MARK SCHEME for the October/November 2006 question paper

5090 BIOLOGY

5090/03

Paper 3 (Practical Test), maximum raw mark 40

This mark scheme is published as an aid to teachers and students, 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.

The grade thresholds for various grades are published in the report on the examination for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses.

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

CIE is publishing the mark schemes for the October/November 2006 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



UNIVERSITY of CAMBRIDGE International Examinations

Page 2			Mark Scheme			Paper	
		(GCE O LEVEL - O	OCT/NOV 2006	5090	3	
(a)	slowl (3-lot	y) black; developed; ed) white/yellow/u ed skin;	nstained centre;		up to [3]		
(b)	(i)	crush/mix with wa add Benedict's; <u>heat;</u> water bath;	ter etc;			[4]	
	(ii)	orange/red/yellow glucose/reducing either suitably qua	sugar present;			[3]	
(c)		test for starch/with if starch reducing if r/s increasing/re	ar sampling samples of each; ugar/with Benedict i iodine soln;	s;	Ţ	up to [6]	
(d)	(i)	seeds in cucumbe no seeds in banar			l	up to [2]	
	(ii)		xual reproduction; /stem/cutting etc;	R: bud		[2]	
					Т	otal : 20	

	Page 3		Mark Scheme		Syllabus	Paper
				GCE O LEVEL - OCT/NOV 2006	5090	3
2	(a)	(i)	1. 2. 3. 4.	awing marks: At least 8 cm. clear, clean, realistic. Calyx & corolla, stamens attached. Stamens 2 at least, anthers shown. Stigma and style clear. bels: corolla/petals & calyx <i>l</i> sepals; stamen/filament & anther; stigma & style;		D.4 [3]
		(ii)	1. 2.	awing marks: Extra clarity (with lens). More detail, e.g. attachment of filament/pollen grains. pels: anther; pollen (grains); filament;		D.2 up to [2]
		(iii)	[<i>uni</i> dim mag	ication of where drawing measured, both measurements recorded its given once, mm or cm, latter to 1 d.p. e.g. 5.0 cm.] nension of drawing over dimension of specimen recorded; gnification correct and well stated; d.p. max; rounded no more than 0.2]		[3]
	(b)	(i)		e mark for each statement in each of 2 pairs in Table.2.1. W3 W4 red (etc) green (etc) ; stigma (etc) covered/contained; stigma emergent; stamen covered/contained; stamen (etc) emergent; floral parts in 4s etc; fewer etc;		
			oth	er valid pair of observations; ;		up to [4]
		(ii)		 by insects & feature; by wind & feature; 		[2]
					т	otal : 20