



"Investing in Africa's Future"

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NACP 113 PRACTICAL AGRICULTURE

END OF FIRST SEMESTER EXAMINATIONS

Nov 2023

LECTURER: Mr Larry Kies

DURATION: 3 HOURS

INSTRUCTIONS

1. Do not write your name on the answer sheet

2. Use Answer Sheets Provided

3. Begin your answer for Each Question on a New Page

4. Credit is Given for Neat Presentation

NACP113 PRACTICAL AGRICULTURE

FINAL EXAM 2023

ANSWER ALL QUESTIONS. Show all working for questions with calculations.

1 Write the answer only.

- Give an example of a substance used for litter in a deep litter system.
- Name the organism that causes Newcastle Disease.

- c. Chickens are one example of poultry. Name another example.
- d. What is the term for a young female chicken?
- e. Describe the comb of a good laying hen.
- f. Give the best temperature in a house receiving day-old chicks.

(1 mark each, total 6 marks)

2 Demonstrate your ability to do conversions as done in class to find the answers to the following questions. If you want to use another method to check your work, that is OK, but you must demonstrate your understanding of the method used in class.

- a. Michel estimated his maize yield by harvesting a plot measuring one square meter. His harvest in one square meter was 100 g. (100 g/m^2) Convert his yield to tonnes per Ha.
Was his yield good? Justify your answer. (4 marks)
- b. Michel's field is 15 hectares. How many bags (50-kg) does he need to buy to store all of his harvest in bags? (2 marks)

3 Nyasha had a broiler project. Her record keeping showed the following:

Purchased 500 day-old chicks.

Feed used: Broiler starter mash- 10 x 50 kg bags

Broiler finisher mash 27 x 50 kg bags

Sales- 471 dressed birds, total of 683 kg of meat; no live birds were sold

- a. Calculate the feed conversion ratio ($\text{kg}_{\text{feed}}:\text{kg}_{\text{meat}}$) of the birds and comment on it. (2 marks)
- b. Calculate the mortality and comment on it. (2 marks)

4 Prince bought 700 day-old broilers, and kept a record of the numbers in the house. Part of the record is below. Give the values of **W** and **X**. (2 marks)

Date	Day	Deaths	Cum Mort	Sold Live	Sold Dressed	Balance	Comments
5 Nov	12	0	60			640	
6 Nov	13	4	W			X	

- 5 a. Describe the procedure used to clean a knapsack sprayer after use. (3 marks)
- b. Explain what is meant by a cold chain when buying vaccines, and why it is important. (2 marks)

- 6 Tinotenda keeps layers and sells the eggs for \$1.50 per dozen.
 Layers concentrate costs \$35.00 per 50 kg.
 Maize costs \$16 per 50 kg.

- a. Using the correct mixture of 2:3, how much will it cost to make 50 kg of layers mash using the above prices? (2 marks)

The production in his house on Wednesday is shown below.

Day	Number of birds in the house	Number of eggs	Laying percentage
Wednesday	300	280	

- b. What was the laying percentage? (1 marks)
- c. Use the answer from (a) to calculate the feed cost per *dozen* eggs. Assume 120 g of feed per bird per day. (2 marks)
- d. Comment on the profitability of the house based on the cost of feed and the selling price of eggs. (2 marks)
- e. What problems can result if layers do not get enough good feed? (4 marks)
- 7 Priscille had a house of broilers. She weighed a sample every week, and compared the weights with targets set by the feed company. The results are in the table below:

Age in weeks	0	1	2	3	4	5	6
Priscille's birds, g	45	100	180	380	770	1200	1700
Target weights, g	45	110	226	518	932	1760	2200

- a. Detach the last sheet of this exam (p4, the graph paper). Use this graph paper to draw a graph showing the growth of the birds. Be sure to include relevant labels. (4 marks)
- b. Discuss possible problems that caused this flock to grow slowly, and possible solutions to those problems. (6 marks)

Practical- To be done outside the lab.

8 Use the designated scale to give the weights of the objects:

Digital scale: 8a. 8b.

White kitchen scale: 8c 8d

Black kitchen scale 8e 8f

(6 marks)

9 Give the names of the labeled tractor parts/systems.

a.

b.

c.

(3 marks)

10 Draw the ear notches of the piglet, then state the piglet number, using the ear notch numbering system discussed in class. (2 marks)

11 Estimate the area of the small field marked.

Show all calculations, and give the answer in square meters *and estimated* in hectares. .

(5 marks)

End of Examination Paper

Student Number _____



