

Question number	Answer	Notes	Marks																				
1	<table border="1"> <thead> <tr> <th data-bbox="430 349 663 432">Structure</th> <th colspan="3" data-bbox="663 349 1330 432">Organism</th> </tr> <tr> <td></td> <td data-bbox="663 432 875 515">bacteria</td> <td data-bbox="875 432 1088 515">fungi</td> <td data-bbox="1088 432 1330 515">viruses</td> </tr> </thead> <tbody> <tr> <td data-bbox="430 515 663 598">cell wall</td> <td data-bbox="663 515 875 598">✓</td> <td data-bbox="875 515 1088 598">✓</td> <td data-bbox="1088 515 1330 598">x;</td> </tr> <tr> <td data-bbox="430 598 663 681">nucleus</td> <td data-bbox="663 598 875 681">x</td> <td data-bbox="875 598 1088 681">✓</td> <td data-bbox="1088 598 1330 681">x;</td> </tr> <tr> <td data-bbox="430 681 663 765">chloroplast</td> <td data-bbox="663 681 875 765">(✓)</td> <td data-bbox="875 681 1088 765">x</td> <td data-bbox="1088 681 1330 765">x;</td> </tr> </tbody> </table>	Structure	Organism				bacteria	fungi	viruses	cell wall	✓	✓	x;	nucleus	x	✓	x;	chloroplast	(✓)	x	x;	<p>If no X s and all ✓ in correct places allow Max 2</p>	3
Structure	Organism																						
	bacteria	fungi	viruses																				
cell wall	✓	✓	x;																				
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Total 3 marks

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2 (a)	<table border="1"> <thead> <tr> <th rowspan="2">Group</th> <th colspan="4">Feature</th> </tr> <tr> <th>Cell wall</th> <th>Plasmid</th> <th>Cytoplasm</th> <th>Nucleus</th> </tr> </thead> <tbody> <tr> <td>bacteria</td> <td>✓</td> <td>✓</td> <td>(✓)</td> <td>✗</td> </tr> <tr> <td>fungi</td> <td>✓;</td> <td>✗;</td> <td>✓</td> <td>(✓)</td> </tr> <tr> <td>protocists</td> <td>(✗)</td> <td>✗)</td> <td>✓;</td> <td>✓;</td> </tr> </tbody> </table>	Group	Feature				Cell wall	Plasmid	Cytoplasm	Nucleus	bacteria	✓	✓	(✓)	✗	fungi	✓;	✗;	✓	(✓)	protocists	(✗)	✗)	✓;	✓;	<p>one mark for each correct column</p> <p>hybrid cross tick = 0</p> <p>empty box = 0</p>	4
Group	Feature																										
	Cell wall	Plasmid	Cytoplasm	Nucleus																							
bacteria	✓	✓	(✓)	✗																							
fungi	✓;	✗;	✓	(✓)																							
protocists	(✗)	✗)	✓;	✓;																							
(b) ()	virus / eq;	<p>allow named virus</p> <p>allow prion</p> <p>allow nematodes</p> <p>allow helminths</p>	1																								
(ii)	malaria / dysentery / sleeping sickness / giardiasis / toxoplasmosis / eq;		1																								

Total 6 marks

Question number	Answer	Notes	Marks
3 (a)	E; C;		2
(b)	1. can be used in the production of beer; 2. cell wall is made of chitin;	3 ticks max 1 4 ticks or more = 0	2

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4		<p>5 = 4 4 = 3 3 or 2 = 2 1 = 1</p>	4

Total 4 marks

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bacteria	✓	✓	✓																			
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5 (c)	receptor / nerve ending; sensory neurone / sensory nerve; impulse / message / signal; CNS / spinal cord / grey matter; synapse; relay neurone / relay nerve; motor neurone ; muscle / effector; contract;	sensory or motor not in correct order = 0 ignore brain allow intermediate / association;	5
		Total	13