**CANDIDATES NAME:…………………………………………………………………**

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| **INDEX NUMBER** | | | | | | | |
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**SIGNATURE: ……………………………………**

**527/1**

**PRINCIPLES AND**

**PRACTICES OF**

**AGRICULTURE**

**PAPER 1**

**JUNE/JULY**

**2 HOURS 30 MINUTES**

**MOCK EXAMINATIONS SET 1 2019**

**Uganda Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

PAPER 1

**(Theory)**

2 HOURS 30 MINUTES

**INSTRUCTIONS TO CANDIDATE:**

* *Attempt all questions in section A in the spaces provided.*
* *Attempt 4 questions from section B by choosing at least one question from each of the parts I, II, and III.*
* *Any additional question(s) answered will not be marked.*

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| **FOR EXAMINERS USE ONLY** | |
| **QUESTIONS** | **MARKS** |
| SECTION A |  |
| SECTION B |  |
| TOTAL |  |

**SECTION A: (OBJECTIVES)**

1. a) Which one of the following is utilizable by products resulting from microbial fermentation in the rumen?

A. acetic acid B. glucose

C. carbon dioxide D. alcohol

b) Seed dormancy due to structure at the seed is caused by:

A. immature embargo

B. Inadequate oxygen

C. presence of germination inhibitors

D. impermeable seed costs

c) ………………. enables the plough to resist side thrust during ploughing.

A. land slide B. disc coulter

C. mould board D. frog

d) The following are methods of controlling risks except:

A. diversification B. contract farming

C. insurance D. proper storage

2. Outline four qualities of good oil for using in an engine. (4 marks)

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3. a) What is agroforestry. (2 marks)

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b) State three benefits of trees on an animal farm. (3 marks)

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4. Give 4 features of internal animal parasites. (4 marks)

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5. a) Identify three (3) importance of specific soil air components. (3 marks)

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b) Suggest two ways of maintaining proper aeration of the soil. (2 marks)

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**SECTION B:**

**Attempt any four (4) questions in this section by choosing at least one question from each of the parts I, II, and III.**

**PART I:**

**(FARM STRUCTURES, MECHANISATION AND MANAGEMENT)**

6. a) Give the functions of a crop planter. (5 marks)

b) With aid of a diagram, describe the mechanisation of a row crop planter.

(10 marks)

c) Suggest the general care and maintenance given to a crop planter.

(5 marks)

7. a) Explain the factors that influence the farmer’s choice of an enterprise.

(12 marks)

b) Outline the methods of increasing profits in agriculture production.

(8 marks)

8. a) State the roles of the following components of the tractor engine.

(6 marks)

i) induction coil

ii) spark plug

iii) wheels and types

b) Suggest the general care and maintenance of the electrical system of a tractor engine. (8 marks)

c) Outline the common faults of the electrical system. (6 marks)

**PART II:**

**(ANIMAL PRODUCTION)**

9. a) Identify the signs of ill health in a pig. (6 marks)

b) State the management of piglets from furrowing up to weaning. (10 marks)

c) What are the benefits of early weaning in piglets? (4 marks)

10. a) Describe the preparations made before milking diary animals (10 marks)

b) State the causes of off flavours in milk. (10 marks)

11. a) Outline the conditions necessary for fermentation of silage. (5 marks)

b) Describe the procedure of preparing silage on the farm. (10 marks)

c) State ways through which the quality of silage may be lowered. (5 marks)

**PART III:**

**(CROP PRODUCTION)**

12. a) Mention the reasons for rising tomato seeds in a nursery bed. (8 marks)

b) Describe the agronomic practices that are used to increase yields in tomatoes. (12 marks)

13. a) Outline the causes of poor drainage on the farm. (8 marks)

b) Explain the effects caused by poor drainage on the farm. (12 marks)

14. a) Describe the methods of layering in crops. (10 marks)

b) Suggest the measures of ensuring success of a graft union. (10 marks)

**END**