

Question Number	Answer	Acceptable answers	Mark
1(a)(i)	3 (\div 20) (X100) (1) 15 (%)	Accept 3 \div 13 Full marks for correct bald answer	(2)

Question Number	Answer	Acceptable answers	Mark
1(a)(ii)	Any two of the following: can photosynthesise more (1) higher light intensity / more light (1) more water / rain (1) warmer (1) more mineral ions / nutrients(1)	accept: reverse argument for woodland Accept: more competition from trees (for water / mineral ions) (1) bigger leaves (1) less flowers eaten (1) different genes (1)	(2)

Question Number	Answer	Acceptable answers	Mark
1(b)(i)	A stomata		(1)

Question Number	Answer	Acceptable answers	Mark
1(b)(ii)	diffusion / diffusing /	Accept description of diffusion eg carbon dioxide molecules move from an area of high concentration to an area of low concentration accept diffuse	(1)

Question Number	Answer	Acceptable answers	Mark
1(b)(iii)	<ul style="list-style-type: none"> • guard cells change shape / (guard cells) close stomata /guard cells close (1) • to reduce water loss /rate of transpiration reduced (1) 	<p>accept stop water loss / keep water in</p> <p>Ignore get more water</p>	(2)

Total for Question 1 = 8 marks

Question Number	Answer	Acceptable answers	Mark
2(a)(i)	B		(1)

Question Number	Answer	Acceptable answers	Mark
2(a)(ii)	Any two from the following: <ul style="list-style-type: none"> • diffusion (1) • from an area of high concentration to an area of low concentration/down a concentration gradient (1) • through stoma / stomata (1) 	Accept pores / between guard cells Ignore through guard cells	(2)

Question Number	Answer	Acceptable answers	Mark
2(a)(iii)	Any three from the following: <ul style="list-style-type: none"> • (by) photosynthesis (1) • ref to chloroplast / chlorophyll (1) • requires carbon dioxide and water (1) • light (energy) needed (for photosynthesis)(1) • (to produce) glucose (1) 	Ignore incorrect balancing of equations throughout Reject (and) respiration Accept if written on arrow in word / formula equation Accept correct formulae word / formula equation Accept if written on arrow in word / formula equation Reject energy is created / produced Accept sugar from word / formula equation	(3)

Question Number	Answer	Acceptable answers	Mark
2(b)	water ————— osmosis (1)	3 lines, 1 correct = 0 mark 3 lines, 2 correct = 1 mark 4 lines, 1 correct = 0 mark 4 lines, 2 correct = 0 mark	
	mineral ions \ active transport (1)		(2)

(Total for question 2 = 8 marks)