

JUNE 2002

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK : 40

SYLLABUS/COMPONENT : 0625/6

**PHYSICS
(ALTERNATIVE TO PRACTICAL)**



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1. (a) Two from
 rule zero at correct position (anywhere below top of bench)
 eye level shown (bottom or top)
 rule next to blocks
 marker (e.g. set square) used 2
- (b) (i) $h = 1.2 - 1.3$ 1
 correct unit for h 1
 actual height = 12 cm (i.e. $10 \times h$) 1
 $t = h/6$ 1
 $t = 2.0$ (or value corresponding to h) to 2/3 sf 1
 (award 3 marks if t correct to 2/3 sf, if wrong look to see if either of other two marks can be given)
 TOTAL 7

2. (a) (i) ammeter symbol, correctly connected 1
 (ii) voltmeter symbol, correctly connected 1
 (b) (i) correct pointer position (by eye) 1
 (ii) 0 – 0.5 1
 (c) 13/13.0/13.04 1
 unit 1
 2/3 sf 1
 TOTAL 7

3. (a) Any three from
 vol/mass of water
 mass of sugar
 type of sugar
 surface area of sugar
 room temp
 same beaker
 amount of stirring 3
- (b) scales 1
 labels 1
 plots (- 1 each error) to $\frac{1}{2}$ square 2
 line judgement 1
- (c) (i) time reduced 1
 (ii) two correct ratios (2.5 – 3.0)
 both no unit 1
 (iii) prediction (2.5 – 3.0 to 2/3 sf) 1
 TOTAL 12

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4. (a) (i) two correct, neat reflected rays through A and B	1
(ii) two correct, neat incident rays from P that meet the reflected rays at the mirror	1
(iii) arrow on an incident ray	1
arrow on a reflected ray	1
(iv) image (by eye) correct	1
method clear	1
(b) virtual	1
rays don't go through it, but appear to have come from it/lines are from behind the mirror/other convincing wording	1
	TOTAL 8
5. (a) (i) 24	1
(b)(i) way of taking an average/ to account for errors/more accurate	1
(ii) $V = 22 - 22.5$	1
$p = 120 - 122$	1
Both PV correct (4400 – 4500)	1
(iii) prediction 240 – 260 to 2/3 sf	1
	TOTAL 6