

Name..... Signature.....

School..... Index No.....

527/2
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
(Practical)
Paper 2
July/August 2017
2 hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- All answers should be written in the spaces provided.

FOR EXAMINER'S USE ONLY		
QUESTION	MARKS	EXAMINER'S No.
1		
2		
3		
4		
5		
TOTAL		

1. Specimens A, B, C, D, E and F are common workshop tools.

a) Explain why;

(i) A and F have different shapes.

(02 marks)

A.
.....
F.
.....

(ii) B and D are made of different materials.

(02 marks)

B.
.....
D.
.....

(iii) C and E have different designs.

(02 marks)

C.
.....
E.
.....

b) Give reasons why these specimens are kept in a tool box.

(04 marks)

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

2. Specimens G and H are animal products.

a) (i) Observe and describe the conditions of each specimen.

(02 marks)

G.
.....
H.
.....

(ii) Comment on the suitability of the two specimens for consumption.

(02 marks)

G.
H.
.....

b) From the observation made in (a) above, state the possible causes of the condition observed in H.

(02 marks)

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

c) Suggest the precautions to be taken to reduce the condition on H.

(02marks)

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

d) How can the suitability of G be maintained?

(02marks)

.....

.....

.....

.....

3. Specimens I, J, K and L are seeds of pasture plants.

a) Observe them and group them according to the nutrients they supply to farm animals.

(02 marks)

.....

.....

b) (i) What would be the best combination for the above specimens in a mixed pasture?

(01 marks)

.....

(ii) Give reasons to support your combination in b (i) above.

(03 marks)

.....

.....

.....

c) Describe how the combination in b (i) can be used to establish a ley.

(04 marks)

.....

.....

.....

.....

.....

.....

4. Specimen M, N and O are components of a tractor system.

a) Name the tractor system to which the specimens belong.

(01 mark)

.....

b) State the functions of each specimen in the system mentioned in (a) above.

(03 marks)

M:

.....

N:

.....

O:

.....

c) Observe the specimen O and point out the faults on it.

(01mark)

.....

.....

d) Draw and label specimen O in the space provided.

(03 marks)

e) State ways of maintaining M in good working condition.

(02marks)

5. Samples P and Q are provided. Pour sample P in a funnel lined with a filter paper. Place the funnel onto the conical flask. Measure 40ml of water and pour it on sample P. Wait until all the water has stopped coming out of the funnel. Repeat the procedure using Q.

a) Record your findings in the table below.

(02 marks)

Sample	Volume of water collected (cm ³)	Volume of water retained (cm ³)
P		
Q		

b) Calculate the percentage of water collected for:

i) P.

(1½ marks)

ii) Q.

(1½ marks)

c) Give reasons for the differences in answers in b (i) and b (ii) above.

(02 marks)

i) P.

ii) Q.

d) How can the condition in (b) (ii) above be improved?

(02 marks)

e) Suggest the aim of carrying out this experiment.

(01 mark)

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PRINCIPLES
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(Practical)
Paper 2
July/August 2015
2 hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
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FOR EXAMINER'S USE ONLY		
QUESTION	MARKS	EXAMINER'S No.
1		
2		
3		
4		
5		
TOTAL		

1. Specimens A, B, C and D are used in building construction.

a) Group them according to the functions they perform in construction. (01 mark)

.....
.....

b) Give reasons for your answer in (a) above. (02 marks)

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

c) Describe how specimen A and B are used in farm building construction. (06 marks)

A
.....
.....
.....

B
.....
.....
.....

d) How can specimens B and D be maintained after construction. (01 mark)

.....
.....

2. Specimens E has been affected by a pest.

a) Cut the specimen open and describe the damage. (03 marks)

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

b) Name the pest that has damaged the specimen. (01 mark)

.....

c) How does the pest in (b) above damage the specimen? (01 marks)

.....

.....

.....

d) What advice would you give farmers to control this pest? (03 marks)

.....

.....

.....

.....

e) What are the effects of these damages on the productivity of the crop? (02 marks)

.....

.....

3. Specimen F is a common equipment used on the farm.

a) State **three** activities carried out using F. (03 marks)

.....

.....

