**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**

**(Theory Essay)**

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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.
2. Distinguish between palatability and digestability. ***(2 marks)***
3. State and explain the relationship between;
4. Palatability and digestability and stage of growth.  ***(3 marks)***
5. Dry matter and carrying capacity at different stages of growth. ***(3 marks)***
6. At what stage would you recommend a farmer to graze his livestock? Give reasons for your answer. ***(4 marks)***
7. Mention the stage each letter represents in figure 1 above.  ***(4 marks)***
8. Explain other factors that influence the carrying capacity of the pasture. ***(4 marks)***

**SECTION B (20 MARKS)**

**CROP PRODUCTION**

1. (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)***

1. (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**

1. (a) Explain the factor that affect animals distribution in Uganda. ***(12 marks)***

(b) Give the advantages of ranching.  ***(8 marks)***

1. (a) Explain the process of milk let dowm 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**

1. (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)***

1. (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**

1. (a) Explain the functions of a farm manager.  ***(12 marks)***

(b) Explain the factors considered when designing a farm lay out.

1. (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)***

***End -***