

**NGULUDI CLUSTER MOCK EXAMINATION****2019 MSCE MOCK EXAMINATION****AGRICULTURE**

Subject Number: M012/II

Date: \_\_\_\_\_

Time Allowed: 1  $\frac{1}{2}$  hours

10:00 am onwards

**PAPER II**  
(40 Marks)**Practical****Instructions**

1. This paper contains 6 printed pages. Please check.
2. Answer **all** questions in the spaces provided. Marks are indicated against each part of the question.
3. Write your **Name** on **all** pages.
4. In the table provided on this page, **tick** against the question number you have answered.
5. At the end of the examination, hand in your paper to the invigilator.

Question number	Tick if answered	Do not write in these columns	
1			
2			
3			
4			

1. A researcher carried out a soil analysis on his farm. From the tests, it was found that the soil lacked nitrogen.

(a) Name any **one** example of fertilizer that can be recommended on this farm

\_\_\_\_\_

(1mark)

(b) The researcher carried out further research to find out the best rate of fertilizer application on maize yield. The results are shown in the table 1 below. Use it to answer questions that follow.

Rate of fertilizer (kg/50m <sup>2</sup> )	Maize yield (kg)
20	150
40	165
60	180
80	180
100	175

Table: 1

(i) What is the best rate of fertilizer that can be recommended on this farm?

\_\_\_\_\_

(1 Mark)

(ii) Give a reason for the answer to question 1 (b) i.

\_\_\_\_\_

\_\_\_\_\_

(2 marks)

(iii) Name **one** economic principle in farm business decision making which is illustrated in the table.

\_\_\_\_\_

(1 Mark)

(iv) Explain **one** way in which the principle named in question 1 (b) iii can help in business decision making.

(2 marks)

(c) Name any **three** factors that were kept constant in this research.

(3marks)

2. Table 2 shows a record for Mr. Moyo's dairy enterprise. Use it to answer questions that follow

Cow Number	Heat date	Date of service	Method of service	Pregnancy test results	Cost of service	Veterinarian
1	7/11/2018	8/11/2018	Artificial Insemination	Positive	K4, 000	Mr. Moyo
2	31/10/2018	1/11/2018	Natural	Positive	-	-
3	12/11/2018	12/11/2018	Artificial Insemination	Negative	K3, 000	Mr. Longwe

Table: 2

(a) Name the type of farm record shown in the table.

