



**AFRICA**  
**UNIVERSITY**  
*A United Methodist-Related Institution*

***"Investing in Africa's Future"***

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

**NACP 113: PRACTICAL AGRICULTURE I**

**END OF SECOND SEMESTER FINAL EXAMINATIONS**

**APRIL 2022**

**LECTURER: MR LARRY KIES**

### ***INSTRUCTIONS***

This exam has one question. Answer ALL parts of the question.

Do NOT include the questions in your answer sheet. Write **only** the answers.

Do NOT indicate your name anywhere on your answer sheet.

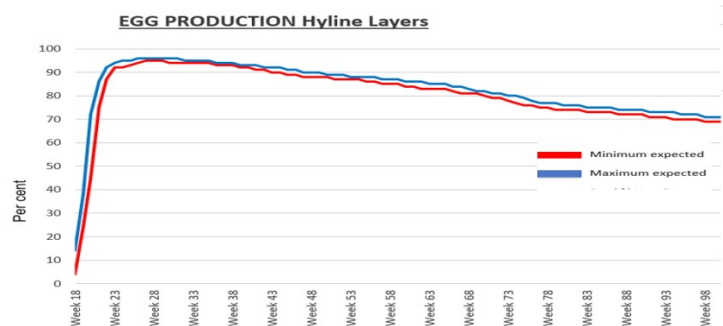
Do all calculations, drawings and/or graphs as part of your answer on the paper provided.

## NACP113 Practical Agriculture END OF SEMESTER EXAM

In all cases, your answers should be based on the information given. For questions involving calculations, **show your work** since marks are allocated for the working.

### Question 1

Refer to the graph below in answering question 1a.



- a. Rosemary has a flock of layers that started with 400 birds. Part of the records for the flock, as recorded by the worker, is below.

Age in Weeks	Total eggs for the week	Production % hens housed	Birds Remaining	Number died	% Mortality cumulative	Production % hen-day
65	2425	xxxxxx	385	2	xxxxxxxxxx	xxxxxxxxxx
66	2285 <b>a.</b>	xxxxxx	384	1	xxxxxxxxxx	xxxxxxxxxx
67	1959 <b>b.</b>	xxxxxx	381	3	xxxxxxxxxx	xxxxxxxxxx
68	2401	xxxxxx	<b>c.</b>	1	<b>d.</b>	<b>e.</b>

Refer to the letters **a-e** in bold font in the table above to answer the questions below:

- State whether the number (**a.**) (Total eggs for week 66) is appropriate for the age of the flock, and justify your answer. (4 marks)
- State whether the number (**b.**) (Total eggs for week 67) is appropriate for the age of the flock, and justify your answer. (4 marks)
- Calculate the value of '**c.**'. (2 marks)
- Calculate the value of '**d.**'. (2 marks)
- Calculate the value of '**e.**'. (2 marks)
- Layers concentrate costs \$42.00 per 50 kg.  
Maize costs \$15 per 50 kg. The mixture used to make layers mash was 2 bags concentrate:3 bags maize.  
Rosemary sells her eggs for \$1.30 per dozen.  
Discuss the profitability of her project during week 60. (4 marks)

b. Explain the procedure of disinfecting a broiler house using a knapsack sprayer, including the triple rinse of the sprayer. (6 marks)

c. Write an essay discussing the practical experiences **you** had with *poultry* in this course and how they will help prepare you for a career after graduation. (10 marks)

d. Edrine had a batch of 600 broilers. He weighed them every week with the results in the table below.

Use the graph paper on the last page to draw a graph that shows their growth, being sure to include all relevant axes titles etc. (8 marks)

Age in weeks	0	1	2	3	4	5	6
					M F	M F	M F
Wt in g	46	103	210	430	840 820	1500 1360	2350 2150

e. Edrine also kept a record of the numbers in the house. Part of the record is below. Give the values of **W** and **X**, and comment on the acceptability of **W**. (4 marks)

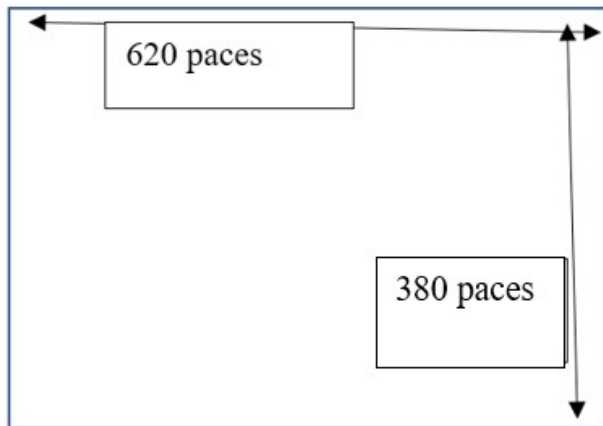
Date	Day	Deaths	Cum Mort	Sold Live	Sold Dressed	Balance	Comments
5 Nov	41	0	30			570	
6 Nov	42	4	<b>W</b>	6	25	<b>X</b>	

e. To answer the question below, you may use other methods to check your work, but understanding of the conversion method used in class must be shown.

