

Revision Sheet

IGCSE Biology · Unit 7 Human nutrition

20 vocabulary items · 30 marks of exam questions (7 questions)

Part 1 · Vocabulary review (20 items). The terms this unit is examined on most. Mark it yourself from the answer key.

Section A · Chinese to English

Write the English word.

1.	<div></div>	[1]
2.	<div></div>	[1]
3.	<div></div>	[1]
4.	<div></div>	[1]
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15.	<div></div>	[1]
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17.	<div></div>	[1]

18.

[1]
19.

[1]
20.

[1]

Part 2 · Exam questions (30 marks, 7 questions) begins on the next page. They are ordered easy to difficult and none of them has been set before.

- 21** A student investigates the breakdown of fats in milk by lipase. Four test-tubes labelled **A**, **B**, **C** and **D** are set up.

The table shows the contents of each test-tube.

In which test-tube will the contents become acidic most quickly?

	milk	bile	boiled lipase	lipase
A	✓	✓	✗	✓
B	✓	✓	✓	✗
C	✓	✗	✓	✗
D	✗	✓	✓	✓

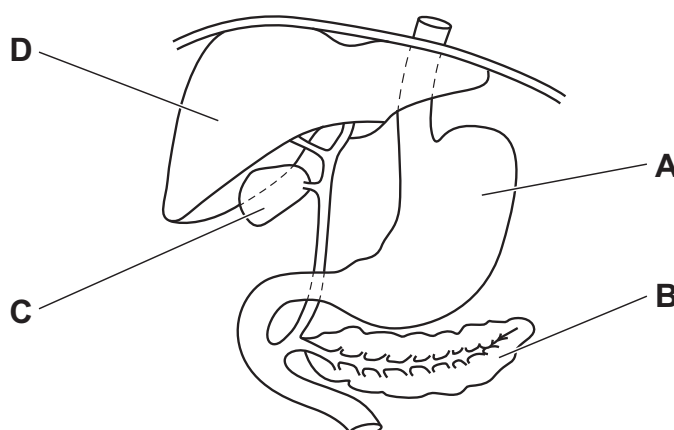
key

✓ = present

✗ = absent

- 22** The diagram shows part of the alimentary canal and associated organs.

Which labelled part stores bile?



- 23** The list contains statements about villi.

- 1 Villi increase the efficiency of the absorption of nutrients.
- 2 Villi increase the efficiency of the alveoli during gas exchange.
- 3 Villi provide a large surface area.
- 4 Villi filter urea from the blood.

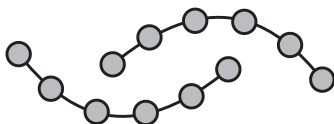
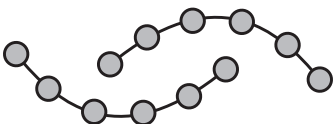
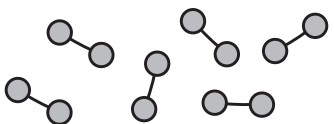
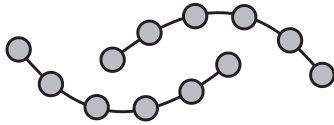
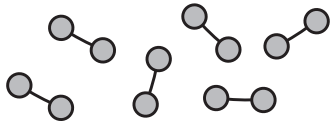
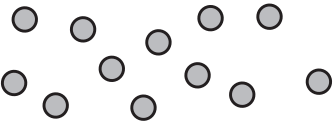
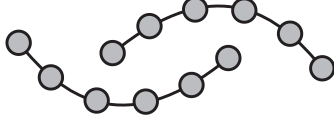
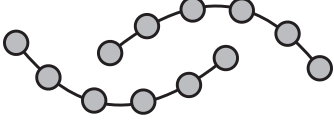
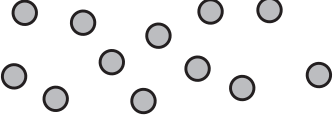
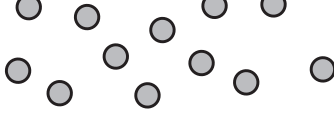
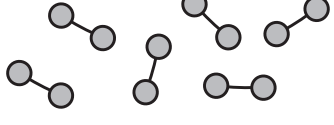
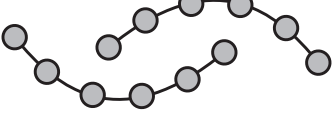
Which two statements explain the role of the villi in humans?

