

Candidate's Name

Signature

Random No					Personal No			

(Do not write your school/Centre Name or number anywhere on this booklet)

527/2

Principles and practices

Of Agriculture

Paper 2

(Practical)

July/August 2019

2 hours

MOCK EXAMINATION 2019
UGANDA CERTIFICATE OF EDUCATION
PRINCIPLES AND PRACTICES OF AGRICULTURE
(Practical)
Paper 2
2 HOURS

Instructions to Candidates:

This paper consists of five questions

Answer **all** questions.

The answers are to be written in ink in the spaces provided.

FOR EXAMINER'S USE ONLY		
Question	Marks	Examiner's Signature
1		
2		
3		
4		
5		
TOTAL		

1. You are provided with specimens A_1 and A_2 which are soil samples.
Carry out the following experiments using these soil samples.

(a) Place 80cm^3 of A_1 into a measuring cylinder. Ensure that the soil is well compacted by gently tapping the cylinder.

- Pour 20cm^3 of water onto the soil and allow to stand for 5 minutes.
- Repeat the experiment with soil sample A_2

(i) Measure the depth of the wet soil in each measuring cylinder and record in the space below

Depth in A_1 cm

Depth in A_2 cm

(1 mark)

(ii) Suggest an explanation for your results in (a) (i) above

Explanation

A_1

.....
.....
.....

A_2

.....
.....
.....

(1 mark)

(iii) Basing on your results comment on the suitability of each specimen for crop production

A_1

.....
.....
.....

(1 mark)

A₂.....
.....
.....
.....

(1 mark)

(b) Put a spatula full of A₁ in a test tube. Add 2cm³ of water, shake and leave to settle

- Decant a clear liquid into another test tube.
- Add drops of universal indicator

(i) Using a pH chart provided record the pH of A₁ in the space below

Repeat this experiment with soil sample A₂

pH of A₁(1 mark)

pH of A₂(1 mark)

(ii) Suggest the possible causes of the observed pH of each specimen

A₁
.....
.....

(1 mark)

A₂
.....
.....

(1 mark)

(iii) How can the pH of the specimens be modified to suit crop production

For A₁

.....
.....

(1 mark)

For A₂

.....
.....

(1 mark)

2. You are provided with specimens B₁ B₂ and B₃ B₄ and B₅ which are used together in a farm operation

(a) Name the farm operation where these specimens are used. (½ marks)

.....

(b) State the function of each specimen

B₁

.....

B₂

.....

(½ mark)

B₃

.....

(½ mark)

B₄

.....

(½ mark)

B₅

.....

(½ mark)

(c) State the design/features on each specimen that make them suitable for their functions.

B₁

.....
.....

(1mark)

B₂
.....
.....

(1 mark)

B₃
.....
.....

(1 mark)

B₄.....
.....
.....

(1 mark)

B₅
.....
.....

(2 marks)

(d) Describe the procedure of the operation while using the given specimens.

(2 marks)

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.....

- 3. Specimens C₁ and C₂ are obtained from farm animals
 - (a) Observe the specimens and their contents then describe the structure of each specimen and its contents in table 1 below.

Specimen	Description of contents and structure	
	Structure	Contents
C ₁		
C ₂		

- (b) Name the farm animals from which each specimen was obtained
 - C₁(1 mark)
 - C₂(1 mark)
- (c) From which system of the farm animal was each specimen obtained?

C₁(1 mark)

C₂ (1 mark)

(d) How is each specimen suited to its function? (2 marks)

C₁
.....
.....

C₂
.....
.....

4. You are provided with crop parts affected by diseases. Closely examine the parts D₁ and D₂ and answer questions below.

(a) Identify the crop part affected and mention the disease responsible for the damage. (2 marks)

Specimen	plant part	Disease
D ₁
D ₂

(b) Write down the observable damage on each of these specimens.

Damage on:
D₁
.....
.....
.....

(2 marks)

D₂

.....
.....
.....

(2 marks)

(c) Mention possible ways of controlling each of these diseases on respective crop plants

Control of effect on

D₁
.....
.....

(2 marks)

D₂
.....
.....
.....

(2 marks)

5. Specimens E₁ E₂ E₃ and E₄ can be used as animal feeds.
Study the specimens and answer the questions below

(a) State two benefits of feeding each of the specimens to live stock (2 marks)

E₁
.....

E₂
.....

E₃
.....

E₄
.....

(b) Give three advantages of feeding E₃ instead of E₄ to animals. (2 marks)

- (i)
- (ii)
- (iii)

(c) Describe how specimen E₂ is prepared. (3 marks)

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END