

GENERAL CERTIFICATE OF SECONDARY EDUCATION
ENVIRONMENTAL AND LAND-BASED SCIENCE
Livestock Husbandry (Foundation Tier)

B495/01

Candidates answer on the question paper.

OCR supplied materials:
None

Other materials required:

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

Friday 27 May 2011
Morning

Duration: 45 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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MODIFIED LANGUAGE

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. Pencil may be used for graphs and diagrams only.
- 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).
- Answer **all** the questions.
- 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.

Answer **all** the questions.

1



The main purpose of good husbandry is to

- A keep animals healthy
- B make as much profit as possible
- C make the animals grow quickly
- D reduce costs as much as possible

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

2 The photographs show different systems of rearing animals.



Decide if each photograph shows an extensive or intensive system.

Write the correct word from the list in the box below **each** photograph.

Each word can be used once, more than once, or not at all.

extensive

intensive

[2]

3 This student needs to move a box.



How should the student lift the box correctly?

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

knees bent

knees straight

back bent

back straight

use leg muscles to lift

use back muscles to lift

[2]

4 The photographs show some houses for keeping animals.



Which of the following houses is **not** suitable for keeping pigs?

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

5 Male and female animals have different reproductive systems.

female animal	male animal

For each of the following decide if it belongs to a male or female animal.

Write each word in the correct column in the table.

egg

ovary

penis

sperm

testis

vagina

[3]

6 The photographs show four different breeds of cattle.



Which one of the cows shown in the picture is a modern dairy breed?

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

7 The picture shows a stag (male) turkey.



Give **three** signs which show that this is a healthy animal.

- 1
- 2
- 3 [3]

8 For a farm animal that you have studied, give **three** signs that show that the animal is on heat (ready to mate).

animal

signs of heat

1

2

3 [3]

9 The picture shows a cow bred many years ago.



Selective breeding has been used to improve cattle over many years.

They have been bred to produce more milk or more meat.

Suggest **two** other features of cattle that have been improved through breeding.

1

2 [2]

10 The photograph shows a student checking pigs while they are feeding.



(a) How does using the board make approaching the pig safer for the student?

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

(b) Why is it safer to check the animal while it is feeding?

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

(c) Suggest **one** other way to make approaching a large animal safer.

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

11 The photographs show a litter of pigs and a bag of their feed.



The bag contains 25 kg of pig pellets.

- (a) The farmer has 5 piglets.
They each eat 2 kg of pellets a day.
How long will the bag last?

..... days

[1]

- (b) It takes 125 kg to feed each pig to pork weight.
How many bags will the farmer need to feed each pig?

..... bags

[1]

- (c) Pigs need to eat pellets.
Suggest **one** other thing pigs need in their diet.

.....

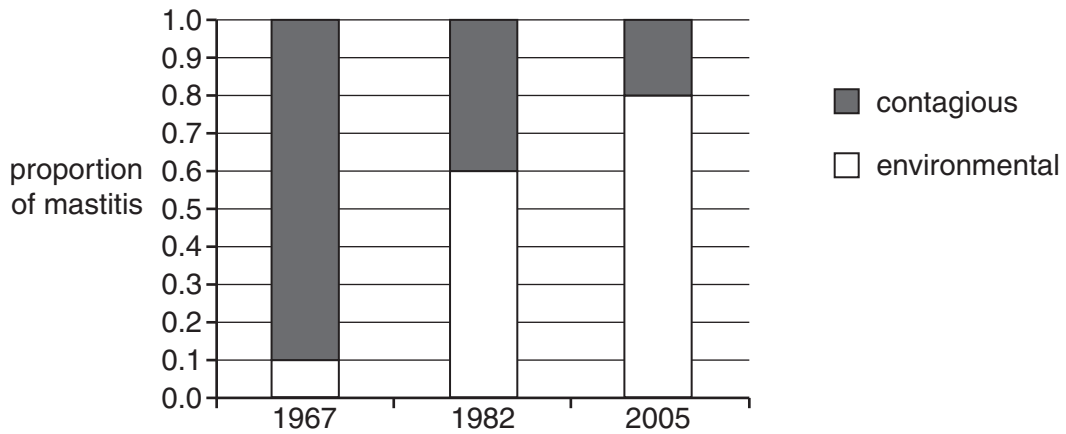
[1]

12 Mastitis is a bacterial disease infecting the udders of cows.

Mastitis can be caught from:

- other cattle – **contagious** mastitis
- dirty wet bedding and a dirty environment – **environmental** mastitis.

The graph shows the percentage of these two types of mastitis in the years 1967, 1982 and 2005.



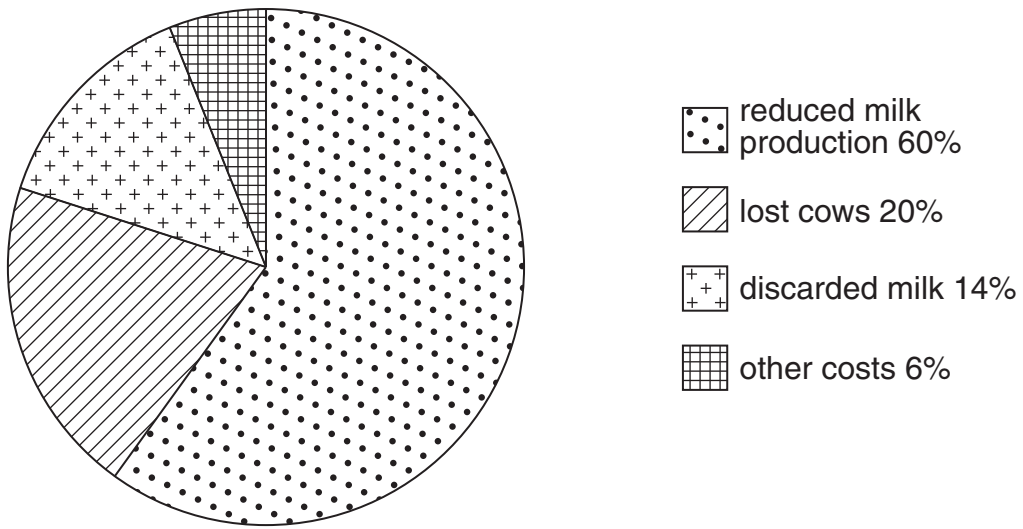
(a) What percentage of cattle had **contagious** mastitis in 1967?

..... [1]

(b) Use the graph to describe the changes in these two types of mastitis.

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

13 The chart shows the total losses caused by mastitis on a typical dairy farm.



(a) How much milk is lost as a result of mastitis?

..... % [1]

(b) For a typical dairy farm the average financial cost of mastitis is £150 000 per year.

Calculate the cost to the farmer of the lost cows.

£ [1]

14 Contagious mastitis is passed from cow-to-cow usually during milking.



How could the farmer reduce the risk of **contagious** mastitis?

.....

.....

.....

..... [2]

15 The picture shows a meat-chicken and egg-layer side-by-side.



A student wanted to answer this question:

“Do meat-chickens grow faster than egg-layers?”

Design an investigation to test this question.

Describe what the student would have to do.

.....

.....

.....

.....

.....

.....

..... [4]

16 Here is a photograph of some piglets.



Explain the difference between an animal's genotype and its phenotype.

.....

.....

.....

..... [2]

END OF QUESTION PAPER

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