



General Certificate of Secondary Education  
2024

Centre Number

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Candidate Number

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# Agriculture and Land Use

Unit 2

Animals on the Land



[GAU21]

\*GAU21\*

MONDAY 17 JUNE, MORNING

## 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.

**You must answer the questions in the spaces provided.**

**Do not write outside the boxed area on each page or on blank pages.**

Complete in black ink only. **Do not write with a gel pen.**

Answer **all nine** questions.

## INFORMATION FOR CANDIDATES

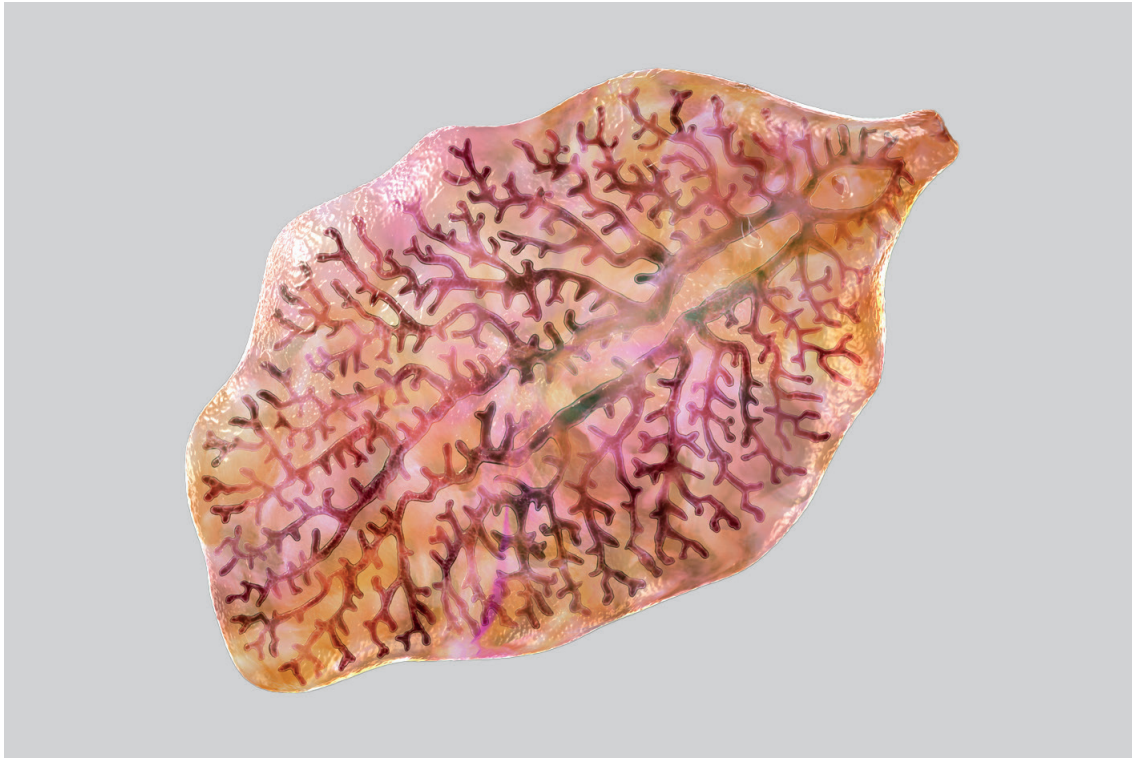
The total mark for this paper is 75.

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**.



- 1 Liver fluke causes a disease which affects farm livestock.  
The photograph shows an adult liver fluke.



Source: © Getty Images

- (a) Complete the following statements about liver fluke.

Choose words from the list below:

<b>bacteria</b>	<b>humans</b>	<b>virus</b>
<b>reduced growth</b>	<b>sheep</b>	<b>inflamed udders</b>
<b>hens</b>	<b>parasite</b>	<b>open wounds</b>

Liver fluke is a \_\_\_\_\_.

Liver fluke is most commonly found in the livers of \_\_\_\_\_.

A common symptom of this disease is \_\_\_\_\_.

[3]



(b) Describe **two** ways to prevent the spread of liver fluke.

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_ [2]

[Turn over



2 Good record keeping is important on the farm. APHIS (Animal and Public Health Information System) is an online tool which allows farmers to record and check information about their animals and business.

(a) Name **two** things which farmers can record or check about their animals on APHIS. An example has been completed for you.

1. Births \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_ [2]

(b) (i) Give **two** benefits of using an online record-based system such as APHIS.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]

(ii) Suggest **one** disadvantage of using an online record-based system.

\_\_\_\_\_

\_\_\_\_\_ [1]

(c) State **two other** new technologies which farmers may use on farms.

1. \_\_\_\_\_
2. \_\_\_\_\_ [2]



3 Northern Ireland has a poultry population of over 25 million. Feed is one of the main costs of poultry farming.

(a) What is the main feed type given to poultry in Northern Ireland?

\_\_\_\_\_ [1]

(b) (i) Apart from feed, state **two other** costs of keeping poultry.

