

NAME.....INDEX NO. ....

SIGNATURE ..... PERSONAL NO: .....

527/1

Principles

Practices of

Agriculture

Theory

Paper 1

July /August 2023

2 hours



**KAYUNGA SECONDARY SCHOOLS EXAMINATIONS COMMITTEE (KASSEK)**

**JOINT MOCK EXAMINATION 2023**

**Uganda Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**Paper 1 (Theory)**

**2 hours: 30 Minutes**

**INSTRUCTIONS:**

- Answer *all* questions in Part A and *Four* questions in Part B by selecting at least one question from each section.

**FOR EXAMINER'S USE ONLY**

PART		MARKS	EXAMINER'S SIGNATURE
A			
B	QN.		
	QN.		
	QN.		
	QN.		
TOTAL			

**Turn Over**

**PART A: (20 MARKS)**

**Answer all questions in this part.**

For question 1, write the letter that corresponds to the best answer in the boxes provided. From question 2 to 5, write all your answers in the spaces provided.

1. (a) The reason for using galvanized iron in constructing farm structures is because it;
- A. Is cheap
  - B. Is strong
  - C. Resists corrosion
  - D. Appears attractive
- (b) Which of the following is a risk in a farming business?
- A. Technological changes
  - B. Changes in government policy
  - C. Transport reliability
  - D. Theft of produce
- (c) The soil with  $\text{PH}_4$  can be modified for crop production by
- A. Growing crops that require  $\text{PH}_4$ .
  - B. Draining it
  - C. Liming it
  - D. Irrigating it
- (d) Which one of the following diseases in livestock can be controlled by eradicating ticks?
- A. Mastitis
  - B. East coast fever
  - C. Trypanosomiasis
  - D. Milk fever

2. (a) Give two functions of the rumen in a farm animal. **(02 marks)**

- (b) (i) State the metabolic disorder which is associated with the rumen. **(01 mark)**

3. (ii) Outline two ways of controlling the metabolic disorder stated in (b)(i) above. **(02 marks)**

4. Mention four causes of low supply for agricultural products in the market. **(04 marks)**

5. In an experiment to investigate the soil property, the following results were obtained.

- Mass of a crucible	=	20g
- Mass of a crucible + soil	=	80g
- Mass of a crucible + soil after heating to red hot	=	58g

- (a) (i) Give a reason why the soil turned red after heating it Strongly.

**(01 mark)**

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- (ii) State the soil component which was investigated in the experiment.

**(01 mark)**

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- (iii) calculate the mass of the soil component investigated in the experiment.

**(02 marks)**

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- (iv) Outline two farming practices that can be employed to increase the content of the soil component stated in (ii) above.

**(01 mark)**

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6. Give four characteristics of a good grain store.

**(04 marks)**

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## **PART B: (80 MARKS)**

Answer **four** questions in this part by selecting at least **one** question from each section.  
Write your answers in the answer booklet provided.

### **SECTION I**

#### **FARM MANAGEMENT AND MECHANIZATION**

7. (a) Outline the reasons why farmers acquire credits. (05 marks)
- (b) What factors limit farmers access to agricultural credits (05 marks)
- (c) Explain the measures that can be put in place to increase effectiveness of agricultural credits. (10 marks)
8. (a) Explain the factors that influence the choice of a farm structure to construct. (12 marks)
- (b) State the ways in which a farmer may increase durability of farm buildings. (08 marks)
9. (a) Explain the considerations when selecting a good animal for performing farm work. (12 marks)
- (b) How can a farmer improve the productivity of oxen? (08 marks)

### **SECTION II**

#### **CROP PRODUCTION**

10. (a) Explain how diseases are spread in crops. (10 marks)
- (b) Describe the measures that can be taken to prevent the outbreak and spread of diseases in crops. (10 marks)
11. (a) Outline the sources from which plants obtain nutrients. (05marks)
- (b) What are the functions of phosphorus in plant growth and development? (06 marks)

(c) How can a farmer ensure better response of crops to fertilizers? **(09 marks)**

12. (a) Explain the meaning of the following terms in vegetable production.

(i) Hardening off **(02 marks)**

(ii) Staking **(02 marks)**

(b) Describe the characteristics of an ideal site for establishing a vegetable garden. **(06 marks)**

(c) Describe the field practices that can be carried out in growing of tomatoes from planting up to harvesting. **(10 marks)**

### **SECTION III ANIMAL PRODUCTION**

13. (a) State the signs of worm infestation in livestock. **(06 marks)**

(b) Explain the adaptations of tape worms to their parasitic mode of life. **(10 marks)**

(c) Outline the ways of controlling tapeworms on the farm. **(04 marks)**

14. (a) Outline the differences between a good and a poor laying bird. **(08 marks)**

(b) What precautions should a farmer take to ensure production of high-quality eggs on the farm? **(12 marks)**

15. (a) Explain the considerations when formulating rations for farm animals. **(12 marks)**

(b) A pig farmer would wish to mix 1200kg of a ration for his animals using sunflower cake containing 45% crude protein and maize which contains 25% crude protein. In what proportions would he mix the two feed stuffs to make a ration which contains 15% crude protein? **(05marks)**

(c) Give reasons for including additives in livestock feeds. **(03marks)**

**END**