527/2
Principles and Practices
of Agriculture
(Practical Paper)
Paper 2

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

(Practical Paper)

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- *This paper consists of **five** questions.*
- *Answer **all** questions.*
- *The answers are to be written in the spaces provided.*

For examiner's use only	
Questions	**Marks**
1	
2	
3	
4	
5	
Total	

1. You are provided with specimens Aand B which are soil samples. Measure 30cm^3 of specimen A and pour it into a funnel which is lined with filter paper. Place the funnel onto the measuring cylinder provided. Add 30cm3 of water on ***Turn Over***
filter funnel and start the stop clock.

   (a) (i) Nate the time taken for the first drop to appear.

   (ii) After five (5) minutes note and record the volume of water collected in the measuring cylinder in the table below.

(iii) Repeat the procedure with specimen B.

Specimen	Time taken for 1st drop to appear	Volume of water collected
A		
B		

(b) (i) Explain the differences in the time taken for the first drop to appear in the soil samples A and B. (02 marks)

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(ii) Explain the differences in the amount of water that passed through the soil samples after five minutes. (02 marks)

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(c) Calculate the percentage of water that was retained in specimen A. (02 marks)

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(d) (i) Suggest one method how the soil sample with the least amount of water retained can be improved. (01 mark)

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(ii) What is the importance of the results of the experiment to the farmer? (01 mark)

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2. You are provided with specimens C, D, E and F which are common plants found in arable lands.

(a) Bend until you break the stems of each of the specimen. Record your observations and from your observation classify the specimens in the table below. (03 marks)

Specimen	Observations	Classification
C		
D		
E		

(b) Using observable features, state why each of the specimen is successful as a weed. (04 marks)

F

……...

……...

C

……...

……...

D

……...

……...

E

……...

……...

(c) Using your observations from (b) above, give two most suitable methods of controlling specimens C, D and E.

C

(i) …….

……...

(ii) …….

……...

D

(i) …….

……...

(ii) …….

……...

E

(i) …….

……...

(ii) …….

……...

3. You are provided with specimens J, G, H and I which are materials that are used in the tractor.

(a) Observe them carefully and describe the condition of specimens F, G and H. (03 marks)

J

……...

……...

G

……...

……...

H

……...

……...

(b) From your observations in (a) above which parts of the tractor are each of the specimens used? Give a reason for your answer. (03 marks)

J

……...

……...

Reason

……...

G

……...

……...

Reason

……...

H

……...

……...

Reason

……...

(c) What are the functions of specimens J when used in the tractor? (02 marks)

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(d) Compare specimens J and I and then give what may have cause the differences in the two specimens. (02 marks)

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4. You are provided with specimen K which is an animal product.

(a) Identify the faults on specimen and their causes. (05marks)

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(b) Describe the procedure of treating specimen K so that it can fetch a high price in the market. (05 mark)

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5. You are provided with specimens P, Q, R, S and T which are materials and tools used for erecting a barbed wire fence.

(a) Describe the observable features that make specimens P, Q and S suitable for their functions. (03 marks)

P

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……...

Q

……...

……...

S

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(b) What practices should a farmer do so that specimen R is not affected by weather conditions? (01 mark)

(i) …….

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(ii) …….

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(c) Describe how specimens P, Q, R, S and T are used in order to erect a barbed wire fence. (05 marks)

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(d) Suggest two ways in which specimen R can be maintained in good working conditions.

(i) …….

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(ii) …….

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END