

P515/2
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
PAPER 2
July/August 2018
3 hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Advanced Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

3 hours

INSTRUCTIONS TO CANDIDATES:

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

SECTION A

COMPULSORY QUESTION

1. On a dairy farm, a study was carried out on the feeding habits of a Friesian cow to determine the digestibility of four pasture species. The cow was given the same amount of each species at different times. The table below shows the amount of each species that was taken in and the amount of faecal material arising from each feeding regime. Study it and answer the questions that follow.

Pastures Species	Amount taken in (g)	Amount given out (g)
Digitaria macrobleshora	2340	2012
Pennisetum purpureum	350	200
Sporobolus pyramidalis	1175	675
Congo / Signal grass	1735	1485

- a) i) What is meant by feed digestibility (02 marks)
ii) Calculate the % digestibility for each grass species in the dietary requirement. (04 marks)
- b) Account for the difference in the digestibility of the above grass species. (04 marks)
- c) Explain what would happen to the dairy cow if it was kept exclusively on the pennisetum species diet. (05 marks)
- d) Suggest how best a farmer would improve intake for the grass species with the lowest digestibility. (05 marks)

SECTION B

CROP PRODUCTION

2. a) What is the importance of Mushroom growing among peri-urban farmers. (06 marks)
b) Explain the challenges of mushroom growing among peri-urban farmers of Uganda. (14 marks)
3. a) State the importance of soil water to crop plants. (06 marks)
b) Explain the measures farmers can take to improve on the water holding capacity of soils. (14 marks)

SECTION C

ANIMAL PRODUCTION

4. a) Describe the preparations farmers carry out on the brooder before receiving day old chicks. (12 marks)
- b) Explain the recommended disease preventive measures in poultry units? (08 marks)
5. a) Explain the factors that determine the stocking rate of fish in ponds. (08 marks)
- b) Describe the management practices that are carried out in order to maintain fish ponds. (12 marks)

SECTION D

AGRICULTURAL ENGINEERING AND FARM STRUCTURES

6. a) What are the reasons for providing housing for farm animals. (08 marks)
- b) Describe the desirable features of a good calf pens. (12 marks)
7. a) What factors determines the choice of farm machines to buy for farm use. (12 marks)
- b) Explain the various ways of ensuring efficiency of farm tools. (08 marks)

AGRICULTURAL ECONOMICS

8. a) What is meant by **Marketing Functions**? (02 marks)
- b) Explain reasons why marketing of agricultural product is still a big challenge in Uganda. (10 marks)
- c) Give reasons for carrying out the following marketing functions.
- i) Processing of products. (04 marks)
- ii) Storage of products. (04 marks)
9. a) What is meant by the term Gender gap in agricultural production. (02 marks)
- b) Identify the role of women/girls in agricultural production. (08 marks)
- c) Explain how the government of Uganda can increase womens' participation in agricultural production. (10 marks)

END