

WJEC (Eduqas) Biology GCSE  
Topic 2.3 Transport Systems in  
Plants  
Questions by Topic - Mark  
Scheme

1.	Question	Marking details	Marks Available
	1 (a)	(i) Phloem; (accept phonetic spelling)	1

2.	Sub-section	Mark	Answer	Accept	Neutral answer	Do not accept
	(a)	1	controls{loss of water /transpiration} and allows {gases/correctly named gas} to pass in or out ;			
	(b)	1	Guard cells;			
	(c)	1	To prevent loss of too much water/ reduces loss of water;			Stops loss of water
	(d) i	1	Decrease/ less time;			
	ii	1	Increase/ more time;			
	<b>Total Mark</b>	<b>5</b>				

3.	Question	Marking details	Marks Available
	3 (a)	Transpiration;	1
	(c)	Any two from: (air) temperature; NOT heat humidity; light intensity; water availability; NOT amount	2

**Question 3 Total**

4.	Question		Marking details	Marks available					
				AO1	AO2	AO3	Total	Maths	Prac
	(a)	(i)	Allow range 1.7- 1.8		1		1	1	1
		(ii)	Transpiration Not evaporation	1			1		
		(iii)	<b>Any two (x1) from:</b> Surface area of leaves/ number of leaves (1) Fewer stomata (1) Thickness of cuticle/ presence of waxy layer(1)		2		2		
	(c)		Increase/ faster (1) Larger surface area for absorption of water (1)			1	1		2

5.	Question	Marking details	Marks Available
	(a)	Cuticle; Xylem; Stoma(ta);	3
	(b)	(i) Guard (cells);	1
		(ii) Open and close/ change pore size/ control how much water passes out;	1
	<b>Question 5 Total</b>		<b>[5]</b>

6.	Question	Marking details	Marks Available
6	(a)	To keep the volumes the same/ so volume of 1cm <sup>3</sup> cubes is the same as the 8cm <sup>3</sup> cube;	1
	(iii)	{% increase in mass was faster/ more water was taken in} in cubes of side 1cm; Because there is a greater surface area; Root hairs increase surface area/ have a large surface area;	3
	(c)	Active transport;	1

7.

Sub-section	Mark	Answer	Accept	Neutral answer	Do not accept
(a)	2	palisade; spongy;			sponge
(b) i	1	photosynthesis;			
ii	1	carries sugar(s);	carries sucrose		carries glucose
(c)	1	controls {loss of water /transpiration}/ allows {gases/correctly named gas} to pass in or out/ allows gas exchange;	CO <sub>2</sub>		Air CO <sub>2</sub>
Total Mark	6				

8.

Question	Marking details	Marks Available
8 (a)	Phloem;	1
(iii) i	80;	1