

P515/2

PRINCIPLES AND PRACTICES

OF AGRICULTURE

(Theory essay)

Paper 2

Jul/Aug 2019

3 Hours



MUKONO EXAMINATION COUNCIL

Uganda Advanced Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

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INSTRUCTIONS TO CANDIDATES

- ✓ *This paper consists of sections A, B, C, D and E*
- ✓ *Answer question 1 in section A and four other questions, selecting one from each of section B, C, D and E*
- ✓ *Any additional question(s) attempted will not be marked.*

SECTION A: COMPULSORY QUESTION

1. A study was carried out to investigate dry matter, palatability and digestability and carrying capacity of Elephant grass at different stages of growth.
 - (a) Distinguish between palatability and digestability. **(2 marks)**
 - (b) State and explain the relationship between;
 - (i) Palatability and digestability and stage of growth. **(3 marks)**
 - (ii) Dry matter and carrying capacity at different stages of growth. **(3 marks)**
 - (c) At what stage would you recommend a farmer to graze his livestock? Give reasons for your answer. **(4 marks)**
 - (d) Mention the stage each letter represents in figure 1 above. **(4 marks)**
 - (e) Explain other factors that influence the carrying capacity of the pasture. **(4 marks)**

SECTION B (20 MARKS)

CROP PRODUCTION

2.
 - (a) Explain ways in which weeds are spread from one place to another. **(10 marks)**
 - (b) Explain the features that enable weeds survive in their Environment. **(10 marks)**
3.
 - (a) Outline the importance of organic matter in the soil. **(8 marks)**
 - (b) Explain how organic matter improves soil properties. **(12 marks)**

SECTION C (20 MARKS)

ANIMALS PRODUCTION

4.
 - (a) Explain the factor that affect animals distribution in Uganda. **(12 marks)**
 - (b) Give the advantages of ranching. **(8 marks)**
5.
 - (a) Explain the process of milk let down in a dairy goat. **(8 marks)**
 - (b) Discuss the factors that affect the amount of milk produced by a dairy cow. **(12 marks)**

SECTION D (20 MARKS)

AGRICULTURAL ENGINEERING

6.
 - (a) Explain the various method of treating water on a farm. **(10 marks)**
 - (b) Explain the factors considered when selecting a site for construction of a dam on a farm. **(10 marks)**
7.
 - (a) State the functional requirement of a good farm store. **(8 marks)**
 - (b) Describe the qualities of a good site for a farm store. **(12 marks)**

SECTION E (20 MARKS)
AGRICULTURAL ECONOMICS

8. (a) Explain the functions of a farm manager. ***(12 marks)***
(b) Explain the factors considered when designing a farm lay out.
9. (a) Explain the various marketing functions a farmer must meet when marketing his produce on a farm. ***(14 marks)***
(b) Give six advantages of processing tomatoes before marketing. ***(6 marks)***

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