



UNIVERSITY OF SWAZILAND

1st SEM. 2016/2017

FINAL EXAMINATION PAPER

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

COURSE CODE: AS 303 / ASC 211

TITLE OF PAPER: NON-RUMINANT ANIMAL PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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THE CHIEF INVIGILATOR**

QUESTION 1

(a) Define the following terms, including one example for each:

- (i) Conditionally essential amino acids (2 marks)
- (ii) Dual purpose breed (2 marks)
- (iii) Predatory camouflage (2 marks)
- (iv) Restricted range system (2 marks)
- (v) Volatile fatty acids (2 marks)

(b) Draw and label the digestive system of a rabbit (10 marks)

(c) List five problems associated with poultry rearing in Swaziland (5 marks)

(25 Marks)

QUESTION 2

(a) Give the taxonomy of poultry, pigs and rabbits in terms of phylum, class, order, family, genus and species, respectively (18 marks)

(b) List any seven advantages of rearing poultry in Swaziland (7 marks)

(25 Marks)

QUESTION 3

(a) List the common names of any four farm animal species that belong to:

- (i) Ruminants (4 marks)
- (ii) Herbivorous non-ruminants (4 marks)
- (iii) Omnivorous non-ruminants (4 marks)

(b) List any three disadvantages of rearing poultry (3 marks)

(c) An international non-governmental organisation called IFAD is interested in developing local farmers through poultry production enterprises in Swaziland. What general guidelines would you offer them regarding improvement of poultry production in the country (10 marks)

(25 Marks)

QUESTION 4

A sound knowledge of the anatomy of the digestive tract and physiology of nutrition of a pig is essential to every farmer who contemplates starting a pig production enterprise. Such knowledge is helpful in evaluation of various feedstuffs, formulation of diets and understanding how various nutrients are utilised in pigs. Therefore, discuss including an illustration the functional anatomy of the digestive tract and nutrient utilisation in the pig.

(25 Marks)

QUESTION 5

Discuss the advantages, disadvantages and constraints of rabbit production in Swaziland.

(25 Marks)