



“Investing in Africa’s future”

**COLLEGE OF HEALTH, AGRICULTURE AND NATURAL
SCIENCES**

NAAS 403: NON-RUMINANT ANIMAL PRODUCTION

END OF SECOND SEMESTER FINAL EXAMINATIONS

MAY/JUNE 2020

LECTURER: MR. P. B. MUVHURINGI

DURATION: 48 HRS

INSTRUCTION

Choose and Answer **ONE** question Only

All Questions Carry Equal Marks (100)

Question 1

1. a. A commercial farmer at Kildrum farm intends to venture into broiler production. Using the following headings, advise the farmer to execute proper management of the broiler chickens:
 - i. Housing [5]
 - ii. Preparation to receive a batch of chicks [5]
 - iii. Early checks on chicks [5]
 - iv. Brooding [10]
 - v. Feeding equipment [5]
 - vi. Stocking density [5]
 - vii. Ventilation [5]
 - viii. Vaccination [5]
 - ix. Feeds [10]
 - x. Marketing [5]
- b. Giving reasons, suggest a breeding system that you will recommend to a smallholder layers birds producer in Zimbabwe. [20]
- c. Name and explain the factors which lead to high number of returns in oestrus in gilts. [20]

Question 2

2. a. Explain why road runners cannot be fed with layers mash. [5]
- b. Which factors should a farmer consider when formulating feeds? As a Livestock Production Specialist, formulate a piggery diet of 15% CP that consists of a supplement of 60% fish meal (45%CP) and 40% Soybean meal (50% CP) and grain mixture of 65% sorghum (9%CP) and 35% maize (12%CP). [45]
- c. Suggest ways of improving layers production in the smallholder farming sector Zimbabwe. [20]
- d. Give characteristics and disadvantages of three named breeds of pigs. [30]

Question 3

3. a. Which breed/ breeds of pigs will you recommend to a large scale farmer in Region 2 in Zimbabwe? Indicate the reasons for choosing that breed. [20]
- b. Suggest four major protein sources for on-farm feed formulation and production for monogastric animals. For each source, highlight the major limitations. [20]
- c. Describe and explain the causes of poor growth in finisher pigs. [20]
- d. Explain the major causes of mortalities in broiler production. [20]
- e. Compare and contrast the production systems used in layers production in Zimbabwe. Stating reasons, suggest the production system that you will recommend for a communal farmer in Chiweshe. [20]

END OF EXAMINATION PAPER