

PHYSICS
PAPER 3
July/August 2008

LARGER BUNGOMA DISTRICT MOCK EXAMINATION
Kenya Certificate Of Secondary Education 2008

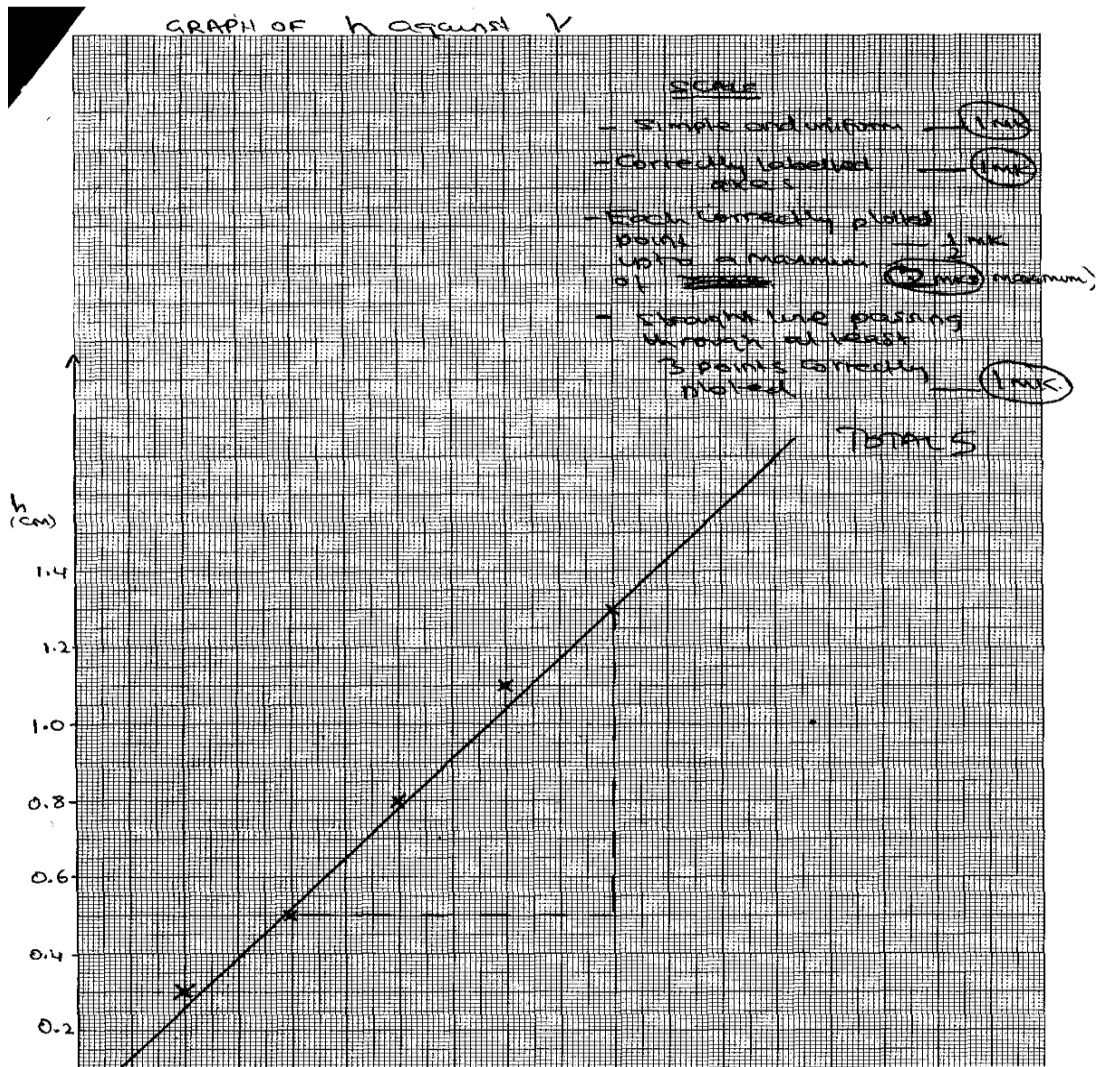
MARKING SCHEME

PHYSICS
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PRACTICAL
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1. b) $L_0 = 20.4\text{cm}$

d)

e) (i)



$$S_1 = \frac{1.3 - 0.5}{1 - 4}$$

$$\text{ii) } = \frac{0.8}{6} = 0.1333\text{cm}^3$$

$$\text{(iii) } 0.1333 = \frac{1}{3.142R^2}$$

$$R^2 = \frac{1}{0.1333 \times 3.142}$$

$$= 2.388$$

$$R = 1.545$$

(f) $h = 0.9\text{cm}$

$$L = 20.4 + 0.9$$

$$= 21.3 \text{ cm}$$

V(cm ³)	2	4	6	8	10
L(cm)	20.7	20.9	21.2	21.5	21.7
h(cm)	0.3	0.5	0.8	1.1	1.3

L values

The difference between two consecutive values of L starting from L₀ should be $= 0.3 \pm 0.1 \text{ cm}$,
Each correct difference 1 mk
Upto a maximum of 5 marks

