

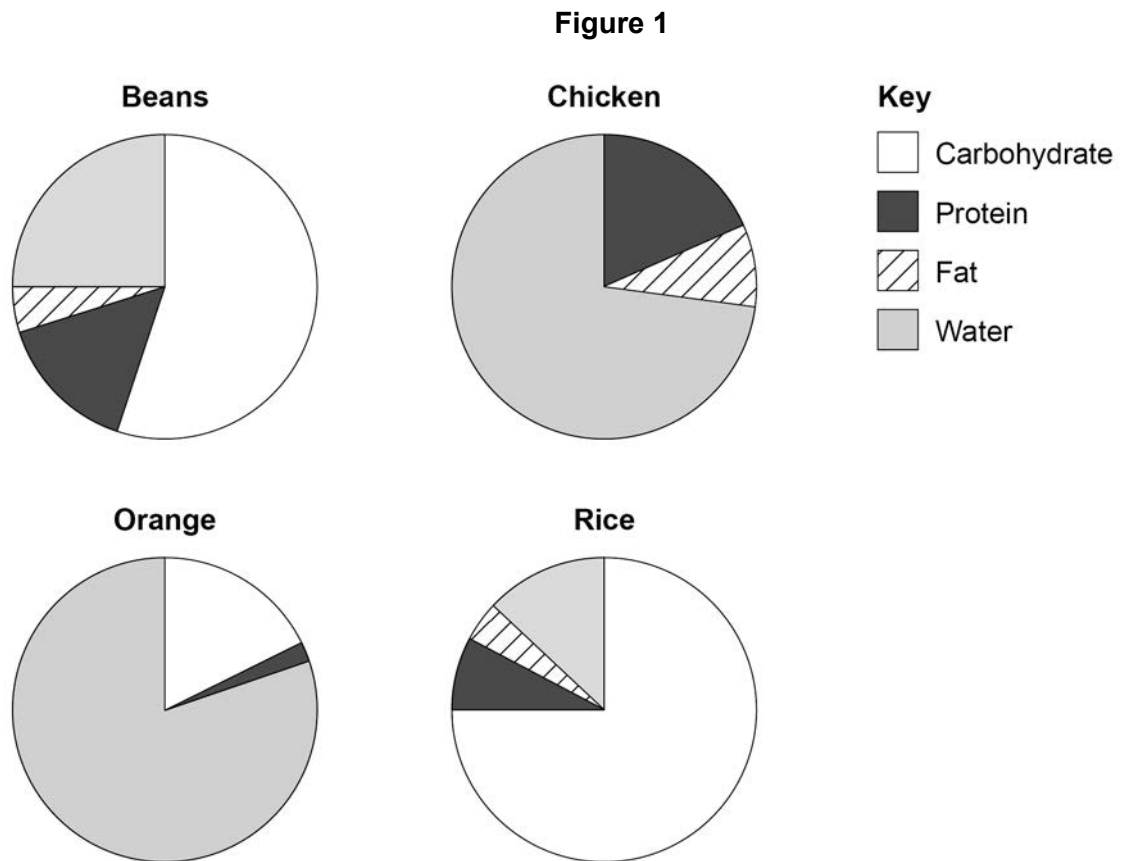
Answer **all** questions in the spaces provided.

Do not write
outside the
box

0 1

Many foods contain carbohydrates.

Figure 1 shows information about four different foods.



0 1 . 1

Which food contains the highest percentage of carbohydrate?

[1 mark]

Tick (✓) **one** box.

Beans	
Chicken	
Orange	
Rice	



0 1 . 2 Estimate the percentage of water found in beans.

[1 mark]

Percentage = _____ %

0 1 . 3 Look at **Figure 1**.

Why would eating only beans provide a more balanced diet than eating only chicken?
[1 mark]

0 1 . 4 Sugars are produced when enzymes break down starch.

