

Question Number	Acceptable Answer	Additional guidance	Mark
10(a)(i)	An answer that makes reference to the following: <ul style="list-style-type: none"> • {cold / buffered} to stop enzyme denaturation (1) • sucrose to stop osmotic loss of water from chloroplasts (1) 		(2)

Question Number	Acceptable Answer	Additional guidance	Mark
10(a)(ii)	<ul style="list-style-type: none"> • tube 3 is a control to show DCPIP does not change colour over time (1) 		(1)

Question Number	Acceptable Answer	Additional guidance	Mark
10(a)(iii)	An explanation that makes reference to the following: <ul style="list-style-type: none"> • set up tubes identical to tube 1 so that chloroplasts are available (1) • set up several tubes to ensure data is reliable (1) • tubes exposed to light of different wavelengths for same time because time affects number of electrons released / tubes exposed to light of same intensity because intensity affects number of electrons released (1) • use a colorimeter with a red filter to measure absorbance (1) 		(4)

Question Number	Acceptable Answer	Additional guidance	Mark
10(b)(i)	C		(1)

Question Number	Acceptable Answer	Additional guidance	Mark
10(b)(ii)	A		(1)

(Total for Question 10 = 9 marks)