

**Question 1**

Question	Answers	Extra information	Mark
01.1	chloroplast		1
01.2	cell membrane		1
01.3	cell wall		1
01.4	protein synthesis		1
01.5	respiration	Allow energy release.	1
Total			5

**Question 2**

Question	Answers	Extra information	Mark
02.1	A DNA loop/chromosome B flagellum	Answers in this order only.	2
02.2	allows the cell to move/swim		1
02.3	Level 2: There is a clear comparison that includes similarities and differences between prokaryotic cells and plant cells. For four marks, at least two similarities and two differences must be given.		3 - 4
	Level 1: There are simple statements describing the structure of prokaryotic cells and plant cells. A clear comparison is not made.		1 - 2
	No relevant content.		0
	Indicative content: Similarities <ul style="list-style-type: none">• both have a cell membrane• both have a cell wall• both have cytoplasm• both contain ribosomes Differences <ul style="list-style-type: none">• plant cells contain a nucleus• prokaryotic cells have DNA floating free in the cytoplasm• only plant cells contain chloroplasts• only plant cells contain mitochondria• only prokaryotic cells have a flagellum• only prokaryotic cells contain plasmids• prokaryotic cells are smaller than plant cells		
Total			7

Question 3

Question	Answers	Extra information	Mark
03.1	contains genetic information controls the cell	Accept chromosomes/DNA.	2
03.2	Level 3: At least three differences between animal cells and plant cells are described and an explanation of why each these differences are important. For six marks, some additional details must be given.		5 - 6
	Level 2: There are statements describing the differences between animal cells and plant cells. An attempt is made to explain why these differences are important		3 - 4
	Level 1: There are simple statements describing some differences between animal cells and plant cells. Allow two marks for two correct statements.		1 - 2
	No relevant content.		0
	Indicative content: <ul style="list-style-type: none"> • plant cells contain chloroplasts • to allow them to make food/glucose by photosynthesis/using energy from sunlight • animal cells do not need chloroplasts because animals obtain glucose/food/nutrients by feeding • plant cells have a cell wall • to strengthen and provide support for the cell • animal cells do not need a cell wall because animals have a skeleton to support the cells • plant cells have a (permanent) vacuole • maintains the shape of the cell/keeps the cell rigid • animal cells may have many smaller vacuoles/no vacuole Additional details: <ul style="list-style-type: none"> • chloroplasts contain chlorophyll • photosynthesis: carbon dioxide + water → glucose + oxygen • cell wall is made of cellulose • the vacuole in a plant cell contains cell sap 		
Total			8