

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
ENVIRONMENTAL AND LAND-BASED SCIENCE**

B495/01

Livestock Husbandry (Foundation Tier)

MONDAY 23 JUNE 2008

Morning
Time: 45 minutes

Candidates answer on the question paper
Additional materials (enclosed): None

Additional materials (required):
Electronic calculator
Pencil
Ruler (cm/mm)



Candidate Forename

Candidate Surname

Centre Number

Candidate Number

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.
- There are no separate marks for the quality of written communication, but make sure that your answers are written in clear and well-structured English.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **36**.

FOR EXAMINER'S USE		
		Mark
TOTAL	36	

This document consists of **15** printed pages and **1** blank page.

Answer **all** the questions.

1 The photograph shows a girl carrying a garden fork.



M Wedgwood/© OCR

(a) Why is carrying a fork in this way dangerous?

.....
.....[1]

(b) How should the fork be carried to be safer?

.....
.....[1]

2 The photograph shows a new animal house.



M Wedgwood/© OCR

Good animal housing is essential if livestock are to remain healthy.

List **three** features of good animal housing.

- 1
- 2
- 3 [3]

3 For each food characteristic below, choose a food type from the list that meets that description.

food types

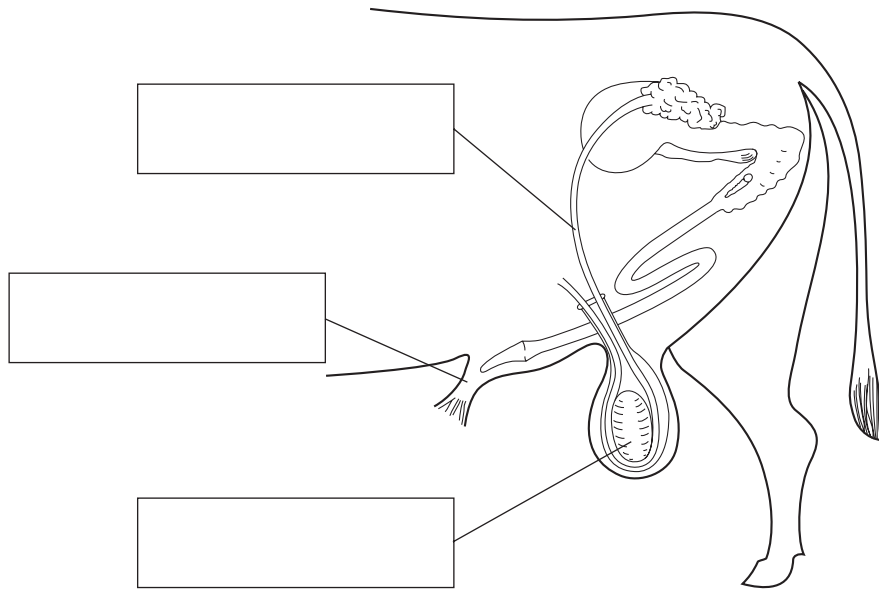
- A** concentrate
- B** roughage
- C** succulent

food characteristics

- high fibre Answer **A, B** or **C**
- high nutrient Answer **A, B** or **C**
- high moisture Answer **A, B** or **C**

[3]

4 The diagram shows a cattle reproductive system.



(a) What is the sex of this animal?

.....

[1]

(b) Write each word in the list in the correct box on the diagram.

penis

sperm duct

testis

[2]

(c) Where in the reproductive system is sperm formed?

.....[1]

5 The photograph shows a Hereford cow.



M Wedgwood/© OCR

Most Hereford cattle are polled.

This means they never develop horns.

Selective breeding has been used to produce this.

Why might having cattle without horns be an advantage to the farmer?

.....
.....[1]

6 The photographs show a bull with horns and cow with no horns.



M Wedgwood/© OCR

bull with horns



M Wedgwood/© OCR

cow with no horns

If a bull **with** horns is crossed with a cow with **no** horns (polled), all the calves born have no horns.

What name is given to an inherited characteristic that does not appear in a first generation cross such as this?

.....[1]

7 The photograph shows a sick animal.



The animal has a runny nose and a dull coat.

Give **three** other signs that an animal is not well.

- 1
- 2
- 3[3]

8 The photograph shows a farm animal.



M Wedgwood/© OCR

Which of the following would you **not** do when approaching a farm animal?

- A approach from the front so that they can see you coming
- B talk loudly so they know you are there
- C talk quietly to calm them
- D walk slowly

Answer **A, B, C** or **D**[1]

9 The photographs show different types of animal house.



M Wedgwood/© OCR



M Wedgwood/© OCR

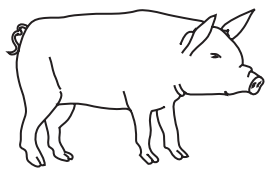


M Wedgwood/© OCR

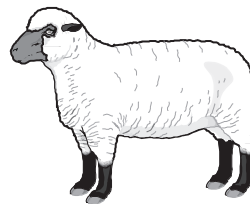


M Wedgwood/© OCR

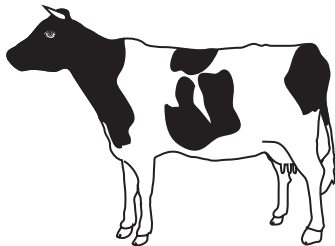
Choose animals from the diagrams below and write each name under the most suitable type of animal house.