.....

b) Describe how the specimen is used to achieve the activities in (a) above. (05 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c) State **two** common faults associated with using F on the farm. (02 marks)

.....

.....

.....

4. Examine specimens G, H and I which are components of a tractor.
Identify a fault on each specimen that may affect its efficient functioning. (03 marks)

a)

G.

H.

I.

- b) How can the observed fault affect the working the specimen? (03 marks)

G.

H.

I.

- c) Suggest how the faults can be corrected. (03 marks)

G.

.....

H.

.....

I.

.....

- (d) What equipment is used to determine the gap on G? (01 mark)

.....

5. Specimens J, K, L and M are common weeds.

- a) Observe the specimens and give the features that make them survive as weeds. (04 marks)

J.

K.

L.

M.

- b) Observe the specimens and state how they are propagated. (02 marks)

J.

K.

L.

M.

- c) Describe how specimen K is dispersed. (02 marks)

.....

.....

- d) Describe how specimens L and M can effectively be controlled. (02 marks)

.....

.....

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PRINCIPLES
AND PRACTICES
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(Practical)
Paper 2
July/August 2014
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WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- All answers should be written in the spaces provided.

FOR EXAMINER'S USE ONLY		
QUESTION	MARKS	EXAMINER'S No.
1		
2		
3		
4		
5		
TOTAL		

1. You are provided with specimens A, B, C and D which are used in ration formulation.
- (a) Classify them according to their feeding values. (02marks)

A. _____

B. _____

C. _____

D. _____

- (b) State the uses of the specimens to animals as feeds. (03marks)

A. _____

B. _____

C. _____

- (c) Specimen B contains 8% CP and C 33% CP. Show how you mix the two to form a 13% CP 50kg chick mash ration. (05marks)

2. You are provided with specimen E, F and G which are soil samples.

- (a) Get small amounts of each specimen and moisten it. Rub each specimen between your fingers. Record your feel for the samples.

E. _____ (01mark)

F. _____ (01mark)

G. _____ (01mark)

- (b) What soil property is being investigated? (01mark)

(c) How does the property identified in (b) above affect crop growth? (03marks)

(d) Suggest three ways of improving specimen G for crop growing. (03marks)

3. Specimen H₁, H₂, H₃, H₄, H₅ and H₆ are work shop tools.

a) Group the specimens according to their functions. (03marks)

Group	Function

b) How does each member in the pair differ in function? (03marks)

c) Observe specimen H₁, H₂ and H₅ and state the feature that make them perform their function well. (03marks)

H₁ _____

H₂ _____

H₅ _____

d) How can specimen H₂ be maintained? (01mark)

4. Specimen I and J are used in a tractor.

a) In which tractor system are the specimens used? (01mark)

b) Give reasons why the specimens are useful in the system named in (a) above? (04marks)

c) Suggest parts of a farm tractor where the specimens are used. (02marks)

I _____

J _____

d) (i) What equipment is used when applying I into a tractor? (01mark)

(ii) What equipment is used to determine the condition of J in the engine?
(01mark)

e) Why should I and J be used on farm implements and tools after a season's work? (01mark)

5. Specimen K and L are used in livestock management.

(a) State the significance of these specimens in livestock management.
(01mark)

b) Give the reasons for the practice in (a) above. (02marks)

(i) _____

(ii) _____

c) Describe how specimen K is used on the animal. (05marks)

d) What are the appropriate parts on the farm animals where K can be used?
(02marks)

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PRINCIPLES
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(Practical)
Paper 2
July/August 2013
2 hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- All answers should be written in the spaces provided.

FOR EXAMINER'S USE ONLY		
QUESTION	MARKS	EXAMINER'S No.
1		
2		
3		
4		
5		
TOTAL		

1. You are provided with specimens A, B, C, D and E which are used in Livestock management.

a) In what farm operation are the specimens used? (1/2 mks)

b) Describe the procedure followed in carrying out the operation stated in (a) above. (05mks)

c) Describe the structure of specimens B and E (02mks)

B:

E:

d) State how the structure of specimens D and E is related to their functions. (02mks)

D:

E:

e) What management practice should be carried out on specimens B, D and E after the operation in (a) above? (1/2mk)

2. You are provided with specimen F which is a component of a tractor system.

a) State the role of the specimen in a tractor. (01mk)

b) Observe the specimen and state the features that enable it perform its duty well. (02mks)

c) Identify the faults on the specimen (02mks)

d) How do the above faults affect the performance of the specimen? (02mks)

e) Describe how specimen G is used on F (03mks)

3. Specimen H is a common livestock parasite.

a) To what category of parasite does it belong? (½mks)

b) Draw and label the specimen in the space provided.

