

Question			Answer	Marks	Guidance
22	(a)	(i)	1.7 mm ✓	1	
		(ii)	× 50 ✓✓	2	ALLOW 1 mark for correct working e.g. 80/1.6 ALLOW answer in the range of 48–51
		(iii)	air spaces give buoyancy ✓ supported by (surrounding) water ✓	2	
	(b)	(i)	<i>B</i> comment about detail of organelles ✓ comment about shapes of cells ✓	2	No Mark for identification of B e.g. light microscope would not allow nuclear pores / ribosomes / endoplasmic reticulum / plasmodesmata to be seen. e.g. sieve tube elements are angular / hexagonal.
		(ii)	the ability to, see more detail / separate two objects ✓	1	
		(iii)	Nile blue ✓ to increase contrast / to make nuclei visible / to show no nuclei in sieve tubes ✓	2	
Total				10	