

NameCentre No.....

Sign

527/2

*Principles and
Practices of Agriculture
(Practical)*

Paper 2

2 hours

RESOURCEFUL MOCKS 2019
UGANDA CERTIFICATE OF EDUCATION
PRINCIPLES AND PRACTICES OF AGRICULTURE
527/2 (PAPER 2)
TIME: 2 HOURS

Instructions to candidates:

This paper consists of five questions. Answer all questions.

Answers are to be written in ink in the spaces provided.

FOR EXAMINER'S USE ONLY		
QUESTIONS	MARKS	EXAMINER'S SIGNATURE
1		
2		
3		
4		
5		
TOTAL		

1. You are provided with specimens A₁ and A₂ which are crushed soil samples. Measure 30cm³ of soil sample A₁ and pour into a filter funnel lined with filter paper or cotton wool. Place the filter funnel onto the measuring cylinder provided.
Add to it 50mls of clean water and start the clock. Stop the experiment after 2 minutes.
Record the volume of water collected in the measuring cylinder. Repeat the procedure with specimen A₂ then answer questions below

(a) Record your results in the table below

(4 marks)

Specimen	Volume of water collected	Volume of water retained
A ₁		
A ₂		

(b) Calculate the percentage of water retained by each soil sample

(2 marks)

(i) A₁

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(ii) A₂

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(c) Mention the physical soil characteristic being investigated in this experiment. (1 mark)

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(d) From your data collected, deduce which of the soil samples is good for crop growth, give two reasons (3 marks)

(i) Soil sample good for crop growth

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(ii) Reasons

(i)

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(ii)

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2. Specimens B₁—B₅ are materials from a plant crop. Study each material provided and answer questions which follow.

(a) Comment on the suitability of each material for planting and give reasons in each case.
(5 marks)

Material	Suitability for planting	Reason
B ₁		
B ₂		
B ₃		
B ₄		
B ₅		

(b) Describe how a sugar cane crop is planted by use of sets/stem cuttings (5 marks)

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3. You are provided with specimens C₁ C₂ and C₃ which are usually used to perform livestock management operation.

(a) Mention the farm operation where these specimens are used: (1 mark)

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(b) State a technical word to describe the operation while using: (2 marks)

C₁

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C₂ and C₃

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(c) Describe how C₂ and C₃ are used together to achieve the operation (4 marks)

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(d) Give the advantages that the use of C₂ and C₃ have over the use of C₁ (3 marks)

Advantages of using C₂ and C₃ over C₁

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4. You are provided with specimens D₁ and D₂ cut open and extracted from farm animals.
Observe the specimens closely and answer questions below

(a) In each case name the farm animal from which the specimen was extracted (1 marks)

D₁

D₂

(b) In which system of a farm animal where these specimens extracted respectively.
(1 mark)

D₁

D₂

(c) Describe the structure and contents of each specimen (4 marks)

D₁.....

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D₂.....

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(d) Describe how the structure of each specimen is adapted to its functions (4 marks)

D₁.....

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D₂.....

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5. You are provided with specimen E₁ and E₂ which are parts of an engine. Study the specimens and answer questions which follow;-

(a) Name the engine system where these specimens belong. (1 mark)

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(b) Describe how these specimens E₁ and E₂ work together in the engine. (5 marks)

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(c) How does a tractor operator ensure that E₁ and E₂ work efficiently

E₁

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E₂

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END