



1ST SEM. 2009/2010

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BSC. IN AGRICULTURAL EDUCATION IV
BSC. IN ANIMAL SCIENCE IV**

COURSE CODE: APH 408

TITLE OF PAPER: POULTRY PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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GRANTED BY THE CHIEF INVIGILATOR.**

Question 1

As a hatchery manager at National chicks, you observe a drastic drop in percentage hatchability in the recent batch of eggs from 85% to 45%. This is a huge blow to the company. Discuss how you would go about determining the root cause of the problem.

(25 marks)

Question 2

Discuss the management of adult layers including routine management.

(25 marks)

Question 3

a) Draw a labeled diagram of the digestive system of a chicken. (10 marks)

b) Describe the digestion of the feed 'laying mash' by layers. (15 marks)

Question 4

What causes the following in chickens?

- a) Cock laying eggs (1 mark)
- b) Yolkless eggs (3 mark)
- c) Blood stains on eggs (3 marks)
- d) Meat spots on eggs (1 mark)
- e) Broken or eaten eggs (5 marks)
- f) Small number of eggs (5 marks)
- g) Poor shells (7 marks)

Question 5

Formulate a layer ration using yellow maize and soyabean meal supplemented with 5% fish meal, 5% vitamin and mineral premix and 0.3% salt.

Nutrient composition of the ingredients:

Ingredient	Energy (MJ/kg ME)	Protein (g/kg)	Calcium (g/kg)
Yellow maize	13.4	100	0.3
Soyabean meal	14	400	3.5
Fish meal	12.9	600	79.0
Vit/min premix	-	-	-
Limestone	-	-	337

Layer nutrient requirement

Energy (MJ/kg ME)	Protein (g/kg)	Calcium (g/kg)
11.1	160	30

(25 marks)