



COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NAAS 303: NON-RUMINANT ANIMAL PRODUCTION

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2023

LECTURER: MR. P. B. MUVHURINGI

DURATION: 3 HOURS

Instructions

Answer one question. Each question carries 100 marks

Question 1

- a. Which factors should a farmer consider when formulating feeds? [15]
- b. Formulate a broiler starter feed with 21% CP using soybean meal (45%CP) and 40% maize (8.5% CP). [25]
- c. Which production system will you recommend to a smallholder layers producer in Zimbabwe?. Give reasons for your choice. [25]
- d. For a named breed of pigs
 - i. state its characteristics [8]
 - ii. advantages [15]
 - iii. disadvantages [12]

Question 2

- a. Explain why road runners cannot be fed with layers mash. [5]
- b. Discuss the management processes that a broiler farmer will carry out to raise a batch of chickens up to maturity. In your response include the housing, preparation to receive a batch of chicks, early checks on chicks, brooding, feeding equipment, stocking density, ventilation, vaccination, feeds, marketing [50]
- c. Suggest ways of improving layers production in the smallholder farming sector Zimbabwe. [25]
- d. Name and explain the factors which lead to high number of returns in oestrus in gilts. [20]

Question 3

- a. List 5 main sources of energy in monogastric feeds. [5]
- b. List 5 major protein sources for animal feed. [5]
- c. Write short notes on the anti-nutritional factors which are found in feed ingredients. [25]
- d. Which breed/ breeds of pigs will you recommend to a large scale farmer?. Give reasons [25]
- e. Describe and explain the causes of poor growth in finisher pigs. [20]
- f. Explain the major causes of mortalities in broiler production. [20]

End of Examination Paper