(2 ½ mks)

c) State the observable features that enable the specimen live parasitically.

(03mks)

d) What is the economic importance of the specimen in livestock production?

(02mks)

e) How can farmers overcome this specimen on their farms?

(02mks)

4. Specimen J,K,L and M are used to improve soil productivity.

a) Observe the specimens and describe their appearance. (1½ mks)

Specimen	Appearance
J	
K	
L	

b) i) Label the test tubes J, K and L

Half fill the test tubes with water. Add a spatula full of each specimen and shake. Leave the set up to stand for 5 minutes. Record your observations in the table below. (1½ mks)

Specimen	Observations
J	
K	
L	

ii) Suggest a reason from the above observation the best stage for applying the specimens in maize growing. (03mks)

J. _____

K. _____

L. _____

Turn Over
5

- c) Observe specimen **M** and suggest reasons why most farmers prefer using **M** in crop growing. (4mks)

5. You are provided with specimens **N**, **O** and **P** which are common on crop land.
a) Give **three** ways in which the specimens affect crop production. (03mks)

- b) Observe the specimens and state how each specimen is adapted to its way of life. (03mks)

N.

O.

P.

- c) Give a reason why specimen **N** is a notorious weed. (01mk)

- d) What would be the most effective methods of controlling **N**. (03mks)

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(Practical)
Paper 2
July/August 2012
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WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- All answers should be written in the spaces provided.

FOR EXAMINERS' USE ONLY		
QUESTIONS	MARKS	EXAMINERS' No.
1		
2		
3		
4		
5		
TOTAL		

1. You are provided with soil samples A₁ and A₂. Follow the instructions below and conduct the experiment.

Plug each of the funnels with cotton wool/filter paper.

- Put soil sample in a measuring cylinder up to 60ml mark.
- Pour each sample in a separate plugged funnel.
- Put the funnels on to a measuring cylinder/conical flask/Beaker.
- Add 50cm³ of water, on top of the soil in each funnel.
- Let the water drip until it stops.

- a) Record in the table below.

(02 marks)

Soil sample	volume of water used	volume of water collected	volume of water retained
A ₁	50ml		
A ₂	50ml		

- b) i) In which soil samples was the highest volume of water collected?

(¹/₂ mark)

- ii) Give a reason to support your answer.

(¹/₂ mark)

- c) Calculate the percentage of water that was retained.

A₁

.....

.....

(02 marks)

A₂

.....

.....

(02 marks)

- d) What soil properties are being investigated?

.....

.....

(01 mark)

- e) From the experiment, state with reason the soil sample which is more suitable for crop production.

Soil sample

.....
(01 mark)

Reason:

.....
(01 mark)

2. Specimens B₁ – B₆ are used in livestock management.

- a) Observe specimens B₂, B₃ and B₄ and state the feature that make them perform their duty well.

B₂,

.....
(01 mark)

B₃

.....
(01 mark)

B₄

.....
(01 mark)

- b) Why are specimens B₁, B₅ and B₆ useful in livestock management?

B₁

.....
(01 mark)

B₅

.....
(01 mark)

B₆

.....
(01 mark)

- c) Describe how specimen B₂ is used on the farm animal.

.....
.....
.....
.....
(04 marks)

3. Specimens C₁, C₂ and C₃ are used in crop growing.

- a) Identify the specimens.

C₁

.....

Turn Over

C₂

C₃ (1½ marks)

b) Observe the specimens and give the characteristics of each.

C₁

C₂

C₃ (1½ marks)

c) State the precautions taken in the preparation of specimen C₃.

.....
.....
(02 marks)

d) Give reasons why most farmers prefer C₃ to C₁ in crop growing.