1. \_\_\_\_\_

2. \_\_\_\_\_ [2]

It is important that farmers make a profit to stay in business.

(ii) Define the term 'profit'.

\_\_\_\_\_  
\_\_\_\_\_ [1]

(c) Poultry and pigs have different digestive tracts.

Sort the following parts of the digestive tracts into the correct boxes. One has been done for you.

proventriculus

gizzard

stomach

anus

liver

small intestine

cloaca

Digestive tracts		
pigs only	poultry and pig	poultry only
	liver	

[6]

[Turn over



4 The photograph shows a tractor and dump trailer being used to move soil.



Source: Chief Examiner

Using your knowledge and the photograph, identify three different hazards and describe the associated risks when using a tractor and dump trailer to move soil.

1. Hazard \_\_\_\_\_

Describe the risk

\_\_\_\_\_  
\_\_\_\_\_ [2]

2. Hazard \_\_\_\_\_

Describe the risk

\_\_\_\_\_  
\_\_\_\_\_ [2]



3. Hazard \_\_\_\_\_

Describe the risk

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[2]

[Turn over



5 Milk production forms a large part of the local agricultural economy in Northern Ireland (NI).

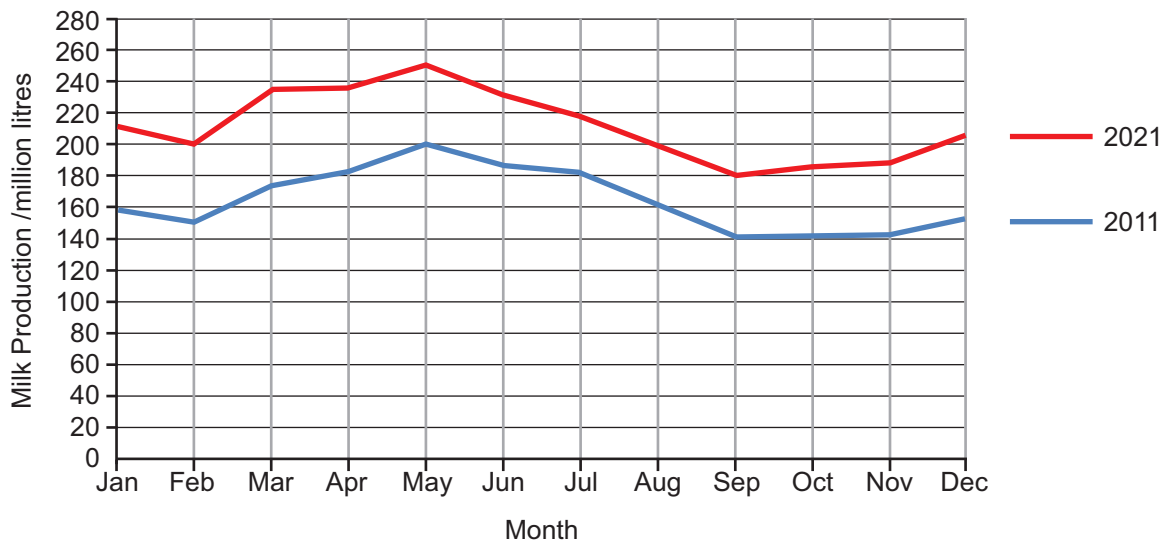
(a) (i) State the typical **annual** milk yield for a dairy cow.

\_\_\_\_\_ litres [1]

(ii) State **three** products that milk can be processed into.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_ [3]

The graph shows the monthly milk production in NI in 2011 and 2021.



Source: Chief Examiner

(b) (i) What was the milk production in February 2021?

\_\_\_\_\_ million litres [1]



(ii) Calculate the difference in milk production between May 2011 and May 2021.

Show your working.

\_\_\_\_\_ million litres [2]

(c) (i) In which month was milk production the lowest for both years?

\_\_\_\_\_ [1]

(ii) Suggest **one** reason why the production varies throughout the year.

\_\_\_\_\_  
\_\_\_\_\_ [1]

[Turn over



(d) In 2021 NI produced a total of 2580 million litres of milk, of which 80% was exported to other countries.

Calculate the total quantity of milk exported in 2021.

**Show your working.**

\_\_\_\_\_ million litres [2]





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**(Questions continue overleaf)**

**[Turn over**

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- 6 Selective breeding of cattle over many generations has given us the variety of breeds we have today.



Source: © Getty Images

- (a) For **two** named breeds of cattle you have studied, give one desirable trait. The desirable trait must be different for each breed.

Breed chosen \_\_\_\_\_

Desirable trait \_\_\_\_\_

Breed chosen \_\_\_\_\_

Desirable trait \_\_\_\_\_ [4]

















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**THIS IS THE END OF THE QUESTION PAPER**

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**DO NOT WRITE ON THIS PAGE**

<b>For Examiner's use only</b>	
<b>Question Number</b>	<b>Marks</b>
1	
2	
3	
4	
5	
6	
7	
8	
9	
<b>Total Marks</b>	

**Examiner Number**

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