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PHYSICS

PAPER 3

MARKING SCHEME

Q1.   h= 5.0cm ± 1.0

Xcm	Hcm	X^2cm(cm^2)	X^2/h(cm)
20.0	5.0	400	400
25.0	7.0	625	89.29
30.0	10.0	900	90.00
35.0	13.0	1225	94.23
40.0	18.0	1600	88.89
45.0	24.0	2025	84.38

± 1.0

Use students own values.

Vi)
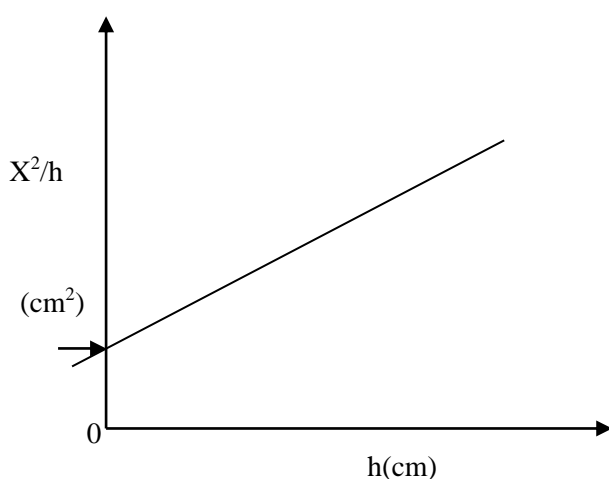
Axes-label/units -1
Scale -1
Plotting -2
Best line -1
                5

Vii)   Shown on graph   -by student graph.

Xi)   28sec for 20 oscillations (student value within ± 1seconds).
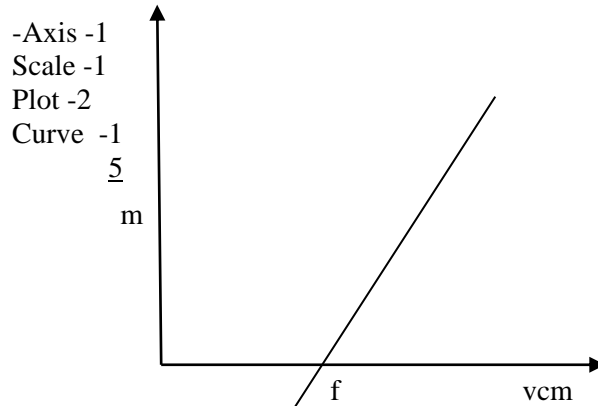
X) $T = \dfrac{28}{20} = 1.4 \sec s.$

Xi)   Making P subject and correct substitution best value of student.

Q2.   F = 20 ± 0.1.

e)

U	30	35	40	45	50	55
V	58	47.0	42.0	46	34.5	32.5
$M = {}^{v}/_{u}$	1.93	1.34	1.05	1.02	0.69	0.59

F)   Plot.

-Axis -1
Scale -1
Plot -2
Curve -1
$\underline{5}$
m

f   vcm

g)   Slope = $\dfrac{1}{f}$

h)   Use the x intercept
When M=0, v = f.

Or reciprocal of slope =f.