CAMBRIDGE
INTERNATIONAL EXAMINATIONS

NOVEMBER 2002

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK : 60

SYLLABUS/COMPONENT : 0625/5

PHYSICS (PRACTICAL)

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

1.

x and y both < 40 cm	1
either to nrst mm	1
(x + y) 39 – 41 cm	1
correct unit, either/both	1
m correct	1
unit	1
Diagram good, neat/clear description	2
(OR adequate	1)
x and y both sensible (< 40 cm)	1
(x + y) 39 – 41 cm	1
m correct	1
Average m method	1
unit	1
2/3 sf	1
within 5 g of each other	1

TOTAL 15

2.

0 – 300 s temps present and decreasing	1
330 – 450 temps present and higher than t = 300 s	1
evidence of better than 1°C	1
all to better than 1°C	1
heats up faster than cools	1
example drop given with time	1
example rise given with time	1
Graph	
Temp scale at least ½	1
Labelled	1
Plot at t = 0 s present	1
10 more plots	1
plots – check 2 most off line (-1 each error)	2
(do not award if < 6 plots)	
line: shape	1
thickness	1

TOTAL 15

3.

V, I_1 and I_2 sensible	1
unit for V and I (at least once)	1
at leasts1 or 2 dp (both)	1
ratio correct	1
2/3 sf	1
no unit	1
R_1 and R_2 correct	1
Unit either/both	1
Ratio correct	1
2/3 sf and no unit	1
the same	1
corresponds with results	1
Circuit	
Symbols cell & resistor	
Resistor, variable, voltmeter	
Resistor fixed (-1 each error)	2
Voltmeter and variable resistor in correct positions in correct circuit	1

TOTAL 15

4.

u and v present	1
unit for either/both	1
u + v = 79 – 81 cm	1
Evidence of better than 0.5 cm (in u,v,x or y)	1
H value	1
x and y present	1
unit for either/both (same as u and v)	1
h value	1
correct arith for ratios u/v and y/x	1
both to 2/3 sf	1
no units	1
u/v = y/x within 10%	1
correct H/h , 2/3 sf, no unit	1
precaution stated	1
explained	1

TOTAL 15