AQA GCSE Biology | 8461

SPECIFICATION POINT 4.7.5.1

Factors affecting food security

Past-paper questions

Tier	**Foundation**
Question groups	**3**
Available paper years	**2008–2016**

Using this booklet

1. Answer the questions in order and show your working.
2. Original question numbers and marks are retained.
3. Print at actual size (100%) for measuring questions.
4. Use the companion answer booklet to check your work.

Name: _____ **Date:** _____

Whole questions are retained for context, so some parts assess other specification points. Current and legacy sources are labelled. Continue on extra paper if needed.

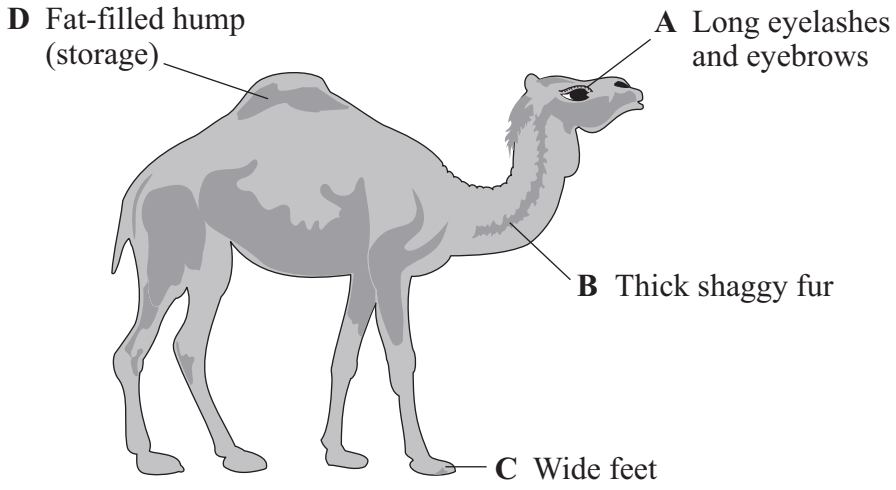
4.7.5.1 Factors affecting food security

Question 01

June 2008 | BLY1BP | Original Q1 | Legacy

QUESTION ONE

Wild camels often live in desert areas which are hot during the day and cold at night. They may have to manage without a supply of food or water for several days and travel great distances over soft sand to find some.



Match labels, **A**, **B**, **C** and **D**, with the numbers **1–4** in the table.

1	stops camel sinking into the sand
2	enables survival without food or water for several days
3	helps protect the body from temperature changes at night and during the day
4	keeps out sand that is being blown about

4.7.5.1 Factors affecting food security

Question 02

8 There are many ways to increase the efficiency of food production.

8 (a) The table shows the energy available to humans from two different food chains.

Food chain	Energy transferred to humans in kJ per hectare of crop
Wheat → humans	900 000
Wheat → pigs → humans	90 000

8 (a) (i) Compare the amount of energy the two food chains transfer to humans.

.....

.....

(1 mark)

8 (a) (ii) Give **one** reason for the difference in the amount of energy the two food chains transfer to humans.

.....

.....

(1 mark)

4.7.5.1 Factors affecting food security

Question 02 · continued

8 (b) *In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.*

Give methods used in the factory farming of animals.
Explain the advantages and disadvantages of these methods.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(6 marks)

8

4.7.5.1 Factors affecting food security

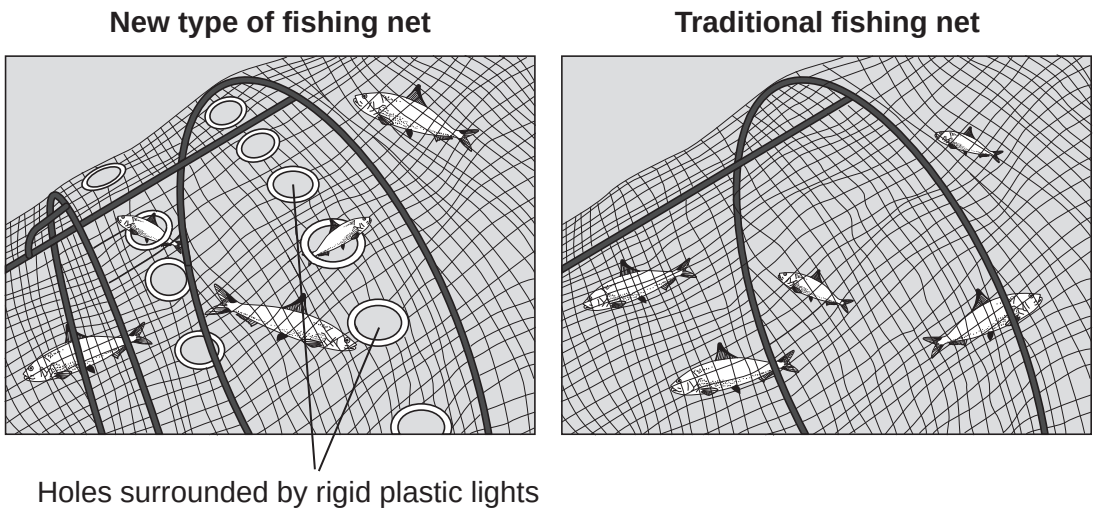
Question 03

June 2016 | BL3FP | Original Q5 | Legacy

5 It is important to conserve fish stocks.

Figure 7 shows a new type of fishing net and a traditional fishing net.

Figure 7



5 (a) (i) Describe how the new type of fishing net helps to conserve fish stocks.

[3 marks]

5 (a) (ii) Give **one** way, other than controlling nets, to reduce overfishing.

[1 mark]

4.7.5.1 Factors affecting food security

Question 03 · continued

5 (b) Another way to make sure there is food for an increasing human population is to make food production more efficient.

Figure 8 shows how some cows are farmed.

Figure 8



5 (b) (i) Use information from **Figure 8** to suggest **two** ways in which this type of farming reduces energy loss from the cows.

[2 marks]

1 _____

_____

2 _____

_____

5 (b) (ii) Give **two** reasons why some people disagree with farming cows in this way.

[2 marks]

1 _____

_____

2 _____

_____

8