UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2007 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.

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1 **(a)** stating the value of resistance/m should be the same as the supervisor

(b)&(c) 5 values of **y** and **I**

good range of **y** to include 85 or more [3]

(d) **(i)** **R** is correctly calculated

current decreases with increasing **y**   do not allow if **I** greater than 1.0 [1]

(ii) **IR** is calculated correctly

2 places of decimals used [2]

(e) Graph

A   axes labelled

S   sensible scale used

P   plotting correct   allow one error

C   smooth curve drawn

Origin included [5]

(f) correctly read from graph must be on graph [1]

(g) explanation needs to say that current would be greater

similar curve but above experimental one [2]

[Total: 15]

2 Chemistry question

(a) **X** is colourless/no change/cloudy/stayed the same NOT clear
   Y is pink
   Z is pink   [1]
   all need to be correct

   X is an acid
   Y is an alkali
   Z is an alkali   [2]
   each incorrect lose a mark to zero

(b) test correctly described TWO marks acidifying not necessary

   acid is hydrochloric ONE

   test can be for sulphate showing negative therefore must be chloride
   it must be clear that the candidate has carried out the experiment
   if in doubt, maximum of two marks   [3]

(c) **(i)** pink colour disappears/colourless   [1]

   (ii) pink colour disappears/colourless

   effervescence
   do not allow clear as equal to colourless   [2]

(d) **(i)** white precipitate

       dissolves in excess   [2]

   (ii) white precipitate

       precipitate does not dissolve   [2]

(e) **Y** could be sodium hydroxide

   Z could be sodium carbonate

   a formula is allowed if it is correct   [2]

                                                                                                    [Total: 15]