



# MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

THIRD YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

ANS 301: RUMINANT ANIMAL PRODUCTION

DATE: 19/01/2021

TIME: 8.30-10.30 AM

## INSTRUCTIONS:



MACHAKOS UNIVERSITY

University Examination for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURE EDUCATION

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**THIRD-YEAR FIRST SEMESTER SUPPLEMENTARY/SPECIAL EXAMINATION FOR  
BACHELOR OF SCIENCE IN AGRICULTURE EDUCATION AND EXTENSION AND  
BACHELOR OF EDUCATION SCIENCE**

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**ANS 301: RUMINANT ANIMAL PRODUCTION**

Date \_\_\_\_\_ Time \_\_\_\_\_

**Instructions: Answer question ONE and any other TWO questions**

**QUESTION ONE (30 MARKS)**

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a) Explain **TWO** disadvantages of using Bomas as housing units in ruminant animal husbandry \_\_\_\_\_ (4 marks)

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b) Explain the management aspects to control scouring in calves \_\_\_\_\_ (4 marks)

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c) Explain **FOUR** differences between ruminant and non-ruminant digestive systems \_\_\_\_\_ (4 marks)

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d) Explain **TWO** reasons why it is important to carry out the following routine management practices in ruminant animal husbandry

i. Livestock identification \_\_\_\_\_ (2 marks)

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ii. Dehorning \_\_\_\_\_ (2 marks)

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iii. Dipping \_\_\_\_\_ (2 marks)

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e) Explain **FIVE** factors considered in selecting breeding Does \_\_\_\_\_ (5 marks)

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e) \_\_\_\_\_

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f) Distinguish between the following in livestock production \_\_\_\_\_ (4mks  
marks)

- i. Hides and skins
- ii. Beef and mutton

g) Explain **THREE** reasons why proper milking techniques should be used \_\_\_\_\_ (3mks  
marks)

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#### QUESTION TWO (20 MARKS)

a) Explain **FIVE** methods that can be used for identifying livestock \_\_\_\_\_ (10mks  
marks)

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b) Describe the Boran breed of cattle under the following headings

i. Disease resistance \_\_\_\_\_ (5mks  
marks)

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ii. Survival \_\_\_\_\_ (5mks  
marks)

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#### QUESTION THREE (20 MARKS)

a) Explain **FIVE** advantages of partitioning sheep and goat houses \_\_\_\_\_ (10mks  
marks)

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b) Explain **FIVE** reasons why disease and treatment records are important \_\_\_\_\_ (10mks  
marks)

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#### QUESTION FOUR (20 MARKS)

a) Describe **FIVE** ways in which climate change affect ruminant animal production \_\_\_\_\_ (10mks  
marks)

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b) Explain the advantages of ranching over nomadic pastoral production systems. \_\_\_\_\_ (10mks  
marks)

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#### QUESTION FIVE (20 MARKS)

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- a) Describe **FIVE** ways of managing cow milking shed \_\_\_\_\_ (10 marks)
- b) Ruminant animals can be used for draught purposes. \_\_\_\_\_ (10 marks)
- i. Explain **-FIVE** management challenges they face
  - ii. How can these challenges be overcome?

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