



Rewarding Learning

General Certificate of Secondary Education
2018

Centre Number

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

Candidate Number

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Agriculture and Land Use

Unit 2
Animals on the Land



GAL21

[GAL21]

THURSDAY 7 JUNE, AFTERNOON

TIME

1 hour 15 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.
Answer **all nine** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 75.

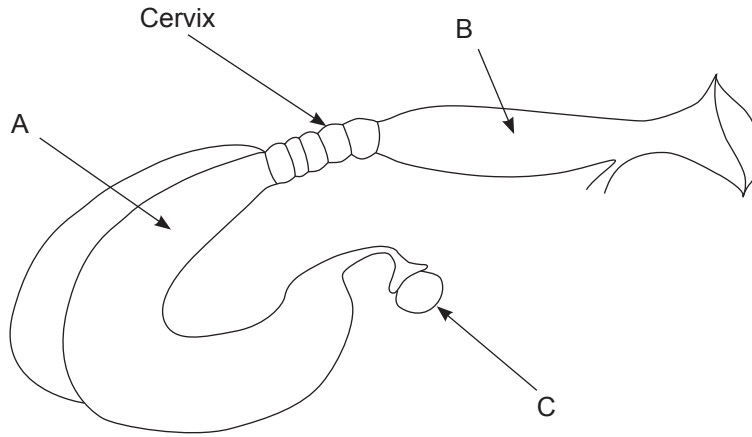
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

Quality of written communication will be assessed in Questions 7 and 9.

| For Examiner's use only | |
|-------------------------|-------|
| Question Number | Marks |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

| | |
|--------------------|--|
| Total Marks | |
|--------------------|--|

1 (a) The diagram below shows the reproductive system of a sheep.



© CCEA

(i) Identify the parts labelled A, B and C.

A _____

B _____

C _____

[3]

(ii) Place an 'I' where insemination would occur.

[1]

(iii) Place an 'F' where fertilisation is most likely to occur.

[1]

(b) Natural fertilisation is the most common method used in agriculture.

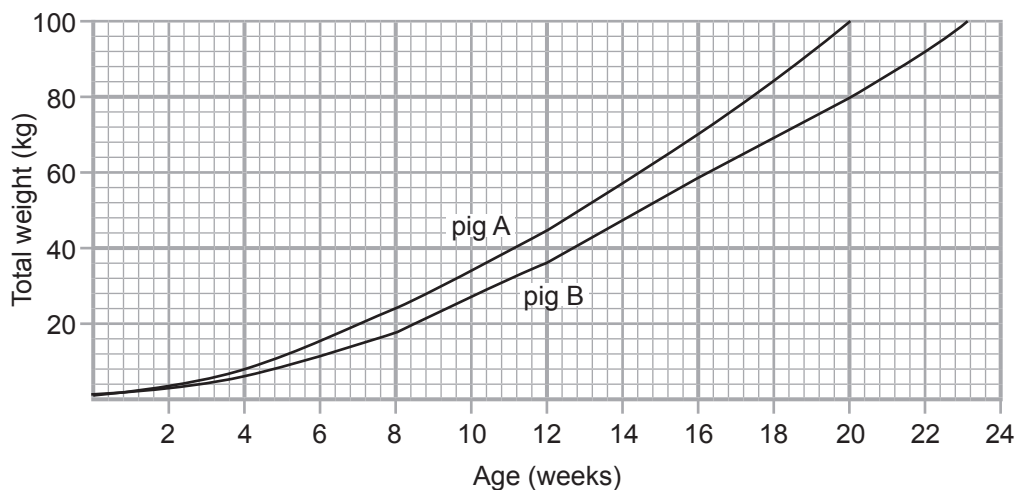
Give **two** reasons why a farmer might choose to use natural fertilisation.

1. _____

2. _____ [2]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

4 The graph below shows the weight of two pigs over a 24 week period.



(i) Describe the trends shown in the graph by pig A and pig B.

[2]

(ii) Calculate the difference in total weight of pig A and pig B at 20 weeks.

Show your working.

_____ kg [2]

(iii) Suggest **two** reasons why there is a difference at 20 weeks between the total weight gained by pig A and pig B.

1. _____

2. _____ [2]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

BLANK PAGE

(Questions continue overleaf)

[9]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

- 8 (a) (i) Animals are fed a range of feed types depending on their nutritional needs.

Place a tick (✓) in the box that best describes each feed type.

| Feed type | Forage | Roughage | Concentrate |
|-----------|--------|----------|-------------|
| Straw | | | |
| Oats | | | |
| Silage | | | |

[3]

- (ii) Feeds have different energy values.

Place the following feeds in order of their energy value, starting with the highest value.

| | | Straw | Meal | Haylage |
|---------|---|-------|------|---------|
| Highest | 1 | _____ | | |
| | 2 | _____ | | |
| Lowest | 3 | _____ | | |

[2]

- (b) A ewe requires 5 kg of dry matter (DM) per day. How much silage would the ewe need to eat each day if the silage has a DM of 25%?

Show your working.

_____ kg [2]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

(c) Concentrate fed cattle are becoming more common in the beef industry.

Give **two** disadvantages of feeding higher levels of concentrate.

1. _____

2. _____ [2]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

[9]

| Examiner Only | |
|---------------|--------|
| Marks | Remark |
| | |

THIS IS THE END OF THE QUESTION PAPER

Permission to reproduce all copyright material has been applied for.
In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA
will be happy to rectify any omissions of acknowledgement in future if notified.