       |      | Calculation of <i>n</i>                                  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      | <i>n</i> =   |     |
|   |       |      | <i>II</i> –  | [2] |
|   | (k)   | Cald | culation of average value for n                          |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       | Ave  | rage value for <i>n</i> =                                | [2] |
|   |       |      | lanation of how you checked that the pin was horizontal. | [-] |
|   | (.)   | LΛΡ  | and the first year encoured that the pin was nonzental.  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  |     |
|   |       |      |  | [1] |

[Total: 10]

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