- A** 1 and 2 **B** 1 and 3 **C** 2 and 4 **D** 3 and 4

24 The diagrams show carbohydrate molecules as they pass through the alimentary canal.

☐

Which row represents the molecules correctly?

	before taking into the mouth	after some time in the mouth	after some time in the small intestine
A			
B			
C			
D			

25 Which substance found in a healthy diet helps to prevent constipation?

☐

- A** fat
- B** fibre
- C** minerals
- D** vitamins

26 (a) State the meaning of the term chemical digestion.

.....

.....

.....

.....

..... [2]

(b) Enzymes are involved in chemical digestion.

Table 3.1 shows some information about enzymes used for chemical digestion.

(i) Complete Table 3.1.

Table 3.1

enzyme	substrate	products
amylase		simple reducing sugars
lipase	fats and oils	
protease	proteins	

[4]

(ii) State where amylase, lipase and protease are made in the human body.

amylase

lipase

protease [3]

(c) (i) State the name of the acid found in gastric juice.

..... [1]

(ii) State **two** functions of the acid found in gastric juice.

1

2 [2]

[Total: 12]

27 (a) Fig. 7.1 is a diagram of the human digestive system.

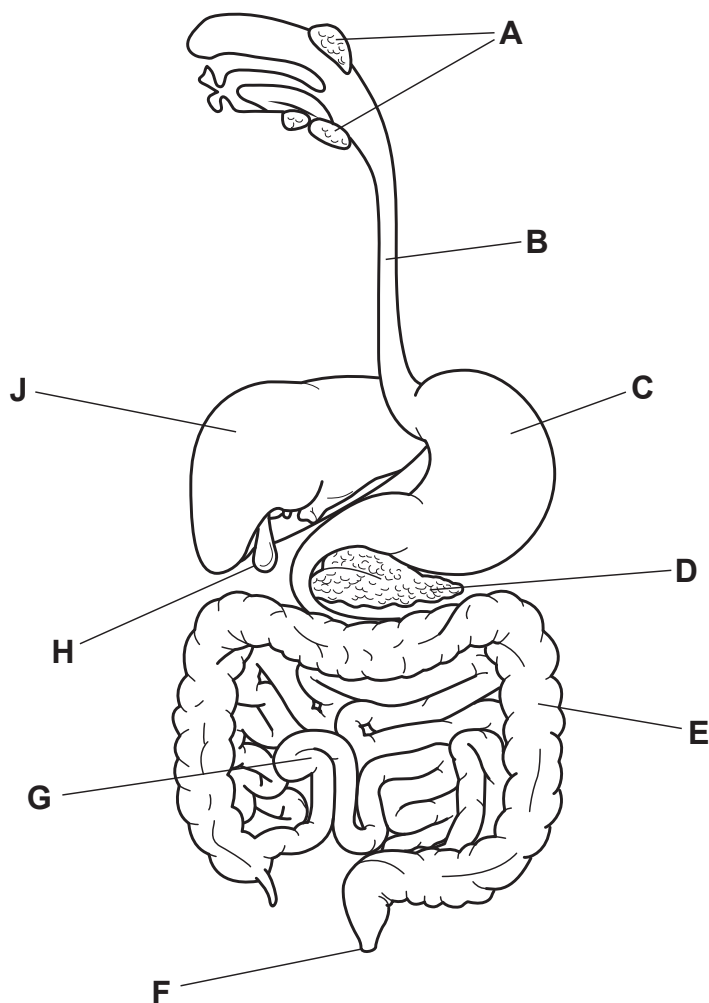


Fig. 7.1

State the letter in Fig. 7.1 that identifies:

the gall bladder

the organ that secretes salivary amylase

where egestion occurs

where most absorption occurs

where physical digestion occurs

where the pH is acidic.

[6]

(b) The boxes on the left show some examples of nutrients.

The boxes on the right show some examples of molecules.

Draw lines to link each nutrient to a molecule found in that nutrient.

Draw **two** lines.

nutrient	molecule
	<div>amino acid</div>
<div>fat</div>	<div>glucose</div>
<div>protein</div>	<div>glycerol</div>
	<div>hydrochloric acid</div>

[2]

(c) State the vitamin deficiency that causes rickets.

..... [1]

(d) Describe the dietary importance of the mineral ions calcium and iron.

calcium
.....

iron
.....

[2]

(e) Fat, protein, vitamins and mineral ions are all required for a balanced diet.

State the names of **two other** components of a balanced diet.

1

2

[2]

[Total: 13]