



1ST SEM. 2017/2018

**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

**PROGRAMME: B.Sc. AGRICULTURAL ECONOMICS AND AGRIBUSINESS
MANAGEMENT YEAR 2
B.Sc. AGRICULTURAL ECONOMICS AND AGRIBUSINESS
MANAGEMENT YEAR 3**

COURSE CODE: ASC 211/AS 303

TITLE OF PAPER: NON-RUMINANT ANIMAL PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY
THE CHIEF INVIGILATOR**

QUESTION 1

Imagine you have been employed by a 20,000 broiler rearing company which has just fired all its workers due to total negligence of duty. The company received a new batch of chicks twelve days ago. One of your duties is to direct and supervise the activities of the new broiler production attendants.

Upon visiting the ten poultry houses, each having more than 3500 birds, you see on the outside pools of stagnant water everywhere left by the rain. At the door of several poultry houses you are met with an irritating pungent smell. Inside the buildings, you notice that the chicks are huddled up in the corners. In two houses, most of the chicks have respiratory signs (gasping, coughing), nervous signs (depression), swelling of the tissues around the eyes and neck, greenish and watery diarrhoea. You are informed that there have been high mortalities from these houses but there are no records.

- a. Give details of the assessment of the previous management and care of the birds and their environment. **(10 Marks)**
- b. Supposing that the chicks were properly vaccinated at the hatchery, what is the likely aetiology they are suffering from? **(2 Marks)**
- c. What instructions would you give the animal attendants in order to save the remaining flock? **(13 Marks)**

QUESTION 2

A) Cobb Company (SA) raises broiler great-grandparent (GGP) stock as the basis for their breeding programme.

- (i) National Chicks Hatchery, the main client of Cobb SA, has broiler operations around Edwaleni, about 100km west of Matsapha. State the advantages of this location for broiler farming. **(5 Marks)**
- (ii) What major physiological problem is associated with broiler farming in the Highveld? **(5 marks)**

B) Formulate a ration using the Pearson Square Method for finishing broilers to have 20% Crude Protein (CP) content using soybean meal with 49% CP and yellow maize which has 11% CP. **(15 marks)**

QUESTION 3

Mrs. T. Dlamini, has just lost her sow a day after it farrowed 10 piglets. She doesn't know how to care for the piglets. Could you give her advice?

(25 Marks)

QUESTION 4

Write short notes on the following about pigs:

(a) Artificial insemination

(15 Marks)

(b) Pregnancy detection

(10 Marks)

QUESTION 5

Discuss breeding management in rabbits

(25 Marks)