MARK SCHEME for the October/November 2010 question paper

for the guidance of teachers

5090 BIOLOGY

5090/62

Paper 6 (Alternative to Practical), maximum raw mark 40

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



Pag	<u>e 2</u>		Mark Scheme: Teachers' version	Syllabus	Paper			
			GCE O LEVEL – October/November 2010	5090	62			
1 (a)	(i)	6–8	[1]					
(wate fills c	[2]					
(i	-	 Graph marks: 1. time on <i>x</i>-axis, distance on <i>y</i>-axis with correct linear scales ; 2. axes labelled – time of day or time / hours, distance / arbitrary units ; 3. plots clear and accurate ; 4. ruled connections / line of best fit ; 						
(i	-	humidity ; temperature ; light ; air movement / wind AW ;						
((v)	cloud	or ; [1]					
(b)	.,	arrow(s) from xylem out through stoma ; <u>evaporation</u> / water <u>vapour</u> ; diffusion (into air) / osmosis (cell to cell) ; water pathway and carbon dioxide pathway labelled / distinguished by key ;						
(arrov to ph	[2]					
(i		mes	rd cell ; ophyll / palisade / spongy ; m / vessel ;		[3] [Total: 20]			
2 (a)		1. ;	ving: at least 6 cm, clear and clean ; accurate shape of embryo ;		[2]			
		Labe	els: <u>radicle</u> ; <u>plumule</u> stem or root origin correctly identified ;		[3]			
(measurements correct with correct units at least once ; correct expression, drawing size over specimen size ; allowance for × 0.75 magnification ;						
			nification correctly stated $- \times$ or times, no more than 2	dp ;	[4]			
					[Total: 9]			

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	Page 3			Mark Scheme:	Syllabus	Paper		
			GCE	O LEVEL – O	5090	62		
3	(a) (i)		able 3.2: ainer A	container B yellow ;	container C purple ;	containe red ;	r D	[4]
	(ii)	resp	[2]					
	(iii)	resp carb phot henc	[max 3]					
	(iv)	yello eith or re	[2]					
								[Total: 11]

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