What is the name of the enzyme which breaks down starch to produce sugars?
[1 mark]

Tick (✓) **one** box.

Amylase

Bile

Lipase

Protease

0 1 . 5 Which chemical could be used to test for glucose?

[1 mark]

Tick (✓) **one** box.

Benedict's reagent

Biuret reagent

Iodine solution

Sulfuric acid

Turn over ►



0 1 . 6 What colour change would be seen in a positive test for glucose?

[1 mark]

From blue to _____.

0 1 . 7 People with diabetes have difficulty controlling the concentration of glucose in their blood.

The blood of four people was tested.

Table 1 shows the results.

Table 1

Person	Concentration of glucose in blood in arbitrary units
A	4.2
B	6.9
C	7.1
D	5.1

Table 2 shows the information used to help decide if a person has diabetes.

Table 2

Concentration of glucose in blood in arbitrary units	Conclusion
<5.6	No diabetes
5.6 to 7.0	Mild diabetes
>7.0	Severe diabetes

Which person has severe diabetes?

[1 mark]

Tick (✓) **one** box.

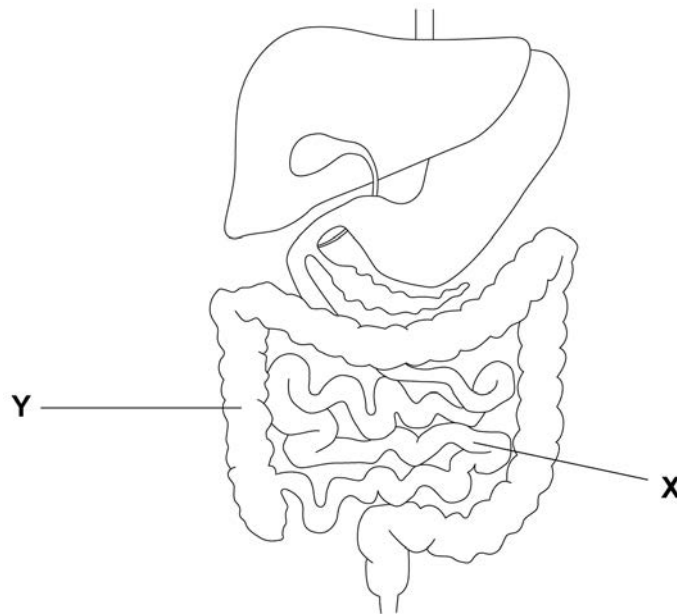
A **B** **C** **D**



Figure 2 shows part of the human digestive system.

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Figure 2



0 1 . 8 Glucose is absorbed into the bloodstream in part X.

Name part X.

[1 mark]

0 1 . 9 Complete the sentences.

Choose answers from the box.

[2 marks]

active transport	digestion	excretion
osmosis	respiration	

Some glucose is absorbed into the bloodstream against the concentration gradient by the process of _____.

Water moves out of part Y and into the bloodstream by

the process of _____.

10

Turn over ►



Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.1	rice		1	4.2.2.1 AO3
01.2	25 (%)	allow an answer between 23 and 27 (%) ignore $\frac{1}{4}$ / 0.25	1	4.2.2.1 AO2
01.3	(beans) contain all (four) food groups	allow converse for chicken allow chicken contains no / less carbohydrate or beans contain carbohydrate allow beans contain more nutrients ignore references to water / fat / protein	1	4.2.2.1 AO3
01.4	amylase		1	4.2.2.1 AO1
01.5	Benedict's reagent		1	4.2.2.1 AO1
01.6	(brick) red / green / yellow / orange / brown		1	4.2.2.1 AO1
01.7	C		1	4.2.2.1 AO3
01.8	small intestine	allow ileum ignore intestine unqualified do not accept large intestine / duodenum	1	4.1.3.3 4.2.2.1 AO1
01.9	active transport		1	4.1.3.2 4.1.3.3 AO1
	osmosis		1	AO1
Total			10	