WWW. Dalla

## **UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**International General Certificate of Secondary Education** 

## MARK SCHEME for the May/June 2010 question paper for the guidance of teachers

## 0654 CO-ORDINATED SCIENCES

0654/51

Paper 51 (Practical), maximum raw mark 45

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, which would have considered the acceptability of alternative answers.

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 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2			Mark Scheme: Teachers' version Syllab						bus	.0	<b>V</b>	
				IGCS	SE – May	/June 20	10		06	45	100	7
(a)	(i)		awings wi			er; simple ou	ıtline e.g.	veins				Cambridge
	(ii)	accu (thes	ırate mea	suremer should b	nt of leng	th of sun th of shac aximum p	le leaf fro	om diag		1111,		[2]
(b)	larg	er are	ea for gre	ater abs	orption o	f light (for	photosyr	nthesis)	;			[1]
(c)	(i)	corre	ect compa	arison of arison of	leaf thick	correct h cness; of palisa ir spaces	de cells;					[4]
	(ii)	featu		two ro	ws of pa	explanat lisade cel t of photo	ls;	s;				[2]
	(iii)	prev	ents too ı	much wa	ter (vapo	our) loss d	lue to trar	nspiratio	on;			[1]
(d)	(i)	leng	th = 63 m	m ; (allov	w 1 mm to	olerance)						[1]
	(ii)		nification 5 (times)									[2]
											[Т	otal: 15]
(a)	(do use	not g	figures fo pive this magures corr	nark if in	cm)							[3]
(b)	(iv)	all de d₂ va if on	e adings; ecreasing alues all l ly 4 readi ly 3 readi	ess than ngs, lose	e 1 <sup>st</sup> mark							[3]
(c)	Gra A S P L	axes suita 4 po	s labelled able scale ints plotte straight l	e; ed correc								[4]

Page 3		ae 3	Mark Scheme: Teachers' version	Syllabus	r		
i ago o			IGCSE – May/June 2010	0645			
(0	d)	clear ind correct e if value is	Syllabus 0645 e correct)	ambridg			
(6	e)	measure density is	[То	[2] tal: 1 <b>5]</b>			
3 (8	a)	volume of drop between 0.05 and 0.1 cm <sup>3</sup> ;					
(i	b)	values de	of drops for <b>X</b> is between 20 and 30; ecrease; of drops approximately halves going down;		[3]		
(0	c)	<b>X</b> is mos	t concentrated because needs most drops;		[1]		
(0	d)	does not pops; hydroger			[3]		
(6	∍)	white ppt			[2]		
(f	F)	litmus blu ammonia			[2]		
()	g)	time take shortest	e amount of acid and magnesium; en to dissolve; time means most concentrated; ethods may be accepted if would work but max 2 if re				
				[То	tal: 15]		