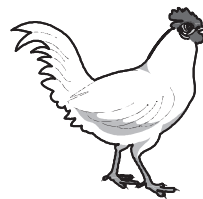
pig



sheep



cow



hen

[3]

10 The photograph shows an intensive pig unit.



M Wedgwood/© OCR

Suggest **two** advantages and **two** disadvantages of **intensive** animal production systems.

advantage 1

.....

advantage 2

.....

disadvantage 1

.....

disadvantage 2

.....[4]

11 The photograph shows a modern breed of cattle.



M Wedgwood/© OCR

Modern breeds put on weight much quicker than traditional breeds.

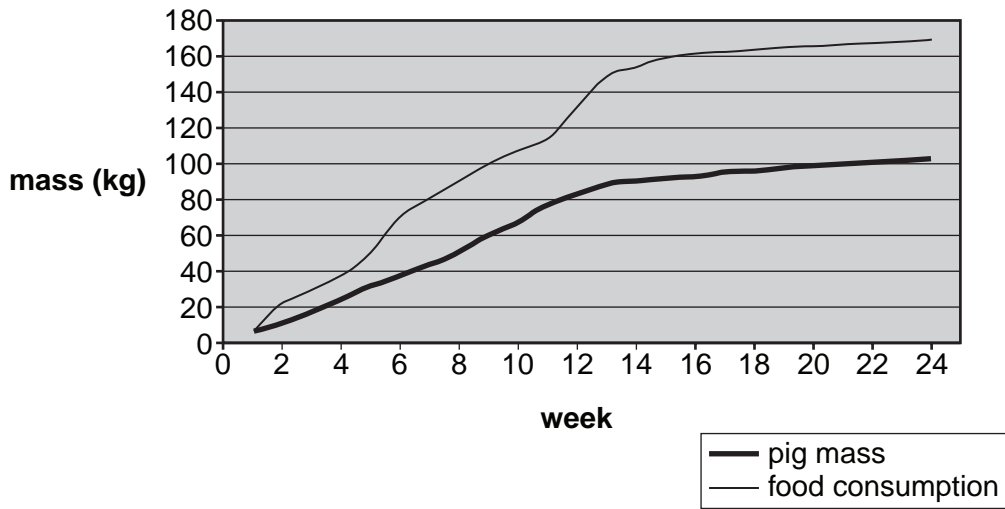
What name is given to the process used for producing these modern breeds?

- A random breeding
- B selective breeding
- C monoculture
- D intensive production

Answer **A, B, C** or **D**[1]

13 The graph shows a comparison between pig growth and food consumption.

pig growth and food consumption



Pigs are normally sent for pork when they have a mass of 80 kg.

(a) How many weeks have they been reared before they reach this mass?

..... weeks [1]

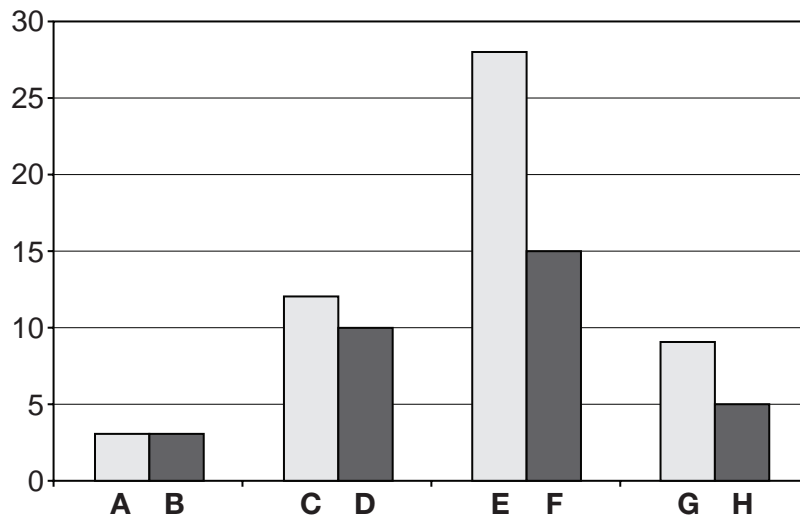
(b) What happens to the growth rate of the pigs after 13 weeks?

.....
[1]

(c) What happens to the food consumption after 13 weeks?

.....
[1]

14 The bar chart shows some effects of rearing pigs inside and outside.



The bar chart has **three errors**.

Use the information in the table to find the errors.

Alter the bar chart to show the correct information.

A	sow mortality (%)	(inside)	5
B	sow mortality (%)	(outside)	3
C	piglet mortality (%)	(inside)	12
D	piglet mortality (%)	(outside)	10
E	labour hours per sow	(inside)	25
F	labour hours per sow	(outside)	15
G	feed costs per pig reared (£)	(inside)	9
H	feed costs per pig reared (£)	(outside)	10

[3]

END OF QUESTION PAPER

15
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