H values

4-5 correct values 1 marks

0-3 correct values 0 mark

✓ Correct extraction

✓ Correct evaluation

$$= 0.1333 \text{ cm}^3$$

✓ Correct answer

2. PART A

V(v)	2.00	1.60	1.20	1.00	0.80	0.50
I(A)	0.20	0.18	0.16	0.14	0.12	0.10

range 0.12-0.14

iii). $0.1333 \text{ l} \cdot 3.142 R^2$

$$R^3 = 1$$

$$0.1333 \times 3.142 = 2.388 R = 1.545 \text{ cm}$$

$$0 \text{ h} = 0.9 \text{ cm } L = 20.4 + 0.9$$

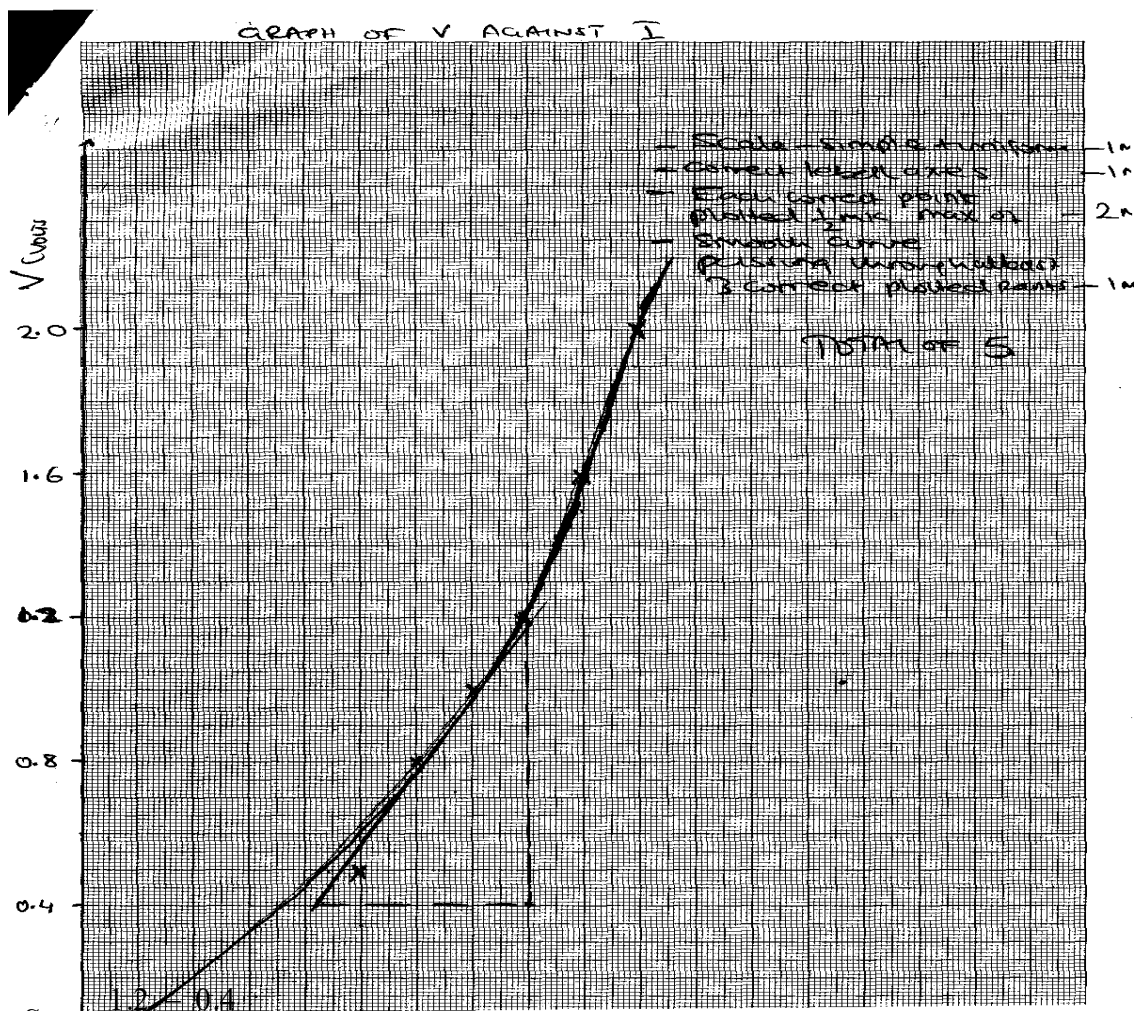
s Correct answer within the range

✓ Correct substitution

✓ Correct evaluation

✓ Correct answer within range (accuracy (1.5-1.6cm))

Candidates correct value from his or her graph
- 21.3cm



Each correct value of $I \times \frac{1}{2} =$ mark upto maximum of 3 marks allow error of $\pm 0.02A$

d ii). Tangent drawn at 0.8V
 0.8

✓ Correct substitution
 ✓ Candidates Correct answer

iii). Resistance of the bulbs filament increases with increase in current.

OR

Resistance of the bulbs filament increase with increase in temperature,

e ii). $OA = 3.5cm$

iii). Image literally inverted

$OP = 42.5cm$

iv) $OR = 28.5cm$

v). $AP = OP - OA = 42.5 - 3.5 = 39cm$

$AR = OR - OA = 28.5 - 3.5 = 25cm$

$$\frac{AP}{AR} = \frac{39.0}{25.0} = 1.56$$

Significance: Refractive index of water with respect to the mirror,

vi). $f = 20cm$