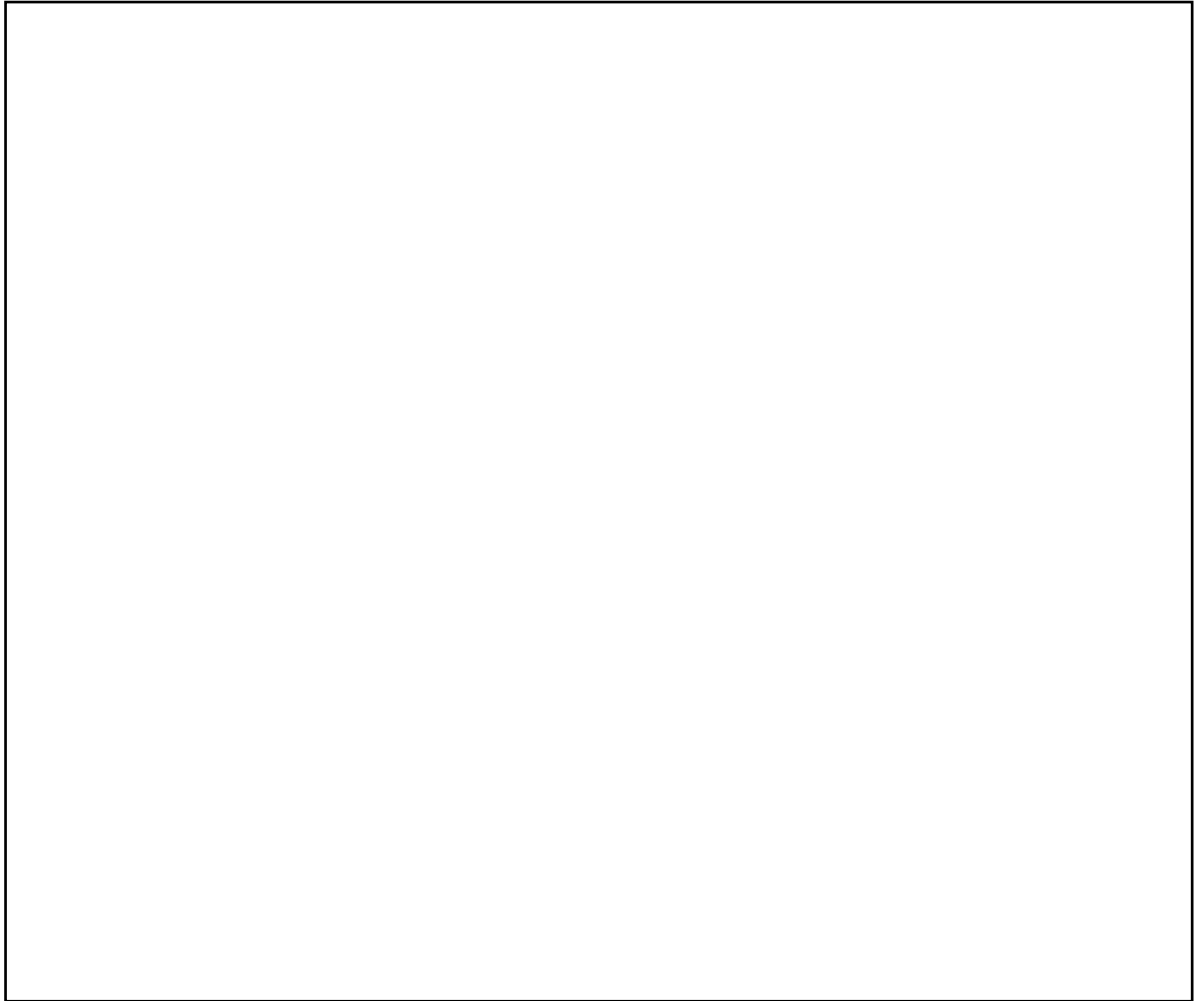
(1mark)

(b) Explain any **three** ways in which the record is important.

(6marks)

Continued/...

(c) When will cow number 2 give birth? Show your calculations.



**(3marks)**

3. You are provided with soil samples labelled X, Y and Z.

- Wet each of the soil samples with equal amount of water;
- Press a small amount of each soil samples between the thumb and forefinger;
- Open the fingers slowly;
- Observe;

(a) Complete the table below to indicate characteristic of each soil sample.

Characteristics	Sticky	Slightly sticky	Non sticky
Soil sample			

(3 Marks)

- (b) Roll each of the wet soil samples between the palms of your hands to form a ribbon and complete the table below to indicate characteristic of each soil sample

Characteristics	Very Plastic	Plastic	Non plastic
Soil sample			

(3 Marks)

- (c) Explain **two** ways in which the experiment is important in crop production.

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(4marks)

4. You are provided with two specimen of animal feeds labelled A and B

- (a) Classify the specimen into classes of livestock feeds.

A: \_\_\_\_\_ (1 Mark)

B: \_\_\_\_\_ (1 Mark)

- (b) Give a reason why specimen B is **not** suitable feed for pigs.

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(2marks)

- (c) Rub specimen A on the white paper

- (i) Write **one** observation.

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(1 Mark)

(ii) From the observation in question 4 (c) i, name the main feed nutrient that livestock can obtain from the specimen.

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(1 Mark)

(iii) What is the function of the feed nutrient named in question 4 (c) ii?

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(1 Mark)

(d) (i) Name a marketing function that has been performed to obtain specimen A.

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(1 Mark)

(ii) Give any **two** ways in which the marketing function named in d (i) above is important.

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(2 marks)

**END OF QUESTION PAPER**

**NB: This paper contains 6 printed pages**

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