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**Thursday 24 May 2012 – Morning**

**GCSE ENVIRONMENTAL AND LAND-BASED SCIENCE**

**B495/03** Livestock Husbandry (Foundation Tier)

Candidates answer on the Question Paper.

**OCR supplied materials:**  
None

**Other materials required:**

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

**Duration:** 45 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**INSTRUCTIONS TO CANDIDATES**

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the bar codes.

**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 **16** pages. Any blank pages are indicated.

For Examiner's Use	
<b>TOTAL</b>	

Answer **all** the questions.

1 The photograph shows an animal pen. This pen is made of recycled plastic.



(a) For which animal is this type of pen suitable?

- A cattle
- B hens
- C goats
- D sheep

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

(b) Suggest **two** advantages, other than cost, of using this material compared with wood.

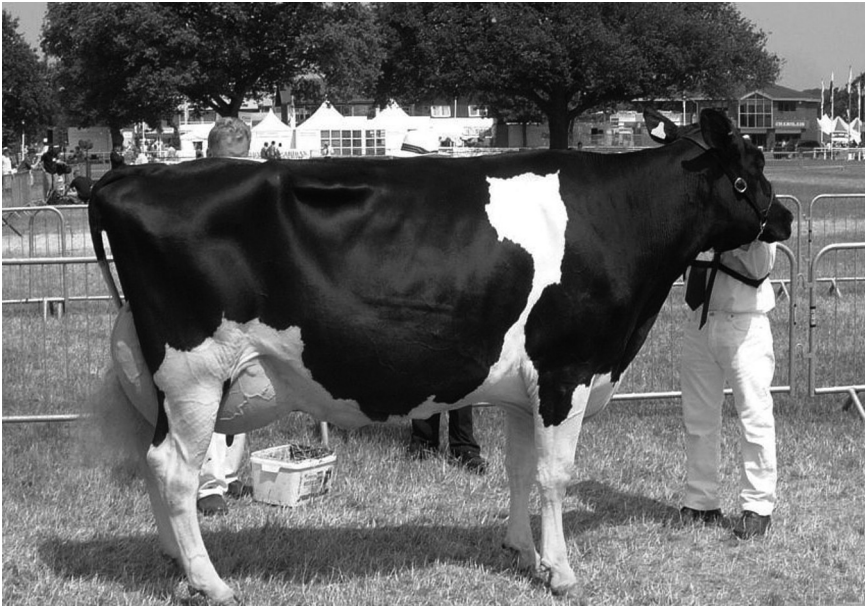
1 .....

.....

2 .....

..... [2]

2 The photograph shows a prize winning dairy cow.



What tells you that the animal shown in the photograph is a dairy breed and not a beef breed?

Put ticks (✓) in the boxes next to the **two** correct answers.

black and white colour

bony lean frame

large udder

no horns

rounded muscular frame

small udder

[2]

3 These two pictures show suitable housing for pigs and for cattle.



housing for pigs



housing for cattle

The housing meets their needs.

Give **two** features of the housing of pigs and cattle which are the same and **one** feature which is different.

**the same**

1 .....

2 .....

**different**

1 ..... [3]

4 The photograph shows a pig breed used in free range pig units.



Which feature is a farmer **most likely** to choose when considering this breed for keeping in a free range pig unit?

- A conformation
- B disease resistance
- C hardiness
- D yield

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

5 Many livestock are fed a mixture of bulk and concentrate feeds.



Name one example of a bulk feed and one example of a concentrate feed.

**bulk feed** .....

**concentrate feed** ..... [2]

6 The picture shows two sheep of the same breed.



(a) A farmer crossed pure bred black sheep with pure bred white sheep.

All the lambs born were white.

What does this tell you about the genetics of colour in this breed of sheep?

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

(b) What genetic term is given to the white lambs produced in this cross?

..... [1]

7 Health problems in livestock can be caused by organisms such as parasites, fungi, bacteria and viruses.

Draw lines to connect each **disease causing organism** to a **health problem**.

<b>disease causing organism</b>	<b>health problem</b>
parasites	foot and mouth
fungi	mastitis
bacteria	ringworm
viruses	roundworm

[3]

8 (a) Working with animals can cause ill health in humans.

Which **one** of the following conditions in animals can cause food poisoning **in humans**?

- A mastitis
- B tuberculosis (TB)
- C tetanus
- D salmonella

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

(b) Suggest **two** ways a farmer could reduce the chances of getting food poisoning from contact with his animals.

1 .....

