

527/1

**PRINCIPLES AND PRACTICES
OF AGRICULTURE**

(Theory)

Paper 1

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

(Theory)

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- *This paper consists of parts A and B.*
- *Answer **all** question in part A and **four** questions from part B including at least **one** question from each section.*
- *Any additional question(s) answered will **not** be marked.*

For Examiner's use Only		
Part/Question	Marks	Examiners Signature
A		
B: No.		
No.		
No.		
No.		
Total		

PART A

*Answer **all** questions in this part. For **question 1** circle the latter corresponding to the best answer. For **question 2**, write **all** answers in the spaces provided.*

1. (a) In which one of the following practices in calf management is caustic soda used
- A. Deworming
- B. Castration
- C. Dehorning

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D. Branding

(b) Which one of the following is not a factor of production?

- A. Labour
- B. Transport
- C. Capital
- D. Management

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(c) Best quality hay is obtained by

- A. cutting grass at flowering stage
- B. complete drying of grass in the sun
- C. cutting grass at the stage of maximum vegetative growth
- D. baling grass immediately it is cut

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(d) Which one of the following does not increase traction in a tractor?

- A. Addition of weights
- B. Ballasting
- C. Increasing tyre pressure
- D. Increasing the number of rear tyres

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2. List five ways through which nitrates in the soil may be made unavailable for crop root absorption. (04 marks)

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3. Give four reasons for steaming up the incalf cow. (04 marks)

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4. (a) What is meant by uncertainty in agricultural production? (04 marks)

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- (b) State any four remedies of uncertainty in agricultural production. (04 marks)

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5. State five precautions followed when handling herbicides in Agricultural production. (05 marks)

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PART B (80 MARKS)

*Answer **four** questions including at least one from each section. Write **all** your answers in the answer sheets provided.*

SECTION I MECHANIZATION AND FARM MANAGEMENT

6. (a) Mention types of fences commonly used on the farm. (04 marks)

- (b) Describe steps to be followed when constructing a barbed wire fence. (10 marks)

- (c) State the importance of fences on the farm. (06 marks)

7. (a) How does a farmer prepare a tractor for a day's work? (10 marks)

- (b) As an agricultural student, how do you advise the farmer to maintain a cooling system of a tractor in a good condition? (10 marks)

8. (a) Briefly explain the following terms as used in Agricultural production.
(i) Marginal production
(ii) Average production
(iii) Total production (06 marks)

- (b) State the law of diminishing returns. (02 marks)
- (c) Explain problems farmers face during marketing of agricultural products in your community. (12 marks)

SECTION II CROP HUSBANDRY

9. (a) Why would you advise a farmer to grow crops in a good soil structure? (08 marks)
- (b) Explain how a good soil structure can be destroyed. (08 marks)
- (c) Mention four ways through which a farmer can maintain a good soil structure. (04 marks)
10. (a) What is the importance of growing legume pastures with grass pastures in the same garden? (06 marks)
- (b) How can a farmer improve the productivity of pastures on a pasture hand? (14 marks)
11. (a) Describe different types of damage that can be caused by pests on a field crop. (08 marks)
- (b) Explain any six cultural methods used to control crop pests in the field crops. (12 marks)

SECTION III ANIMAL HUSBANDRY

12. (a) Give two digestive functions of each of the following parts in ruminant farm animals. (05 marks)
- (i) Rumen
 - (ii) Reticulum
 - (iii) Omasum
 - (iv) Duodenum

- (b) Explain factors that may affect digestibility of feeds in a farm animal. (12 marks)
13. (a) State the advantages and disadvantages of using artificial incubation to hatch eggs on a poultry farm. (06 marks)
- (b) Outline cases of failure of chicks to hatch on a poultry farm. (06 marks)
- (c) How would a farmer control vices in a poultry house. (08 marks)
14. (a) Explain factors that make meat less fit for human consumption. (12 marks)
- (b) Outline ways of reducing meat spoilage in the slaughter house. (08 marks)

END