

Name .....Index No,.....

Signature .....

527/1

**Principles and practices of**

**Agriculture**

**Paper 1**

**Aug. 2017**

**2½hours**

**UGANDA CERTIFICATE OF EDUCATION  
RESOURCEFUL MOCK EXAMINATIONS 2017  
S.4 PRINCIPLES AND PRACTICES OF AGRICULTURE  
PAPER 1 (Theory)  
2½Hours 30 Minutes**

**INSTRUCTION TO CANDIDATES**

- Answer all questions in part A and any four questions from part B selecting at least one from each of the sections I, II and III.

<b>FOR EXAMINERS USE ONLY</b>		
<b>PART</b>	<b>MARKS</b>	<b>INITIAL</b>
PART A:		
PART B: Qn.		
Qn.		
Qn.		
Qn.		
<b>Total</b>		

**PART A (20MARKS)**

- Answer all questions in this part.
- Answer number 1 by writing the letter corresponding to the best alternative in the box provided.
- You are advised not to spend more than 30 minutes in this part.

1. (a) Which one of the following is a sign of stomach worm infestation in calves?

- A. Rough skin coat
- B. Increased appetite
- C. Swollen lymph nodes
- D. Constipation

☐

(b) In a tractor engine, a dip stick;

- A. Is used to apply grease to engine parts
- B. Indicates the level of oil in the sump
- C. Indicates the level of fuel in the tank
- D. Indicates the level of a caricide in plug dip.

☐

(c) A profit and loss account is a farm record which shows;

- A. Purchases, expenses, sales and receipts of farm business
- B. Assets and Liabilities
- C. Expenditures and receipts only
- D. Fixed costs and marginal products.

☐

(d) Which one of the following is a viral crop disease?

- A. Streak
- B. Smut
- C. Sigatoka
- D. Fusarium wilt

☐

2. (a) State the importance of good soil aeration (02marks)

- (i) .....
- .....
- (ii) .....
- .....

(b) The table below shows the results of an experiment carried out to determine the percentage of air in three soil types. Study it answer the questions that follow.

Type of soil	%air by volume
X	46
Y	25
Z	10

- (i) Which of these soil types X, Y and Z would; drain best (½marks)

.....

Be most suitable for crop growth (½mark)

.....

- (ii) Give reasons for your answers in b (i) above. (1½marks)

.....

.....

.....

- (c) Suggest the identities of the soil types. (1½marks)

X.....

Y.....

Z.....

3. State any 6 marketing functions carried out in agricultural production. (03marks)

(i) .....

(ii) .....

(iii) .....

(iv) .....

(v) .....

(vi) .....

4. Give 5 functions of lubricants in tractor engines. (05marks)

(i) .....

.....

(ii) .....

.....

(iii) .....

.....

- (iv) .....  
 .....  
 (v) .....  
 .....

5. Outline 4 ways of minimizing vices among poultry layers reared using deep litter system. (04marks)

- (i) .....  
 .....  
 (ii) .....  
 .....  
 (iii) .....  
 .....  
 (iv) .....  
 .....

## **PART B**

Answer four questions including atleast one from each section.

### **SECTION I: CROP PRODUCTION**

6. (a) State the characteristics to consider when selecting pasture species for establishment. (08marks)  
 (b) Explain various ways of managing pasture land for high production (12marks)
7. (a) Describe the procedure of preparing farm yard manure. (06marks)  
 (b) Explain the merits of using farm yard manure in soil fertility management. (14marks)
8. (a) What are the advantages of producing Garlic and Cabbages as vegetables in Crop production. (06marks)  
 (b) Explain management practices carried out on cabbages while in nursery bed. (10marks)  
 (c) State the importance of processing garlic before selling. (04marks)

## **SECTION II**

### **MACHANISATION AND FARM MANAGEMENT**

9. (a) Distinguish between concrete and mortar (02marks)  
 (b) What are the Limitations of using metals to construct farm buildings? (04marks)

- (c) Explain how farmers can ensure long life span of building. (14marks)
10. (a) Describe how power is produced in four stroke cycle spark ignition engines. (12marks)
- (b) Outline causes of over heating in water cooled tractor engines. (08marks)
11. (a) The following information was extracted from Mr. Ssendawula's farm records Dated 31/12/2008.
- Debts payable to creditors; 800,000/=,  
 Un paid wages; 200,000/= Interest on capital; 140,000 and bank overdraft from Barclays bank; 2,200,000/=, Land value 1,200,000 2 heifers for sale; 800,000/=, 3 dairy cows 2,500,000/=, debts receivable; 300,000/= and feeds' value; 900,000/=
- (i) Using the above information to prepare balance sheet for Mr. SSendawula's farm. (08marks)
- (ii) Give the reasons why Mr. Ssendawula should have a balance sheet in his farm records. (04marks)
- (b) Explain the causes of unstable prices for agricultural products. (08marks)

### **SECTION III: ANIMAL PRODUCTION**

12. (a) What are the symptoms of liver fluke infestation in cattle? (04marks)
- (b) Describe the life cycle of a liver fluke (12marks)
- (c) How can a farmer control liver fluke infestation in cattle. (04marks)
13. (a) Explain the criteria followed in selection of breeding stock. (06marks)
- (b) Describe the factors that influence water intake among farm animals. (14marks)
14. (a) How would you manage the day-old chicks from the day of arrival till they are Four weeks old? (10marks)
- (b) Explain the possible causes of wetness of litter in poultry houses. (10marks)

**END**

**"If you can not excel with talent, triumph with effort"**