

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

**B495/01**

Livestock Husbandry  
(Foundation Tier)

**Thursday 4 June 2009  
Morning**

**Duration: 45 minutes**

Candidates answer on the question paper

**OCR Supplied Materials:**  
None

**Other Materials Required:**

- Electronic calculator
- Pencil
- Ruler (cm/mm)



Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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**INSTRUCTIONS TO CANDIDATES**

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use 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, however additional paper may be used if necessary.

**INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **36**.
- This document consists of **12** pages. Any blank pages are indicated.

Answer **all** the questions.

1 A



B



C



D



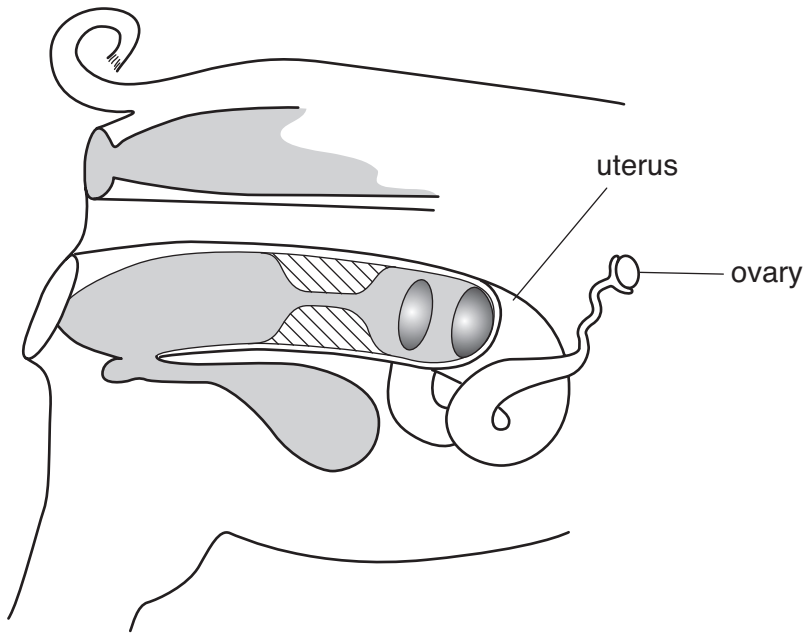
Which of the cattle shown in the photographs is a female?

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

2 Name one organ that is **only** found in the **male** reproductive system of an animal you have studied.

..... [1]

3 The diagram shows the reproductive system of a sow (female pig).



What is the job (function) of the following parts of the reproductive system?

ovary .....

.....

.....

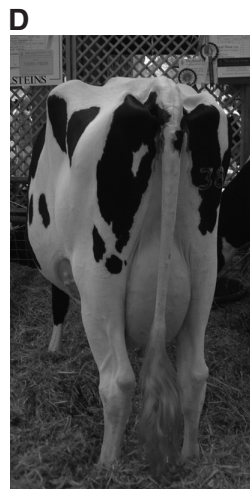
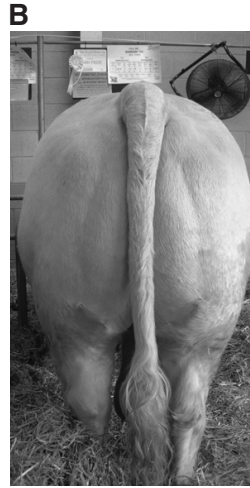
.....

uterus .....

.....

.....

..... [2]



Which **one** of the animals in the photographs is a dairy breed?

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

5 **Belgian Blue**



**Longhorn**



**Hereford**



**Ayrshire**



Which of the cattle is a modern, highly selected breed?

..... [1]

6 **Hay, silage and straw** are all fodder crops that can be fed to livestock in winter.

Describe the differences in production for hay, silage and straw.

.....  
.....  
.....  
.....  
..... [3]

7 Choose the correct word from the list below to complete the following sentences.

**chromosomes**

**gene**

**genotype**

**mutations**

**phenotype**

The genetic information of an animal or plant is carried by pairs of .....  
located in the nucleus of the cell.

Each characteristic is coded for by a particular ..... for that characteristic.

