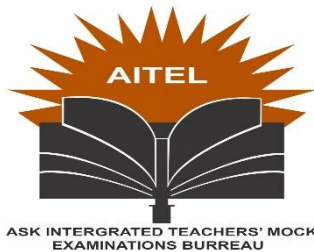


STUDENT'S NAME: .....

SCHOOL NAME: ..... INDEX NUMBER .....

527/1  
PRINCIPLES AND PRACTICES  
OF AGRICULTURE  
(Theory)  
Paper 1  
June/July 2022  
2 ½ Hours



**AITEL JOINT MOCK EXAMINATIONS**  
**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**

Questions	Marks	Examiner's No. and signature
<b>PART A</b>		
<b>PART B</b>		
<b>TOTAL</b>		

**PART A**

Answer **all** questions in this part.

For question **1**, write the letter corresponding to the best answer in the box provided.

For questions **2 to 5**, write all answers in the spaces provided.

- 1. (a) The conversion of soil nitrogen into atmospheric nitrogen is best described as:  
A. Ammonification  
B. Nitrification  
C. Denitrification  
D. Immobilization
  
- (b) The percentage change in quantity demanded divided by the percentage change in price is termed as;  
A. Elasticity of demand  
B. Elasticity of price  
C. Elastic demand  
D. Unit elasticity of demand
  
- (c) The hormone responsible for milk let down in a milking animal is;  
A. Oestrogen  
B. Oxtocycin  
C. Prolactin  
D. Progesterone
  
- (d) The following determine the depth of planting seeds except ;  
A. Soil moisture  
B. Size of the seed  
C. Growth habit of the plant  
D. Soil type

2. Outline reasons why farm animals should be provided with clean water? (02 marks)

.....  
.....  
.....  
.....

3. (a) State four advantages of using draught animals to do farm activities. (04 marks)

.....  
.....  
.....  
.....

(b) Mention four traits of a good draught animal to use on the farm. (02 marks)

.....  
.....  
.....  
.....

4. (a) Why are organic mulches preferred to inorganic mulches in soil and water conservation? (02 marks)

.....  
.....  
.....  
.....

(b) Outline two limitations of using organic mulches in farming. (02 marks)

.....  
.....  
.....  
.....

5. (a) Mention four examples of field pests that cause damage to crops. (04 marks)

.....  
.....  
.....  
.....

(b) Outline four importance of storage farm structures. (02 marks)

.....  
.....  
.....  
.....

**PART B (80 MARKS)**

*Answer four questions including at least one from each section.*

**SECTION I  
CROP PRODUCTION**

6. (a) Differentiate between soil productivity and soil fertility. (02 marks)  
(b) Explain the factors that influence the fertility and productivity of a soil. (12 marks)  
(c) Outline ways through which a soil loses its fertility. (06 marks)
7. (a) Explain the features that make crop pests hard to control. (10 marks)  
(b) Describe ways through which crop pests may be culturally controlled. (10 marks)
8. (a) Differentiate between asexual and sexual propagation in crop production. (02 marks)  
(b) Explain the advantages of propagating crops asexually. (08 marks)  
(c) Describe the different methods of asexual propagation in crop production. (10 marks)

**SECTION II  
ANIMAL PRODUCTION**

9. (a) Describe the process of milk let down in a milking animal. (08 marks)  
(b) Explain the factors affecting the amount and composition of milk in a milking animal. (12 marks)
10. (a) Explain factors that affect food intake in farm animals. (12 marks)  
(b) Giving an example in each case, describe the following types of feeds given to farm animals. (08 marks)  
(i) Roughages  
(ii) Concentrates  
(iii) supplements

(iv) Additives

11. (a) Explain ways through which animal diseases are transmitted on a farm. (10 marks)
- (b) State the damages caused by ecto parasites on animal farms. (10 marks)

### **SECTION III**

#### **MECHANIZATION AND FARM MANAGEMENT**

12. (a) Explain the factors considered when choosing a building material to buy. (08 marks)
- (b) Explain the reasons behind the collapse of buildings on the farm. (08 marks)
- (c) Mention four examples of building materials commonly used on farms. (04 marks)
13. (a) Describe the types of farm records kept by any farm business. (10 marks)
- (b) State the importance of keeping good farm records. (10 marks)
14. (a) Using an illustration, describe the components of a disc plough. (10 marks)
- (b) Outline the advantages of using a disc plough over a mould board plough. (05 marks)
- (c) State ways through which a dis plough is maintained in a good working condition. (05 marks)

**END**

