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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1 (a) 24

(b) s, °C
23, 1 (-1 each error)   [2]

(c) (i) reason consistent with results   [1]

  (ii) Three from:
  room temp/draughts etc
  volume
  beaker
  liquid
  amount of stirring
  surface area   [3]

(d) lid   [1]

                                                                                [Total: 9]

2 (a) 8, 14, 20, 25, 34, 41 (-1 each error)   [2]

(b) (i) Graph:
  suitable scales labelled symbol/unit   [1]
  all plots to nearest ½ sq (-1 each error or omission)   [2]
  line thin and straight   [1]

  (ii) correct value (29mm – 31mm)to nearest ½ sq.   [1]
  clear how obtained   [1]

                                                                                [Total: 8]

3 (a) 0.41, 0.13, 0.14, 0.12(-1 each error)   [2]
I in A at least once   [1]

(b) statement (yes)
Reason – correct within limits of experimental accuracy   [1]

(c) variable resistor/extra cell/variable power source/potential divider/potentiometer   [1]

(d) (i) correct arithmetic for R 3.90 (ecf)   [1]
  unit and 2/3 sf   [1]

  (ii) voltmeter correct position and symbol   [1]

                                                                                [Total: 8]

4 (a) (i) x = 2.1, 2.2

(ii) h = 6.5, 6.6
x and h with same unit

(iii) correct arithmetic for n1.47 – 1.51 (ecf)   [1]
2/3 sf and no unit   [1]

(b) two equal heights from bench (or other valid method)   [1]

[Total: 6]

5 (a) (i) 50, 75/76   [1]

(ii) 25 (ecf)   [1]
cm^3 (at least once and not contradicted)   [1]

(iii) density 4.36 (ecf)   [1]

(b) V_2, V_1 [1]
cm^3(at least once and not contradicted)   [1]
density g/cm^3 [1]
5.68, 3.02 both to 2/3 sf   [1]

(c) Same method, lots of grains   [1]

[Total: 9]