Mark scheme - Transport in Plants - MCQ

Questi		Answer/Indicative content	Marks	Guidance
1		C√	1	
		Total	1	
2		D√	1	
		Total	1	
3		D√	1	
		Total	1	
4		A	1	
		Total	1	
5		D	1	
		Total	1	
6		С	1	
		Total	1	
7		B√	1	
		Total	1	
8		A✓	1	Examiner's Comments This question proved challenging and was poorly answered by many candidates who struggled with the multiple stages of the calculation. Option B was the most common incorrect response, reached by failing to factor in the 2–dimensional nature of the image.
		Total	1	
9		A✓	1	Examiner's Comments The majority of candidates chose the correct option for this question.
		Total	1	
1 0		A√	1	Examiner's Comments There were many correct responses for the reason why <i>V.minimum</i> did not need chloroplasts with candidates demonstrating

				the ability to make deductions from
				information provided.
		Total	1	
1		D√	1	
		Total	1	
1 2		D✓	1 (AO1.1)	
		Total	1	
1		B√	1 (AO1.1)	
		Total	1	
1		B√	1 (AO1.1)	
		Total	1	
1 5		B√	1 (AO1.1)	
		Total	1	
1 6		A✓	1 (AO1.1)	
		Total	1	
1 7		A✓	1 (AO1.1)	
		Total	1	
1 8		C ✓	1	Examiner's Comments This question tests detail of how sucrose is actively loaded into sieve tube elements. Candidates need to recall the process and apply what they know about how substances cross membranes. This enables them to work out that C is the correct response. Only the more able candidates could achieve this.
		Total	1	
1 9		A <	1	

				Examiner's Comments
				Candidates who read the question carefully spotted that it is asking for an adaptation to reduce water loss. Roots have nothing to do with water loss, they are involved in uptake. The other three adaptations refer to leaves where the majority of water loss occurs.
		Total	1	
2 0		C ✓	1	Examiner's Comments This question tests understanding of experimental design. Many readings are used to test repeatability but many candidates still believe that it will increase accuracy.
		Total	1	
2		c ✓	1	Examiner's Comments This was correctly answered by many candidates.
		Total	1	
2 2		D✓	1	Examiner's Comments Candidates also found this question fairly straightforward. B and C were the common incorrect answers.
		Total	1	
2		В	1	
		Total	1	
2		D	1	
		Total	1	