

527/1
**PRINCIPLES AND PRACTICES
OF AGRICULTURE**

Paper 1
June/July 2022
2 ½ hours

MWALIMU EXAMINATIONS BUREAU
UCE RESOURCE MOCK EXAMINATIONS 2022

PRINCIPLES AND PRACTICES OF AGRICULTURE

PAPER 1
2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

- Answer **all** questions in part A and four (4) questions from Part B including at least one from each section.

PART A (20 Marks)

Answer all the questions in this part

1. A) Which one of the following is a tick-borne disease?

- A. Trypanosomiasis
B. Foot rot

- C. Rinder pest
D. Heart water

☐

B) A disc plough is pushed into the ground by

- A. Weight of the plough
B. Rotation of the disc

- C. Tractor's pull
D. Vibration of the beam

☐

C) Damping off is a disease of crops which is caused by

- A. Bacteria
B. Virus

- C. Mineral deficiency
D. Fungus

☐

D) Diversification in farming is beneficial because it?

- A. Increases yield
B. Eases management of crops
C. Ensures marketing of farm products
D. Improves efficiency of resource utilization

☐

2. (a) State four desirable characteristics of plants that make it suitable for use as green manure. **(04marks)**

(i)

(ii)

(iii)

(iv)

(b) Outline the advantages of using water as a coolant. **(04 marks)**

(i)

(ii)

(iii)

(iv)

3. (a) Give four importance of electrical system in a tractor. **(02 marks)**

(i)

(ii)

(iii)

(iv)

b) Mention four advantages of artificial insemination. **(04 marks)**

(i)

(ii)

(iii)

(iv)

4. Outline four causes of price fluctuation of agricultural products **(02marks)**

(i)

(ii)

- (iii)
- (iv)
5. Give two advantages of practicing zero grazing in animal production. **(02marks)**
- (i)
- (ii)

PART B (80 MARKS)

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

SECTION I MECHANISATION AND FARM MANAGEMENT

6. a) Explain the major principles that govern a good cooperative society. **(12 marks)**
 b) Give the advantages of the following marketing practices.
 (i) Processing **(04 marks)**
 (ii) Packaging **(04 marks)**
7. a) Describe how a tractor operator would ensure that the tractor is in good working condition before starting a day's work. **(16 marks)**
 b) Give reasons why most tractor engines are of diesel type. **(04 marks)**
8. (a) Define the term a balance sheet. **(02 marks)**
 (b) Using the information below, draw a profit and loss account of Mr. Odongo's farm as it could be at 31st December 2012. **(16 marks)**
- | | |
|--------------------|-------------|
| Opening valuation | 1,200,000/= |
| Closing valuation | 3,400,000/= |
| Vegetable sales | 30,000/= |
| Milk sales | 430,000/= |
| Fertilizers | 130,000/= |
| Interest payable | 50,000/= |
| Crop produce sales | 170,000/= |
| Wages | 730,000/= |
| Depreciation | 350,000/= |
| Coffee seedlings | 20,000/= |
- (c) Using the profit and loss account in (b) above, determine the profit or loss the farm will have made. **(2 marks)**

SECTION II
CROP PRODUCTION

9. (a) Explain the cultural practices that ensure increase in crop yield. (14 marks)
(b) Outline six advantages of irrigating crops during dry season. (06 marks)
10. (a) Describe how a farmer can prepare good silage on the farm. (14 marks)
(b) Give the factors that affect the quality of silage preparation on the farm. (06 marks)
11. (a) Explain the cultural practices that are used in reducing pests in annual crops. (16 marks)
(b) Give the qualities of a good pesticide used in pest control. (04 marks)

SECTION III
ANIMAL PRODUCTION

12. (a) Explain the factors that a farmer should consider before establishing a beef herd. (16 marks)
(b) Give reasons why milk is highly perishable. (04 marks)
13. (a) Describe how a farmer can castrate a piglet on his farm. (10 marks)
(b) Outline the advantages of carrying out the following management practices
(i) Castration (05 marks)
(ii) Steaming up (05 marks)
14. (a) Explain the different ways of controlling animal disease. (16 marks)
(b) Outline four symptoms of Mastitis in a dairy animal. (04 marks)

End