

Candidate's Name :

Signature :

Random No.						Personal No.		

(Do not write your School/ Centre Name or Number anywhere on this booklet.)

527/1

**PRINCIPLES &
PRACTICES OF
AGRICULTURE**

(Theory)

Paper 1

Oct./Nov. 2022

2½ hours



UGANDA NATIONAL EXAMINATIONS BOARD

Uganda Certificate of Education

**PRINCIPLES AND PRACTICES OF AGRICULTURE
(THEORY)**

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Answer all questions in part A and four questions from part B, including at least one question from each section.

For Examiners' Use Only			
Part	Question	Marks	Examiner's Signature & No.
A	No. 1-5		
B	No.		
	No.		
	No.		
	No.		
Total			

PART A (20 MARKS)

Answer **all** questions in this part. For question 1, write the letter corresponding to the best answer in the box provided. For question 2 to 5, write all your answers in the spaces provided.

1. (a) Which one of the following is **not** a reason for grooming calves?

- A. Stimulating digestion.
- B. Removing external parasites.
- C. Keeping the skin loose and flexible.
- D. Stimulating the flow of blood.

☐

(b) Which one of the following building construction tools is used to check if bricks have been laid horizontally in a straight line?

- A. Plumb bob.
- B. Try square.
- C. Spirit level.
- D. Trowel.

☐

(c) Which one of the following will ensure effective use of agricultural credit?

- A. Availing credit to all farmers.
- B. Encouraging the culture of saving.
- C. Timely availability of credit.
- D. Limiting the use of credit to the intended purpose.

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(d) Which one of the following nutrients causes a deficiency symptom of poor root development in plants?

- A. Phosphorus.
- B. Calcium.
- C. Potassium.
- D. Iron.

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2. State **four** practices that lead to the production of high quality hides. (04 marks)

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3. Suggest **five** ways by which farm workers can be motivated to work hard. (05 marks)

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4. List **five** advantages of using a spray race in the control of ticks. (05 marks)

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5. Explain **four** precautions that should be taken when storing maize grains. (04 marks)

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PART B (80 MARKS)

*Answer **four** questions including at least **one** from each section. Additional questions answered will **not** be marked. Write your answers in the answer booklets provided.*

SECTION I MECHANISATION AND FARM MANAGEMENT

6. (a) Explain the factors to be considered when choosing materials for constructing a farm building. (12 marks)
- (b) Describe the features of a good deep litter poultry house. (08 marks)
7. (a) Explain the various types of records a dairy farmer should keep. (06 marks)
- (b) Table 1 shows assets and liabilities of Mr. Kasumba's farm business as at 31st December, 2021.

Study the table and answer the questions that follow.

Table 1

Assets and liabilities	Shs
Farm implements & machinery	300,000
Buildings	400,000
Long term loan	500,000
Bank overdraft	120,000
Land	500,000
Debts payable	70,000
Debts receivable	170,000
Cattle	230,000
Goats	120,000
Cash in the bank	150,000
Cabbages	45,000

- (i) Draw a balance sheet for Mr. Kasumba's farm business. (11 marks)
- (ii) Calculate the value of liquid assets. (01 mark)
- (iii) Calculate the value of fixed assets. (01 mark)
- (iv) Calculate the value of current liabilities. (01 mark)

8. (a) Give the uses of a hand hoe on a farm. (05 marks)
- (b) Explain the factors to consider when choosing farm tools to buy. (10 marks)
- (c) How should farm tools be maintained? (05 marks)

SECTION II CROP PRODUCTION

9. (a) What factors have contributed to the success of cereal crop farming in Uganda? (12 marks)
- (b) Outline the challenges faced by cereal crop farmers in Uganda. (08 marks)
10. (a) Describe the ways in which living organisms contribute to soil formation. (08 marks)
- (b) Explain factors that influence the amount of organic matter in the soil. (12 marks)

11. (a) Explain the adaptations that have made weeds more successful than crop plants. (10 marks)
- (b) What measures can a farmer take to ensure effectiveness of herbicides in weed control? (10 marks)

SECTION III ANIMAL PRODUCTION

12. (a) State the factors that may lead to diseases in calves. (08 marks)
- (b) Explain the effects of diseases on livestock enterprise. (12 marks)
13. (a) Outline the management practices required to maintain a steady egg production from a poultry business. (10 marks)
- (b) State the advantages and disadvantages of free-range system of poultry rearing. (10 marks)
14. (a) State the reasons for conserving herbage. (04 marks)
- (b) Describe the procedure for making silage. (10 marks)
- (c) What problems are associated with making and using silage? (06 marks)