



# MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL, EDUCATION AND EXTENSION

BACHELOR OF SCIENCE EDUCATION

ANS 302: NON-RUMINANT ANIMAL PRODUCTION

DATE: 24/4/2019

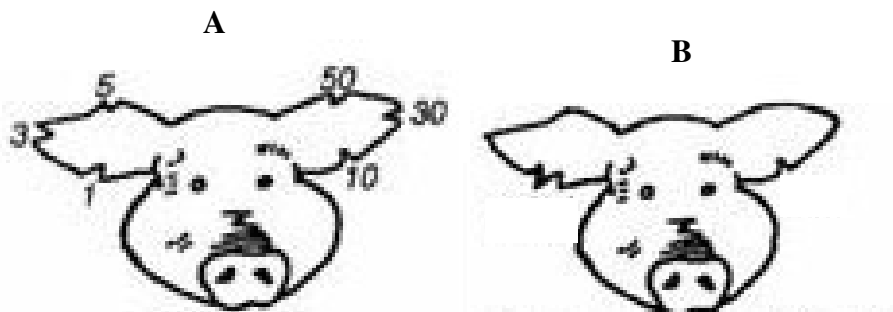
TIME: 8:30 – 10:30 AM

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**INSTRUCTIONS: Answer Question One and Any Two Questions**

## QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain **FOUR** advantages of the battery cage system of poultry rearing (4 marks)
- b) Explain the importance of the following
- i) Coprophagia in rabbits (2 marks)
  - ii) Supersedure in bees (2 marks)
- c) Using the ear notching code in figure A below,
- i) Identify pig **B** (1 mark)



- ii) Explain **TWO** disadvantages of using this method of identification (2 marks)

- d) Explain **THREE** roles of aquaculture in the Kenyan economy (3 marks)
- e) A poultry farmer in Machakos has reported low hatchability of eggs in his farm. Explain **FOUR** likely causes for this. (4 marks)
- f) Pigs have few sweat glands and will encounter problems in regulating their body temperature. Explain **TWO** management practices to reduce heat stress in the pig house (4 marks)
- g) Explain **FOUR** benefits of record keeping in non-ruminant livestock farms (4 marks)
- h) Explain **FOUR** ways to control diseases in poultry production (4 marks)

**QUESTION TWO (20 MARKS)**

- a) A farmer Katumani wants to practice bee keeping. Propose **FIVE** factors he needs to consider in planning for the apiary site. (10 marks)
- b) Identify **FIVE** effects resulting from the absence of a queen in a bee colony. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) Explain **FIVE** factors that pose a challenge to pig production in Kenya. (10 marks)
- b) Describe **FIVE** factors affecting water quality in aquaculture (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Mr. Wambua lives in Ruiru and would like to start rabbit keeping. Explain **FIVE** reasons why he is likely to succeed (10 marks)
- b) Explain **FIVE** advantages movable comb hives have over fixed comb hives (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Explain **FIVE** ways a farmer can bio secure his poultry premises (10 marks)
- b) Explain **FIVE** market factors to be considered before starting fish farming (10 marks)