All the genetic information of an animal is called its ..... and the  
characteristics that this produces is the ..... [4]

8 The photograph shows a poultry house that is sitting on a sled. The sled allows the house to be easily moved around the field.



Moving the house allows the grass to recover.

Suggest **two** other advantages of being able to move the poultry house.

advantage 1 .....  
.....

advantage 2 .....  
..... [2]

9 It is important that a farmer knows when cows come on to heat (are ready to mate).

Explain why it is important that a farmer knows when cows come onto heat.

.....

.....

.....

..... [2]

10 The photograph shows a dairy farmer using a computer to keep his farm records.



Suggest **three** different types of record farmers might keep on their computers to manage the breeding of their cattle.

1 .....

2 .....

3 ..... [3]

11 Farmers try to improve their stock by breeding.

Suggest **two** things a farmer might try to improve in stock by better breeding.

1 .....

2 ..... [2]

12 Animals can be farmed using **intensive** or **extensive** systems.

Each has different features.

intensive farm system	extensive farm system

Write down the following descriptions in their correct places in the table.

animals usually kept outside

high labour input

animals often kept indoors

low energy costs

high equipment costs

low equipment costs

high energy costs

low labour input

[4]



13 You need to be careful when you go near a farm animal.

Suggest **one** way you could let the animal know you are moving close to it.

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

14 Handling pigs can be difficult.

The picture shows someone using a board to help move a pig.



Suggest how this piece of equipment makes handling pigs safer and easier.

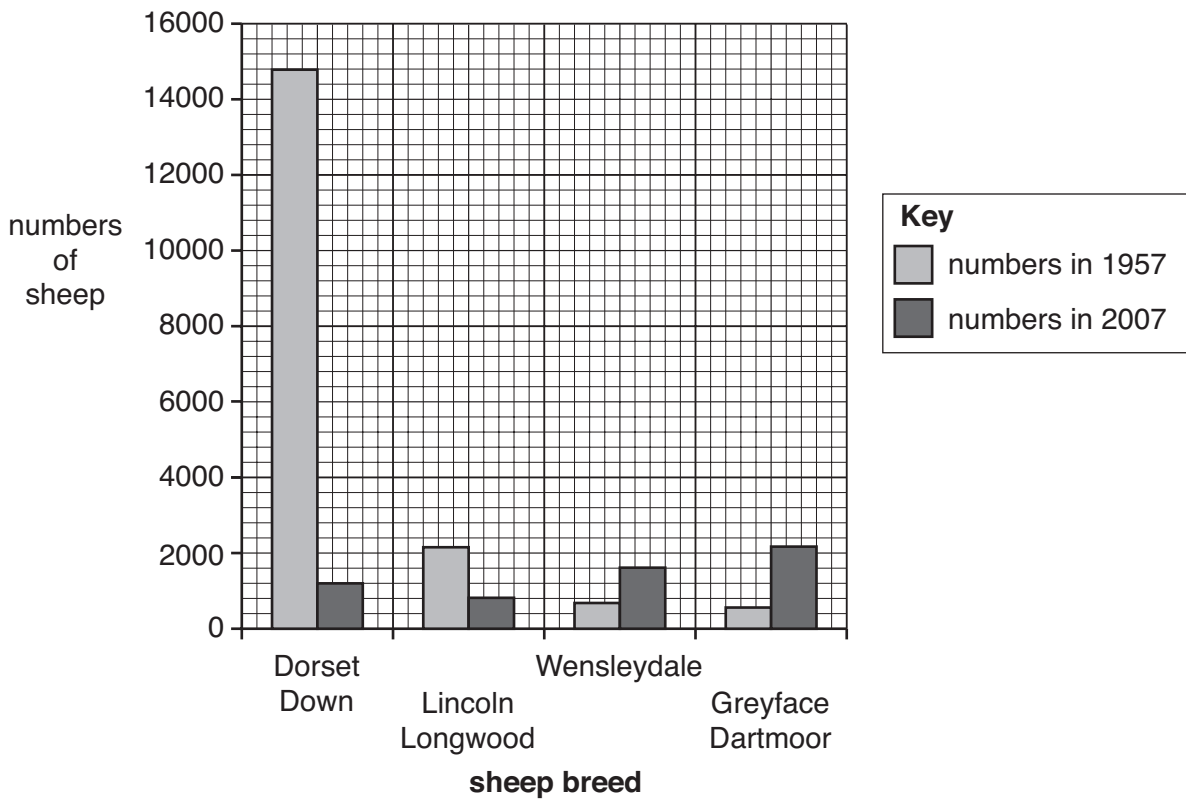
.....  
.....  
..... [2]

