## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2007 question paper

## 0625 PHYSICS

0625/06

Paper 6 (Alternative to Practical), maximum raw mark 40

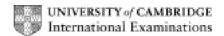
This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

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|   |     | <u> </u>   | -                                    | IGCSE – October/November 2007   | 0625 | 06                |  |
|---|-----|--|--------------------------------------|---|------|-------------------|--|
| 1 | (a) | 24   |                                      |   |      | [1]               |  |
|   | (b) | s, °C<br>23, 1 (-1 each error)   |                                      |   |      |                   |  |
|   | (c) | (i)  | rea                                  | son consistent with results   |      | [1]               |  |
|   |     | (ii)   | roon<br>volu<br>beal<br>liqui<br>amo | ker   |      | [3]               |  |
|   | (d) | lid  |                                      |   |      | [1]               |  |
|   |     |  |                                      |   |      | [Total: 9]        |  |
| 2 | (a) | 8,   | 14, 20                               | 0, 25, 34, 41 (-1 each error)   |      | [2]               |  |
|   | (b) | (i)  | all p                                | ph: able scales labelled symbol/unit lots to nearest ½ sq (-1 each error or omission) thin and straight |      | [1]<br>[2]<br>[1] |  |
|   |     | (ii)   |                                      | ect value (29mm – 31mm)to nearest ½ sq.<br>r how obtained   |      | [1]<br>[1]        |  |
|   |     |  |                                      |   |      | [Total: 8]        |  |
| 3 | (a) | 0.41, 0.13, 0.14, 0.12(-1 each error) I in A at least once                         |                                      |   |      |                   |  |
|   | (b) | statement (yes)<br>Reason – correct within limits of experimental accuracy         |                                      |   |      |                   |  |
|   | (c) | variable resistor/extra cell/variable power source/potential divider/potentiometer |                                      |   |      |                   |  |
|   | (d) | (i)  |                                      | ect arithmetic for <i>R</i> 3.90 (ecf) and 2/3 sf   |      | [1]<br>[1]        |  |
|   |     | (ii)   | voltr                                | meter correct position and symbol   |      | [1]               |  |
|   |     |  |                                      |   |      | [Total: 8]        |  |

Mark Scheme

Syllabus

Paper

Page 2

|   | Page 3          |                                | Mark Scheme  | Syllabus | Paper                    |
|---|-----------------|--------------------------------|--|----------|--------------------------|
|   |                 |                                | IGCSE – October/November 2007  | 0625     | 06                       |
| 4 | (a) (i)         | x = 2                          | 2.1, 2.2   |          | [1]                      |
|   | (ii)            |                                | 6.5, 6.6<br>d <i>h</i> with same unit                                  |          | [1]<br>[1]               |
|   | (iii)           |                                | ect arithmetic for n1.47 – 1.51 (ecf)<br>of and no unit                |          | [1]<br>[1]               |
|   | <b>(b)</b> two  | equa                           | al heights from bench (or other valid method)                          |          | [1]                      |
|   |                 |                                |  |          | [Total: 6]               |
| 5 | (a) (i)         | 50, 7                          | 75/76  |          | [1]                      |
|   | (ii)            | 25 (<br>cm <sup>3</sup>        | ecf)<br>(at least once and not contradicted)                           |          | [1]<br>[1]               |
|   | (iii)           | dens                           | sity 4.36 (ecf)  |          | [1]                      |
|   | der             | <sup>3</sup> (at le<br>nsity g | ast once and not contradicted)<br>/cm <sup>3</sup><br>2 both to 2/3 sf |          | [1]<br>[1]<br>[1]<br>[1] |
|   | ( <b>c</b> ) Sa | me m                           | ethod, lots of grains  |          | [1]                      |
|   |                 |                                |  |          | [Total: 9]               |