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**Community**

UNNASE MOCK EXAMINATIONS

**UGANDA CERTIFICATE OF EDUCATION**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**PAPER *527/1***

**DURATION: 2 ½ HOURS**

NAME ………………………………………………………………………………………………

SCHOOL ……………………………………………………………………………………………

**INSTRUCTIONS:**

* *This paper has four sections* ***A, B, C*** *and* ***D.***
* *Attempt* ***all*** *questions in section* ***A*** *and any other* ***four*** *questions choosing at least* ***one*** *from each section.*

**SECTION A:**

1. (a) In the process of digestion in ruminants, large food particles are separated from small ones in the:

1. Omarium C. Abomusum
2. Rumen D. Reticulum

(b) Which one of the following can be determined using a trading account?

1. Net capital C. Debits payable
2. Gross profit D. Gross margin

(c) The function of a pitch on the mould board plough is to

1. Protect the share during ploughing.
2. Provide the cutting edge during ploughing.
3. Improve the penetration of the blade.
4. Provide stability to the plough during ploughing.

(d) Which one of the following practices ensures that seedlings get adapted to field conditions after transplanting?

1. Shedding C. Thinning
2. Hardening D. Pricking

2. (a) Outline four factors that influence the availability of soil living organisms. (4mks)

1. ………………………………………………………………………………………….
2. ………………………………………………………………………………………….
3. ………………………………………………………………………………………….
4. ………………………………………………………………………………………….

(b) Mention four reasons for mulching crop gardens. (4mks)

1. ………………………………………………………………………………………….
2. ………………………………………………………………………………………….
3. ………………………………………………………………………………………….
4. ………………………………………………………………………………………….

3. (a) Give four reasons for drying off lactating animals. (2mks)

1. ………………………………………………………………………………………….
2. ………………………………………………………………………………………….
3. ………………………………………………………………………………………….
4. ………………………………………………………………………………………….

**(b)** Outline four objectives for animal identification. (4mks)

1. …………………………………………………………………………………………
2. ………………………………………………………………………………………….
3. ………………………………………………………………………………………….
4. ………………………………………………………………………………………….

4. List four examples of farm records a farmer needs to keep on a dairy farm. (4mks)

1. ………………………………………………………………………………………….
2. ………………………………………………………………………………………….
3. ………………………………………………………………………………………….
4. ………………………………………………………………………………………….

**SECTION B: CROP AND SOIL SCIENCE**

5. (a) Outline five qualities of a good green manure plant. (5mks)

(b) Describe how farm yard manure can be prepared on the farm. (5mks)

(c) Explain the factors that influence the quality of farm yard manure. (10mks)

6. (a) Mention the problems caused by weeds among crop plants. (5mks)

(b) State five characteristics that make weeds more successful than crop plants. (5mks)

(c) Explain the various cultural methods used to control weeds in a crop field. (10mks)

7. (a) Explain the various ways through which the soil losses its fertility. (10mks)

(b) Show the ways in which farmers can maintain soil fertility in crop fields. (10mks)

**SECTION C: ANIMAL PRODUCTION**

8. (a) Explain the factors to consider when formulating feed rations for livestock. (10mks)

(b) State five factors that affect the utilization of rations by farm animals. (5mks)

(c) Mention five reasons for steaming up in calf cows. (5mks)

9. (a) Explain the practices a farmer can employ to maintain the quality of litter in a poultry house. (10mks)

(b) Outline the causes of the following vices in a poultry house:

1. Cannibalism (5mks)
2. Egg eating (5mks)

10. (a) Explain the harmful effects of external parasites on livestock. (10mks)

(b) Describe the procedure of hand spraying cattle on the farm. (10mks)

**SECTION D: MECHANISATION AND FARM MANAGEMENT**

11. (a) State the benefits of agricultural credit to farmers. (5mks)

(b) Explain the reasons why farmers fail to pay back credit. (10mks)

(c) Suggest five possible measures to make agricultural credit more effective. (5mks)

12.(a) Explain the factors a farmer should consider when planning a farm lay out. (10mks)

(b) Outline the importance of having farm buildings. (10mks)

13. (a) Give the effects of overheating of the engine. (5mks)

(b) Give five reasons why water is the most commonly used engine coolant. (5mks)

(c) Describe the water cooling system of a tractor engine. (10mks)

**END**