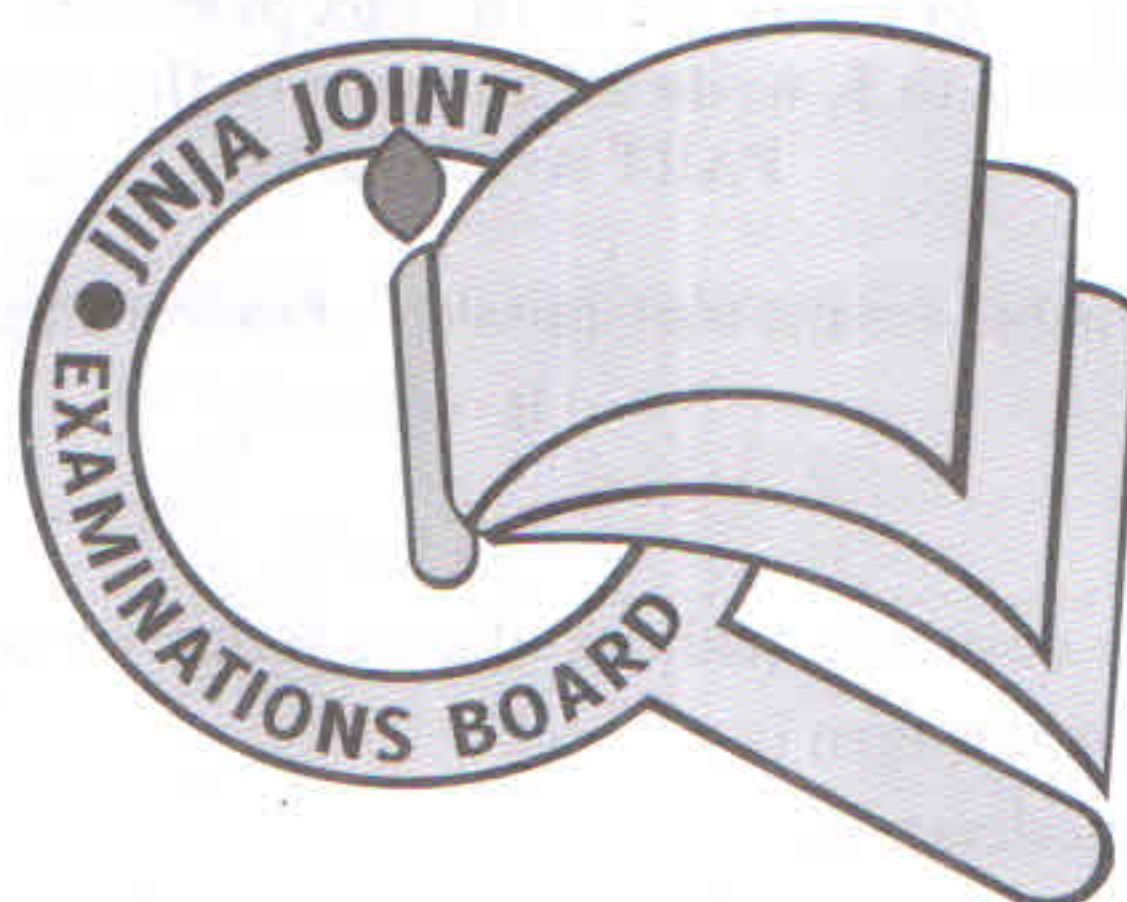


Name:.....Centre/Index No:...../.....

Signature:.....

527/1
PRINCIPLES AND
PRACTICES OF
AGRICULTURE
(THEORY)
Paper 1
DECEMBER, 2020
2½ hours



JINJA JOINT EXAMINATIONS BOARD

Uganda Certificate of Education

MOCK EXAMINATIONS – DECEMBER, 2020

PRINCIPLES AND PRACTICES OF AGRICULTURE

(THEORY)

Paper 1

INSTRUCTIONS:

2 hours 30 minutes

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
PART A		
PART B		
TOTAL		

PART A: (20 MARKS)

Answer ALL questions in this part. For question 1, write the letter corresponding to the best answer in the box provided

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

PART A: (20marks)

1. a) The vector responsible for the transmission of maize streak disease is, (1/2mark)
 A. leaf hopper B. white fly
 C. aphid D. moth.
- b) The following are desirable qualities of agro forestry tree species, except' (1/2mark)
 A. ability to fix nitrogen in the soil.
 B. having a moderate canopy.
 C. ability to grow fast.
 D. having a wide rooting zone.
- c) Which one of the following is **not** a variable input in agriculture production? (1/2mark)
 A. labour B. seeds C. land D. fertilizers
- d) In the reproductive system of a hen, the uterus is also referred to as the, (1/2mark)
 A. isthmus B. shell gland C. infundibulum D. magnum
2. State the sources from which plants obtain nutrients. (3marks)

3. Suggest **four** causes of failure of cows to come on heat. (4marks)

- 4 a) Give the meaning of the following terms as applied to mechanization. (4marks)
 i) firing order.

 ii) stroke.

- b) State the function of the injector pump in the fuel system of the diesel engine. (2marks)

.....

5. List five advantages of diversification in farming. (5marks)

.....

.....

PART B (80marks)

Answer **four** questions from this part selecting a **least one** from each of the sections.

SECTION I

CROPPRODUCTION

6. a) Define the term cover crops. (2marks)
 b) State the characteristics of a good cover crop. (8marks)
 c) Describe the roles cover crops play in maintainance of soil fertility. (10marks)
7. a) Explain the causes of change in soil pH. (8marks)
 b) Suggest ways of maintaining favourable soil pH. (6marks)
 c) How does soil pH influence crop growth? (6marks)
8. a) Explain the effects of soil erosion on farming process. (10marks)
 b) How can farmers control the development of gullies on steep slopes? (10marks)

SECTION II

ANIMAL PRODUCTION

9. a) What precautions should the farmer take when feeding birds on greens? (5marks)
 b) Explain ways through which spread of diseases in poultry can be controlled (10marks)
 c) Outline five symptoms of Newcastle disease. (5marks)
10. a) What factors should the farmer bear in mind when housing calves. (14marks)
 b) Give reasons why many farmers still leave calves to be suckled by their mothers. (6marks)
11. a) Explain why most farmers in Uganda continue to rear indigenous cattle. (12marks)
 b) Suggest factors that are responsible for low productivity of indigenous cattle.

SECTION III
MECHANISATION AND ECONOMICS

12. a) State the conditions under which traction may be reduced in a farm tractor. (6marks)
- b) How can tractor tyres be maintained in good working condition. (7marks)
- c) Briefly explain the reasons for checking a tractor before a days work. (7marks)
13. a) Give reasons why farm buildings may fail to serve their expected life span. (6marks)
- b) State the features of a crop store that would reduce damage of crop produce. (9marks)
- c) Outline the problem farmers in Uganda face in trying to store crop produce. (5marks)
14. a) How do farmers benefit from forming farming organizations? (10marks)
- b) Explain the problems are faced by farming organisations in Uganda. (10marks)