Chancey harvested 410 bags (50 kg) of maize from his field measuring 4 Ha.

Calculate his yield in t/Ha and comment on whether it is realistic. (4 marks)

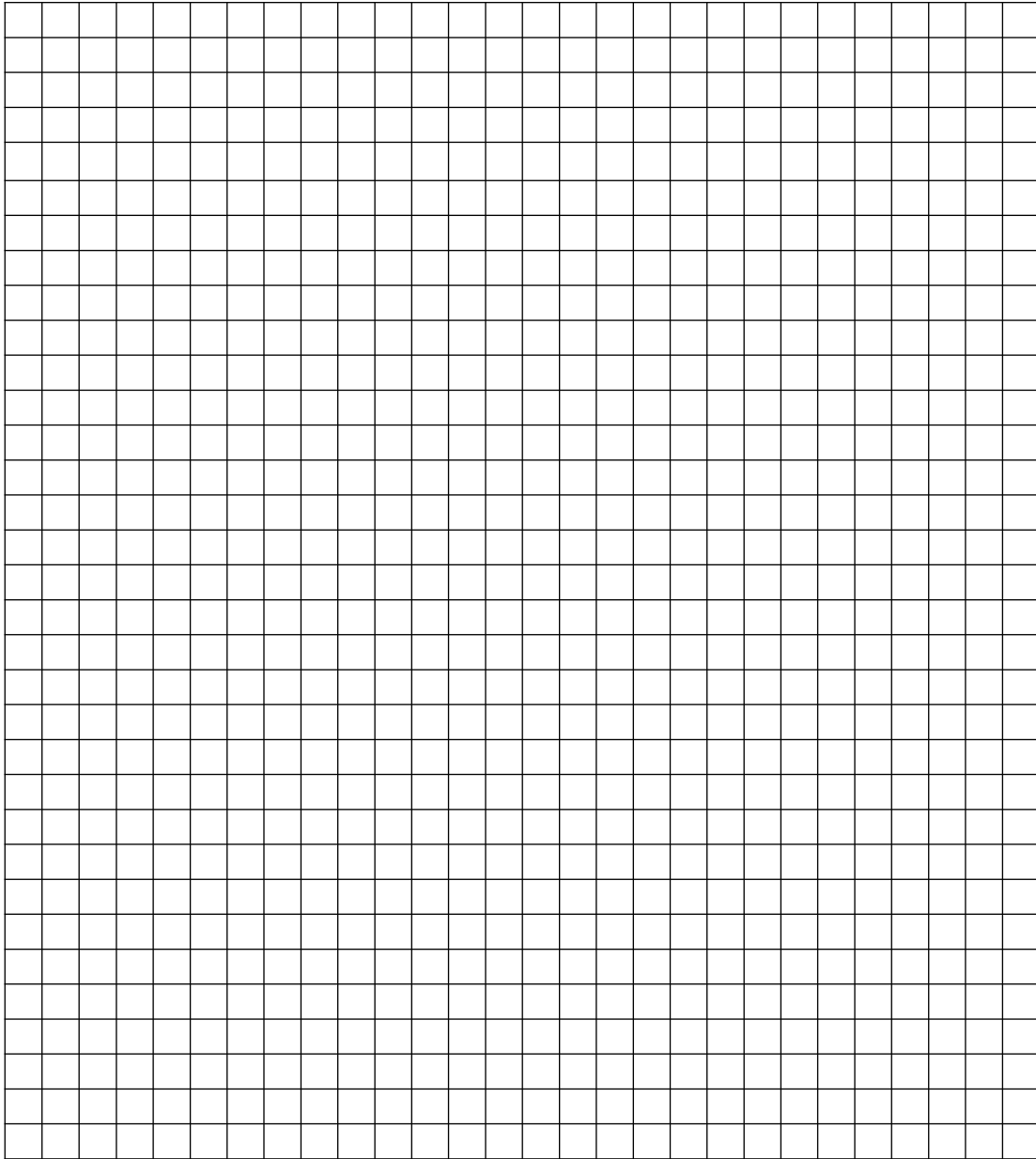
f. Tainara estimated the length of her pace by taking 68 steps to cover 50 m. She then measured the field below. Give the area in  $\text{m}^2$  and *estimated* in hectares. (5 marks)



g. Give the weights recorded on the scales below. (2 marks)



h. Give three purposes of eartagging a calf. (3 marks)



**End of Examination Paper**