15 Which of the following is **not** a sign of loss of condition?

- A dull coat
- B gaining weight
- C poor appetite
- D sunken eyes

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

16 The graph below shows the changes in numbers of some rare breed of sheep since 1957.



(a) Which breed of sheep has shown the greatest **increase** in numbers?

..... [1]

(b) Which two breeds of sheep are most at risk of extinction?

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

17 Hens produce eggs of different sizes.

These eggs are graded by mass.

grade	1	2	3	4	5	6	7
range of mass (g)	>70	70–66	65–61	60–56	55–51	50–46	<46

(a) What is the range of mass for grade 2 eggs?

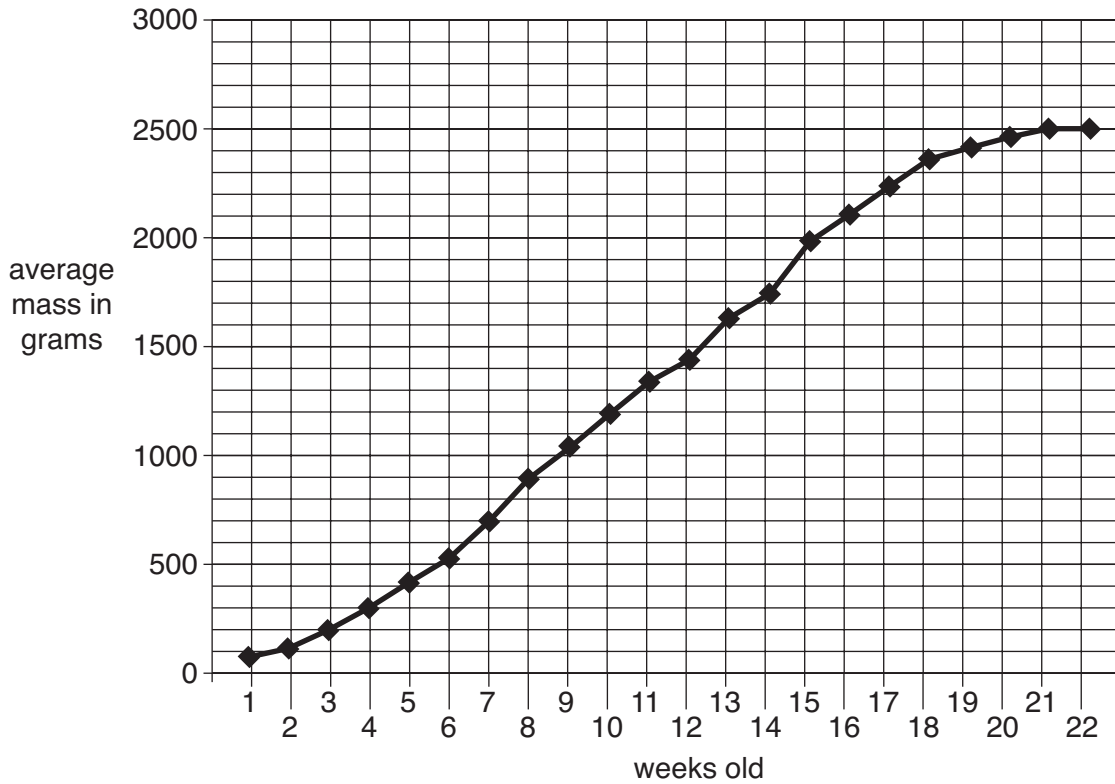
..... [1]

(b) An egg has a mass of 53g.

What grade is it?

..... [1]

18 The graph shows how chicks grow.



(a) What is the average mass of the chicks when they are 7 weeks old?

..... [1]

(b) At what age do the chicks stop growing?

..... [1]

**END OF QUESTION PAPER**



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