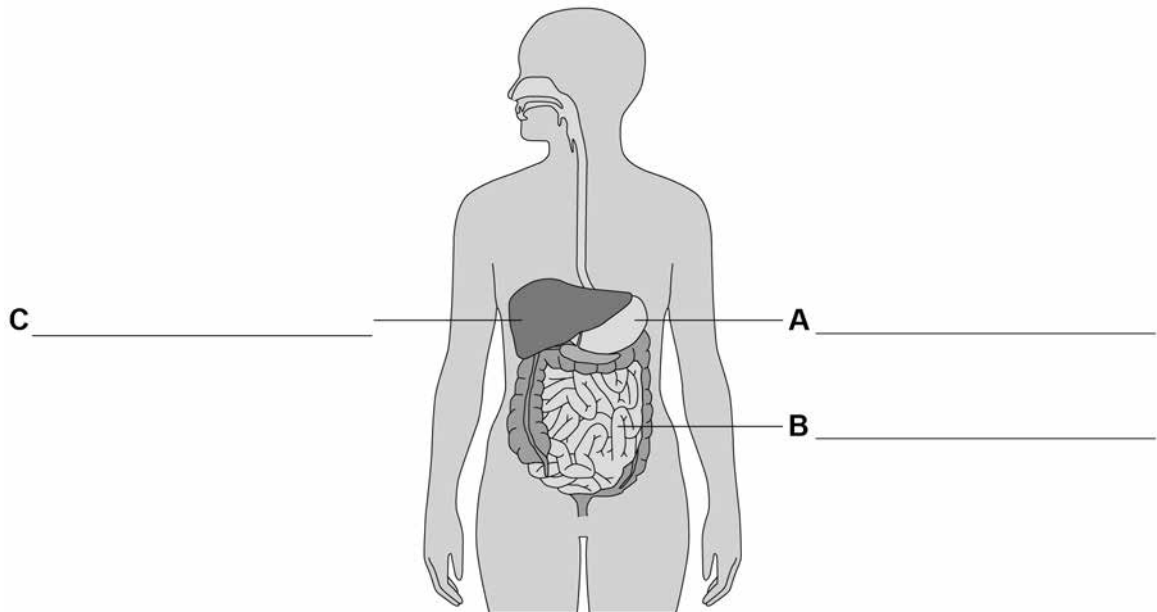


0 3

Figure 5 shows the human digestive system.

Figure 5



0 3

1

Label organs A, B and C.

[3 marks]

0 3

2

Complete the sentences.

[3 marks]

Choose the answers from the box.

catalyse	denatured	digest	energise
excreted	ingested	insoluble	soluble

Digestion is the process of breaking down large food molecules into smaller molecules that are _____.

Enzymes help to break down food because they _____ chemical reactions.

If the temperature of an enzyme gets too high, the enzyme is _____.



0 3 . 3 Protease is an enzyme.

Protease breaks down protein.

What is protein broken down into?

[1 mark]

Tick **one** box.

Amino acids

Fatty acids

Glucose

Glycerol

0 3 . 4 Why is protein needed by the body?

[1 mark]

0 3 . 5 Which organ in the human digestive system produces protease?

[1 mark]

Tick **one** box.

Gall bladder

Large intestine

Liver

Stomach

Turn over ►



0 3 . 6

Describe how you would test a sample of food to show it contains protein.

Give the reason for any safety precautions you would take.

[4 marks]

0 3 . 7

Complete the sentence.

[1 mark]

Choose the answer from the box.

fat	fibre	minerals	vitamins
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Obesity can be caused by a diet high in _____.

0 3 . 8

Complete the sentence.

[1 mark]

Choose the answer from the box.

skin cancer	type 1 diabetes	type 2 diabetes
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Obesity is a risk factor for _____.

15



Question	Answers	Extra information	Mark	AO / Spec. Ref.
03.1	(A) stomach	allow ileum ignore intestine unqualified	1	AO1 4.2.2.1
	(B) small intestine		1	
	(C) liver		1	
03.2	soluble	this order only	1	AO1 4.2.2.1
	catalyse		1	
	denatured		1	
03.3	amino acids		1	AO1 4.2.2.1
03.4	any one from: <ul style="list-style-type: none"> • for growth • for repair / replacement (of cells / tissues / organs) 	allow for enzymes / hormones / antibodies allow to strengthen bones ignore for energy	1	AO1 4.2.2.1
03.5	stomach		1	AO1 4.2.2.1

Question	Answers	Mark	AO / Spec. Ref.	
03.6	Level 2: Scientifically relevant facts, events or processes are identified and given in detail to form an accurate account.	3–4	AO1 4.2.2.1	
	Level 1: Facts, events or processes are identified and simply stated but their relevance is not clear.	1–2		
	No relevant content	0		
	Indicative content <ul style="list-style-type: none"> • grinding up the food • add Biuret reagent (allow CuSO₄ and NaOH) to food (sample) • protein turns solution (from blue) to purple / lilac • wear goggles to protect eyes • clean up spills immediately • Biuret / NaOH is an irritant / corrosive / poisonous <p>for level 2 a reference to Biuret, a positive result and reason for a safety precaution is required</p>			
03.7	fat		1	AO1 4.2.2.1
03.8	type 2 diabetes		1	AO1 4.2.2.6
Total			15	