UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

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0610 BIOLOGY

0610/05 Paper 5

Maximum 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 initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published Report on the Examination.

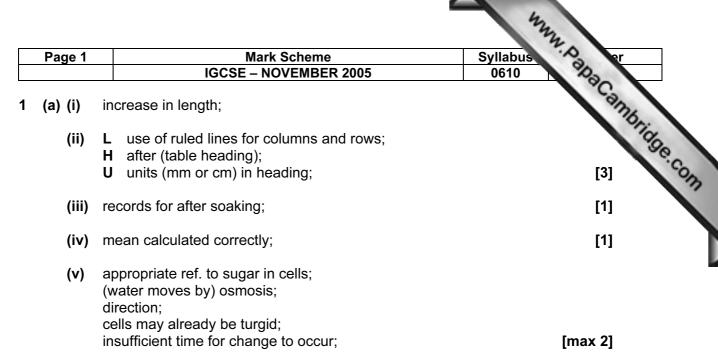
All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the Report on the Examination.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the Report on the Examination for this session.

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

CIE is publishing the mark schemes for the November 2005 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



(b) (i)

potato chips soaked in distilled water	P2
firm	soft/bendy;
not slimy	slimy;
granular	smooth;
AVP	AVP;

[max 2]

(ii) (distilled) water has no sucrose/solution contains sucrose;

	Allow answers for reverse argument if appropriate surrounding solution, weaker/higher water potential, than inside cell water moves into cells; by osmosis; to equal concentrations/down water potential gradient; cells expand;	
		[max 3]
(c) (i)	+1 -2 -4 -5 -5 1 mark for correct numbers; 1 mark for correct +/-;	[2]
(ii)	 D data plotted; C points joined by, clear line/curve of best fit; (A) logical extrapolation (R) line to (0,0) or to left hand corner of graph 	[2]
(iii)	value where his line crosses x axis; (read off graph)	[1]
()		[,]
	Г	FOTAL 18]

Page 2		Mark Scheme	Syllabus	
		IGCSE – NOVEMBER 2005	0610 202	
(a) (i)	Drawing -	clear outline S1; at least 5 cm in one direction; cotyledon and embryo shown; testa shown;	Syllabus 0610 Pathacamb	
	Labels -	cotyledon; plumule; radicle; testa;	[max 6]	
(ii)				
	[3]			
(b) (i)	add iodine so	blution;		
	add Benedic heat/boil;	ts reagent;		
	reference to divide sample	appropriate volumes; e;	[max 4]	
(ii)	turns blue/bla	ack;	[1]	
	turns, orange	e/red;	[1]	
(c)	starch;			
	starch <u>and</u> reducing sugar;			
	reducing sug	ar;	[3]	
(e)	starch conve during germi sugar transp reference to	orted to, shoots/roots; enzymes; before germination;	[max 4]	
			[Total 22]	
			[Total 22]	