UNEB U.C.E AGRICULTURE THEORY (PAPER 1) 2008

PART A

Answer all the questions in this part. For questions 1, write the letter corresponding to the best answer.

- 1. a) the following farm activities can be performed in a crush except
- A) castrating bull calves
- B) spraying to control ticks
- C) vaccinating against diseases
- D) Carrying out artificial insemination.
- b) Which one of the following is not a reason for secondary tillage?
- A) Helps to burry the surface vegetation.
- B) Controls weeds and crops pests.
- C) Creates good condition in the sell for germination.
- D) Levels the soil and facilitates fertilizers application.
- c) Anplasmosis is caused by
- A) Ticks.
- B) Protozoa.
- C) Bacteria.
- D) Viruses.
- d) Which one of the following activities illustrates the first stage in the production function?
- A) Overstocking in a paddock.
- B) Insufficient use of fertilizer.
- C) High feeding rates for a dairy cow.
- D) Purchase of a tractor for a small area of land.
- 2. a) State the sources from which obtain nutrients.
- b) How would you identify phosphorous deficiency in a growing crop?
- 3. Outline five milking practices to ensure maximum milk production.
- 4. Explain four precautions that should be taken to ensure proper drying of timber.
- 5. Give five reasons why there may be changes in demand for an agricultural commodity.

PART B

Answer four questions including at one from each section. Write your answer in the answer booklet provided. **SECTION 1**

CROP PRODUCTION

- 6. a) Describe how compost manure is prepared, using the Indore method
- b) Outline the benefits of using organic manure as a source of plant nutrients.
- 7. a) Explain the importance of vegetable growing.
- b) What problems do vegetables growers face?
- c) Explain the following practices in vegetable growing.
- i. Pricking out
- ii. Hardening off.
- 8. a) Outline the dangers of soil erosion on arable land.
- b) Describe the mechanical methods of controlling soil erosion.

SECTION II

ANIMAL PRODUCTION

- 9. a) Outline the characteristics of a good diary cow.
- b) Explain why most farmers in Uganda continue to rear indigenous cattle.
- 10. a) Explain why each of the following management practices is carried out.
- i. Grooming
- ii. Culling
- iii. Restraint of animals
- b) Describe how the rubber ring method of castration is done.
- 11. a) Describe how you would ensure maximum production of high quality eggs in a deep litter system.
- b) Outline the advantages and disadvantages of free range system of poultry keeping.

SECTION III

MECHANISATION AND FARM MANAGEMENT

- 12. Explain the causes of fluctuations in the price of agricultural products.
- 13. a) Describe how power produced in the engine is transmitted to the rear wheels of a tractor.
- b) Explain the conditions under which traction may be reduced in a farm tractor.
- 14. a) Explain the factors that determine the type of machinery to buy for farm use.
- b) Give reasons why diesel rather than petrol engines are used on farm tractors.