



MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

**SECOND SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN AGRICULTURE
EDUCATION AND EXTENSION
SUPPLEMENTARY/SPECIAL**

ANS 301: RUMINANT ANIMAL PRODUCTION

Date:

Time:

Instructions QUESTION ONE and any two questions in section B

QUESTION ONE

- a) Explain the importance of the following:-
 - i. Candling of eggs **(2mks)**
 - ii. Creep feeding of piglets- **(2mks)**
- b) In Ethiopia a queen bee can be sold on market days. Using **TWO** external features explain how the queen bee can be distinguished from a worker bee **(2mks)**
- c) Explain **TWO** advantages of using a Langstroth hive as compared to using The Kenya Top Bar Hive **(4mks)**
- d) Explain the causes of the following behavior
 - i. Day old brooding chicks crowding at the edges of the brooder guard board. **(2mks)**
 - ii. Pregnant rabbit does plucking fur or hair from their bellies and sides. **(2mks)**
- e) Explain **FOUR** disadvantages of the 'Cat fish' (*Clarius gariepinus*) as an aquaculture species **(4mks)**

- e) Failure to lay eggs is one of the main reasons for culling layers. Explain **FOUR** signs of a non-laying hen (**4mks**)

- f) A farmer in Kilimambogo would like to stock Landrace pigs. Describe **TWO** external features that help him distinguish a Landrace pig from a large white pig. (**4mks**)

- g) Explain **FOUR** uses of honey (**4mks**)

SECTION B. Answer any TWO questions in this section

QUESTION TWO

- a) Describe **FIVE** requirements for the efficient functioning of an incubator (**10mks**)

- b) A farmer in katumani has arranged for day old chicks to be brought to his farm. Describe the activities he will do in day1 (**10 marks**)

QUESTION THREE

- a) Explain **FIVE** causes of newborn mortality in Piglets (**10mks**)

- b) Describe the symptoms and prevention of post weaning diarrhea in piglets (**10mks**)

QUESTION FOUR

- a) Explain **FIVE** constraints faced by beekeepers in Kenya (**10mks**)
- b) Explain **FIVE** ways that a beekeeper can prevent swarming in his apiaries (**10mks**)

QUESTION FIVE

- a) Explain **FIVE** reasons for record keeping in rabbit production

- b) Explain **FIVE** management practices for young bunnies (**10mks**)