.....
.....
(02 marks)

e) What are the effects of too much application of C₁ in crop growing?

.....
.....
(02 marks)

4. Specimens D₁ – D₄ are components of a tractor system.

a) Identify the specimens.

D₁

D₂

D₃

D₄ (02 marks)

b) i) Name the system to which the components belong.

.....
(½ mark)

ii) What is the function of the system named in b(i) above to the tractor.

.....
(1/2 mark)

c) What roles do specimens D₂ and D₃ play in the system? (02 marks)

D₂

D₃

d) Observe specimens D₄ and describe the features that make it perform its duty well.

.....
.....
.....
.....
(05 marks)

You are provided with specimens F₁ – F₈ which are used in farm structure construction.

a) Describe how you can use the above specimens collectively in constructing the foundation of a building.

.....
.....
.....
.....
.....
.....
.....
(07 marks)

b) What are the observable differences between F₂ and F₄?

F₂

F₄
(01 mark)

c) What is the importance of the above differences in building construction?

F₂

F₄

(01 mark)

- END-

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PRINCIPLES AND
PRACTICES OF AGRICULTURE
July/August 2010
2 hours

WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- Answer all questions
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FOR EXAMINERS' USE ONLY		
QUESTIONS	MARKS	EXAMINERS' No.
1		
2		
3		
4		
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TOTAL		

- I. You are provided with specimens A_1 , A_2 and A_3 when have been collected from the same spot. Carefully observe them and answer the following questions.

a) State two observable characteristics of each of the specimens.

A_1

(i)

(ii)

A_2

(i)

(ii)

A_3

(i)

(ii)

b) Identify the specimens

3marks

A_1

A_2

A_3

1 1/2 Marks

c) State three ways in which sample A_3 influence sample A_1

i)

ii)

iii)

d) Give four factors that affect the transformation of A_3 to A_1 .

1 1/2 Marks

i)

ii)

iii)

iv)

4Marks

2. Specimen B is a diseased crop plant
a) Identify the disease affecting specimen B

.....
.....
(1mk)

(ii) State two symptoms of the disease as observed on specimen B.

- i)
ii)
(2mk)

(iii) Give one method by which the disease spreads from one plant to another.

.....
.....
.....
(1mk)

(iv) Suggest three effective control measures of the disease.

.....
.....
.....
(3mk)

b) Specimen C is a crop affected by a pest

(i) State one damage on the specimen C

.....
.....
(2mk)

(ii) Name the pest responsible for the damage.

.....
.....
(1mk)

3) Provided are specimens P₁ and P₂. Study each carefully and answer the questions that follow

a) Identify the specimen;

Specimens

Identifications

P₁

P₂

(2mks)

Turn Over

b) Suggest any four factors that would reduce on the quality of specimens P1 and P2.

(i) Before slaughter

- i)
- ii)
- iii)
- iv) (2mk)

(ii) During slaughter

- i)
- ii)
- iii)
- iv) (2mk)

(iii) After slaughter

- i)
- ii)
- iii)
- iv) (2mks)

Differentiate between the specimens

P1	P2
i)
ii)

(2mks)

4. Specimens N₁, N₂, N₃, N₄, N₅ and N₆ are garden tools.

a) State at least one feature that enables each specimen to perform its functions.

N₁.....

N₂.....

N₃.....

N₄.....

N₅.....

N₆.....
(3mks)

6. How can you use N₁, N₄ and N₆ in the establishment and maintenance of a nursery bed?

i)

ii)

iii)
(3mks)

c) Suggest four ways of maintaining above tools in good working conditions.

i)

ii)

iii)

iv)
(4mks)

5. Provided are specimens S and T. Observe them closely and answer the questions that follow.

a) State any two functions of each of the specimens.

S

i)

ii)

Turn Over

- T
- i)
 - ii) (2mks)
- b) State any four measures that you would employ to make the specimen S to perform its functions effectively.
- i)
 - ii)
 - iii)
 - iv) (4mks)
- c) State any two properties of specimen T.
- i)
 - ii) (2mks)
- d) What are the contaminants of specimen T
- i)
 - ii) (2mks)

-END-