**Name:……………………………………………………………………………………………………………………….**

**Signature:…………………………………………………………..Index No.:…………………………………….**

**527/1**

**PRINCIPLES AND**

**PRACTICES OF**

**AGRICULTURE**

**(Theory)**

**Paper 1**

**Jul/Aug 2016**

**2 ½ Hours**

**MUKONO EXAMINATIONS COUNCIL**

**Uganda Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**Theory**

**Paper 1**

**2 Hours 30 Minutes**

**INSTRUCTIONS TO CANDIDATES**

* *Answer all questions in part* ***A*** *and* ***four*** *questions from part* ***B*** *choosing at least* ***one*** *question from each section.*

|  |  |  |
| --- | --- | --- |
| **For Examiner’s Use Only** | | |
| **Question** | **Marks** | **Examiner’s No and signature** |
| **Part A** |  |  |
| **Part B**  Q |  |  |
| Q |  |  |
| Q |  |  |
| Q |  |  |
| **Total** |  |  |

**PART A (20 MARKS)**

* *Answer* ***al****l questions in this part.*
* *For question 1, put the most correct answer in the boxes provided.*
* *For question 2 – 5, write the answers in the spaces provided.*

1. a) Which one of the following is the firing order in a 4-cylinder engine with the cylinders labelled E, H, G, F.
2. E, H, G, F B. E, G, F, H

C. E, F, H, G D. E, H, F, G

b) The fine particle sizes of clay soil make it have the following properties except

A. being well drained

B. having a high water holding capacity

C. have a high capillary

D. being sticky when wet.

c) The difference between total income and total variable cost is called

A. net profit B. Gross margin

C. Net capital D. Gross profit

d) Which one of the following hormones is responsible for milk hold up

A. Adrenalin hormone B. Oxytocin hormone

C. Prolactin hormone D. Thyroxin hormone

1. Give four major causes of damages to hides and skins ***(04marks)***
2. ………………………………………………………………………………………………………………………
3. ………………………………………………………………………………………………………………………
4. ……………………………………………………………………………………………………………………….
5. ……………………………………………………………………………………………………………………….
6. a) What is geological erosion? ***(01mark)***

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

b) Give four effects of gulley erosion in farming. ***(04marks)***

(i) ……………………………………………………………………………………………………………………………

(ii) …………………………………………………………………………………………………………………………..

(iii) …………………………………………………………………………………………………………………………

(iv) ………………………………………………………………………………………………………………………….

1. a) Give two reasons for making permanent marks on farm animals. ***(02marks)***
2. ……………………………………………………………………………………………………………………
3. ……………………………………………………………………………………………………………………

b) Suggest three ways of making permanent marks on farm animals. ***(03marks)***

1. …………………………………………………………………………………………………………………….
2. …………………………………………………………………………………………………………………….
3. …………………………………………………………………………………………………………………….
4. Outline four reasons for preparing farm budget. ***(04marks)***
5. ……………………………………………………………………………………………………………………
6. ……………………………………………………………………………………………………………………
7. …………………………………………………………………………………………………………………….
8. …………………………………………………………………………………………………………………....

**PART B**

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

**SECTION 1: MECHANIZATION AND FARM MANAGEMENT**

1. a) Why is human labour continuing to be the most important form of power on farms? ***(12marks)***

b) Outline ways government can increase agriculture mechanization. ***(08marks)***

1. a) Explain the various uses of a crush. ***(12marks)***

b) Outline the disadvantages of using a crush. ***(08marks)***

1. a) State the law of demand. ***(02marks)***

b) Explain factors that affect the demand of agricultural produce. ***(10marks)***

c) Outline problems faced in marketing agricultural products. ***(08marks)***

**SECTION II: CROP PRODUCTION**

1. Explain how the following factors affect crop production in Uganda. ***(20marks)***
2. Climate
3. Social
4. Altitude
5. Soils
6. a) Name six common grass pasture species. ***(06marks)***

b) How can natural pastures be improved? ***(08marks)***

c) State the disadvantages of zero grazing. ***(06marks)***

1. a) Explain the characteristics of a good soil for planting crops. ***(10marks)***

b) How is soil fertility cost? ***(10marks)***

**SECTION III: ANIMAL PRODUCTION**

1. a) Why is pellet feeding important in poultry farming? ***(10marks)***

b) Explain factors to consider when formulating feed rations for poultry. ***(10marks)***

1. a) Explain how a calf can be taught to drink milk and other supplements from a bucket. ***(10marks)***

b) Give the importance of construm feeding. ***(10marks)***

1. a) Explain the management practices carried out on a pregnant sow. ***(12marks)***

b) Outline the causes of piglet mortality on a farm. ***(08marks)***

***End -***