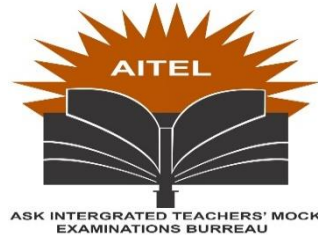


P515/2  
PRINCIPLES AND PRACTICES  
OF AGRICULTURE  
PAPER 2  
2023  
3HRS



# AITEL JOINT MOCK EXAMINATION

Uganda Advanced Certificate of Education

PRINCIPLES AND PRACTICES  
OF AGRICULTURE

PAPER2

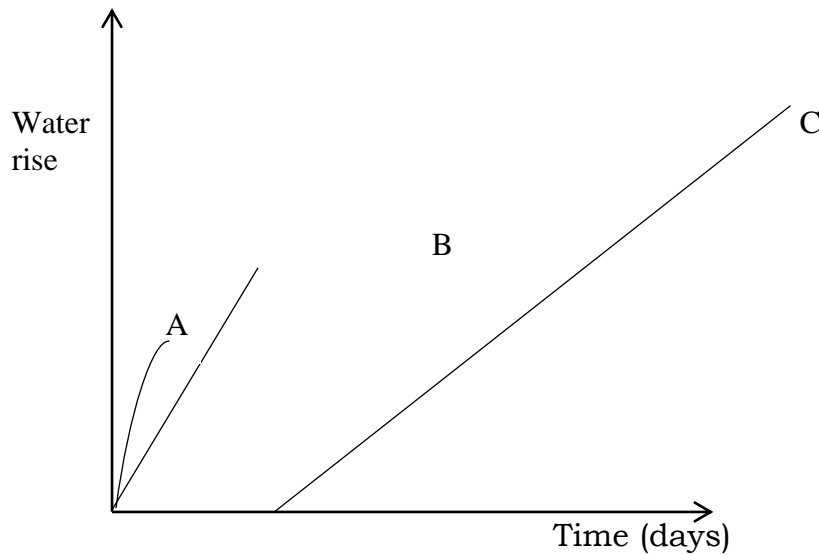
3HOURS

## INSTRUCTIONS TO CANDIDATES:

- The paper consists of section **A, B, C, D, and E.**
- Answer question **1** and **four other** questions selecting one from each section B, C, D, and E.
- Any additional question(s) attempted will not be marked

## SECTION A

1. An experiment was carried out to test the relative capillarity in various soil samples represented by curves A, B, C. Study the graph carefully and answer the questions that follow.



- (a). Describe the trend of water rise in the three soil samples basing on the curves **3mks**  
(b). Explain the causes of differences in water rise in the 3 soil samples. **6mks**  
(c). Of what importance is the information in (b) above to the farmer? **2mks**  
(d). Explain the factors that influence soil moisture content **9mks**

## SECTION B. Crop production

2. (a). What is germination efficiency? **2mks**  
(b). Explain the factors that affect germination efficiency. **7<sup>1/2</sup>mks**  
(c). Describe one chemical method of testing for seed viability **11<sup>1/2</sup>mks**
3. (a). Outline the importance of soil living organisms **8mks**  
(b). Explain the factors that influence abundance of soil living organisms **12mks**

## SECTION C Animal production

4. (a). Describe the procedure for insemination using recto vaginal technique. **13mks**  
(b). Describe the advantages of using artificial insemination. **8mks**
5. (a). State the considerations when siting a fish pond **6mks**  
(b). Describe the procedure for fish pond construction **8mks**  
(c). Outline the importance of fish farming **6mks**

## SECTION D

## Agricultural engineering

6. (a). Describe the procedure for making good concrete without using machines. **10mks**  
(b). Explain the factors that influence the choice of building materials. **10mks**
7. (a). Outline the types of power used on the farm. **03mks**  
(b). Explain the factors that influence power output in work animals **12mks**  
(c). State the characteristics of an animal suitable for work. **05mks**

### SECTION E AGRICULTURE ECONOMICS.

8. (a). Differentiate between labour and labour supply. **04mks**  
(b). Explain the factors that influence labour supply **09mks**  
(c). Outline the ways through which labour efficiency can be improved. **07mks**
9. (a). Distinguish between demand and demand schedule. **02mks**  
(b). Consider the demand and supply schedule for milk in a given season

Quantity demanded (L)	Price per litre (shs)	Quantity supplied (L)
800	1000	4000
1200	900	3500
1600	800	3000
2000	700	2000
2500	600	1500
3000	500	800
4000	400	400
6000	300	200

Plot the information on a graph paper. **06mks**

- (c). What is the market condition when price is fixed  
(i). Above equilibrium price  
(ii) Below equilibrium price **06mks**
- (d). Explain the factors that influence prices of agricultural production. **06mks**

**END**