2 ..... [2]



9 This question is about reproduction in mammals.

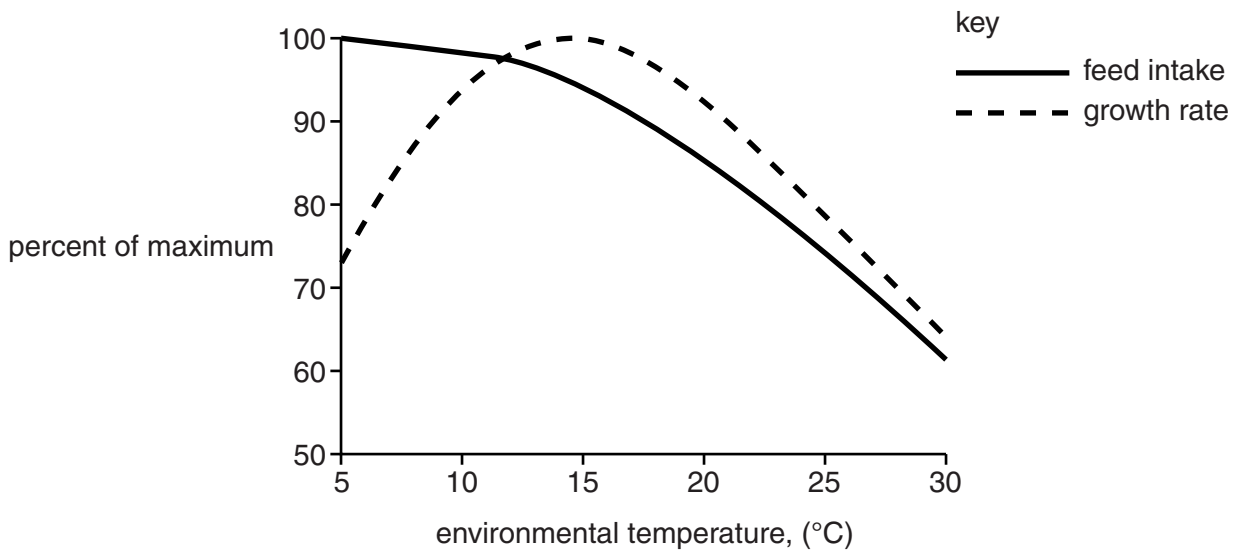
Choose the correct terms from this list to complete the sentences below.

**fertilised      ovary      oviduct      uterus      vagina**

Eggs are formed in the ..... and released into the  
.....

If the eggs meet sperm here, they can be ..... before becoming  
implanted in the wall of the ..... **[3]**

10 The graphs show how temperature affects the feed intake and growth rate of pigs.



(a) At what temperature do the pigs eat most food?

Answer ..... °C [1]

(b) Describe the effect that temperature has on the feed intake and growth rate of the pigs.

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..... [3]

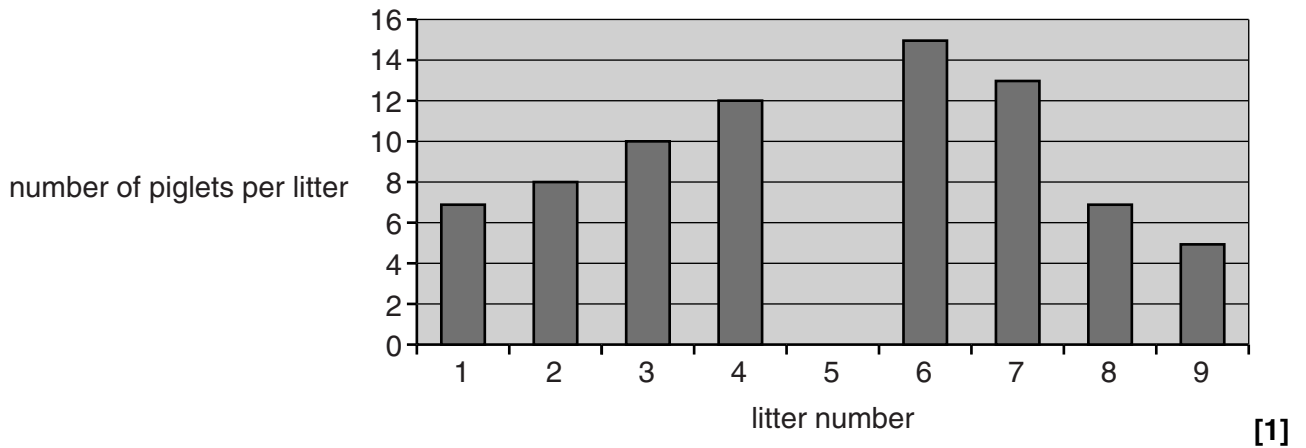
11 A farmer records the numbers of piglets in different litters for the same sow.

litter	number of piglets
1	7
2	8
3	10
4	12
5	16
6	15
7	13
8	7
9	5

(a) A graph was plotted from these data.

One of the bars on the graph is missing.

Draw this bar on the graph.



(b) Use the data in the table to calculate the average number of piglets per litter for this sow.

.....

.....

Answer ..... [1]



- 13 Allowing hens to free range outside is thought to improve the colour of the yolk in the eggs that they lay.



Describe an experiment that could be carried out to test if this is true.

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[4]

**END OF QUESTION PAPER**

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