UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2008 question paper

0652 PHYSICAL SCIENCE

0652/05 Paper 5 (Practical Test), maximum raw mark 30

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)** value of **E** correct
do not allow if clearly not mm
allow if values are reversed [1]

(c) **four** complete sets of readings i.e. for 20 oscillations
suitable range of masses

(d) **T** correct must have at least 3 readings of 20 oscillations
$\mathbf{T}^2$ correct to 2 dp [4]

(e) axes correct and labelled with units
no marks for graph if wrong things plotted
scale is sensible
plotting correct
best straight line for their points and is reasonable straight line [4]

(f) gradient is shown on graph for any reasonable straight line
correctly calculated [2]
*if line is made up of parts, NO marks for **(f)***
allow if area involving the plots is used

(g) correctly calculated for candidate's figures
accuracy – between 8 and 10 [2]
do not allow this mark if straight line mark not given

(h) any reasonable answer – one mark for each [2]
allow 'repeating more times'

[Total: 15]

2 **(a)** **(i)** white ppt. *do not allow 'milky'* [1]

(ii) fizzes
pops
hydrogen *only if 'pops' is given* [3]

(iii) effervescence/bubbles OR Mg disappears [1]
it is an acid
contains sulphate [2]
allow one if sulphuric acid

(b) addition of sodium hydroxide allow Na_2CO_3 or aqueous NH_3
red-brown ppt.
iron(III) [3]

(c) **(i)** decolourised/loses its colour/goes white [1]

(ii) white ppt.
dissolves in the acid [2]

(iii) dirty green ppt. [1]

(d) the iron(III) has been changed to iron(II) OR the iron has been reduced OR WTTE [1]

[Total: 15]