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## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the May/June 2008 question paper

## 0653 COMBINED SCIENCE

0653/05

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.

• CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2008 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



<ul> <li>(a) (i) good quality drawing, sharp pencil, clear outline; (1) leaves obviously wilted, or 1 or more leaves partially shaded (1)</li> <li>(ii) lack of water; water lost from leaves by evaporation/transpiration; OR water not replaced through stem;</li> <li>(iii) stem of twig clearly shaded in;</li> <li>(iv) wood/lignin (provides support;) provides support even when water is scarce;</li> <li>(b) good quality drawing, sharp pencil, clear outline; xylem clearly labelled in at least one place;</li> <li>(c) wind speed humidity/light intensity/availability of water</li> <li>2 (a) Table value for homust be in mm; complete set (first three columns) of readings (good range) must be sensible; mass correctly converted to newtons; extension correct for each reading;</li> <li>(b) scale is sensible; plotting correct; line is OK must pass through zero;</li> <li>(c) correct from graph;</li> <li>(d) yes (1) straight line force is proportional to extension</li> </ul>			1000=	
water lost from leaves by evaporation/transpiration; OR water not replaced through stem;  (iii) stem of twig clearly shaded in;  (iv) wood/lignin (provides support;) provides support even when water is scarce;  (b) good quality drawing, sharp pencil, clear outline; xylem clearly labelled in at least one place;  (c) wind speed humidity/light intensity/availability of water  2 (a) Table value for h <sub>0</sub> must be in mm; complete set (first three columns) of readings (good range) must be sensible; mass correctly converted to newtons; extension correct for each reading;  (b) scale is sensible; plotting correct; line is OK must pass through zero;  (c) correct from graph;	1 (a)	a) (i)		[2]
<ul> <li>(iv) wood/lignin (provides support;) provides support even when water is scarce;</li> <li>(b) good quality drawing, sharp pencil, clear outline; xylem clearly labelled in at least one place;</li> <li>(c) wind speed humidity/light intensity/availability of water</li> <li>2 (a) Table value for h<sub>0</sub> must be in mm; complete set (first three columns) of readings (good range) must be sensible; mass correctly converted to newtons; extension correct for each reading;</li> <li>(b) scale is sensible; plotting correct; line is OK must pass through zero;</li> <li>(c) correct from graph;</li> </ul>		(ii)	water lost from leaves by evaporation/transpiration;	[2]
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	(b)	plo	otting correct;	[3]
(d) yes (1) straight line force is proportional to extension	(c)	<b>c)</b> co	orrect from graph;	[1]
(a) yes, (1) straight line force is proportional to extension	(d)	<b>d)</b> ye	es, (1) straight line force is proportional to extension	[2] [Total: 10]

Mark Scheme

IGCSE - May/June 2008

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Paper 05

Syllabus

0653

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2008	0653	05

3 (a) (i) & (ii) A and C no reaction; allow slight bubbling with A

B fizzes; [2]

(b) A and B no reaction;C milky;[2]

(c) (i) fizzing; [1]

(ii) white ppt.; [1]

(d) A is sodium carbonate

B is sulphuric acid

C is limewater [1]

Each correct reason [3]

[Total: 10]