

Question	Answer	Marks	AO Element	Notes	Guidance																
1(a)(i)	<b>T ;</b>	<b>1</b>																			
1(a)(ii)	<b>C and G ;</b>	<b>1</b>																			
2	<table border="1" data-bbox="398 392 806 1117"> <thead> <tr> <th data-bbox="398 392 501 520">nutrients</th> <th data-bbox="501 392 602 520">elements</th> <th data-bbox="602 392 703 520">enzyme</th> <th data-bbox="703 392 806 520">products of digestion</th> </tr> </thead> <tbody> <tr> <td data-bbox="398 520 501 719">protein</td> <td data-bbox="501 520 602 719">C, H, O, N (S) <b>AND</b></td> <td data-bbox="602 520 703 719">protease / pepsin / trypsin</td> <td data-bbox="703 520 806 719">amino acids ;</td> </tr> <tr> <td data-bbox="398 719 501 919">fat</td> <td data-bbox="501 719 602 919">C, H, O ;</td> <td data-bbox="602 719 703 919">lipase</td> <td data-bbox="703 719 806 919">fatty acids <b>AND</b> glycerol ;</td> </tr> <tr> <td data-bbox="398 919 501 1117">lactose (milk sugar)</td> <td data-bbox="501 919 602 1117"></td> <td data-bbox="602 919 703 1117">lactase ;</td> <td data-bbox="703 919 806 1117">galactose and glucose (simple sugars)</td> </tr> </tbody> </table>	nutrients	elements	enzyme	products of digestion	protein	C, H, O, N (S) <b>AND</b>	protease / pepsin / trypsin	amino acids ;	fat	C, H, O ;	lipase	fatty acids <b>AND</b> glycerol ;	lactose (milk sugar)		lactase ;	galactose and glucose (simple sugars)	<b>4</b>		elements for protein and fat for 1 mark enzyme and products for protein for 1 mark enzyme and products for fat for 1 mark enzyme for lactose for 1 mark	
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3	carbon, hydrogen, oxygen ; nitrogen ;	<b>2</b>																			

Question	Answer	Marks	AO Element	Notes	Guidance
4	<p>T A A T A T T A G C C G G C T A G C</p>	1			
5	<p>large molecule                      smaller molecule</p> <p>cellulose                      amino acids fat                                  fatty acids and glycerol glycogen and starch                      glucose protein</p> <p>....      </p>	4			

Question	Answer	Marks	AO Element	Notes	Guidance
6	<p><i>any two from carbohydrates:</i> cellulose ; for cell walls ; starch ; for energy/respiration ; to attract insects to flowers / nectar / fruits ; AVP ;</p> <p><i>any two from amino acids:</i> to make (named) proteins ; or enzymes ; for growth ; AVP ;</p>	4			
7	C H O ; N ;	2			
8	D	1			
[Total: 20]					