



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**UNIVERSITY EXAMINATION  
FOR THE**

**DEGREE OF BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT;  
BSc. ANIMAL SCIENCE; BSc. FOOD SECURITY AND BSc. AGRICULTURAL  
EDUCATION AND EXTENSION**

**2019/2020 ACADEMIC YEAR  
RESIT**

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**COURSE CODE: AAS 3221**

**COURSE TITLE: Principles Of Animal Production**

**EXAM VENUE:**

**STREAM: Agribusiness Management;  
BSc. Education & Extension  
BSc. Animal Science'  
BSc. Food Security**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B.**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

## SECTION A (30 Marks)

### Answer All the Questions in this Section

1. a. List five (3) common breeds of dairy cattle and sheep in Kenya. (3 Marks)  
b) Define Steaming in reference to dairy production. (2 Marks)  
c). Using examples differentiate Physiological age from chronological age (3 Marks)  
d. List some of the synthetic hormones which have been used to manipulate animal production. (2 Marks)
2. a) Outline factors affecting reproductive performance of farm animals. (5 Marks)  
b. Highlight 4 farm structures and their functions. (2 Marks)  
c. Outline modes of inheritance in relations to animal production. (2 Marks)
3. a) Give categories of disease causing agents in animals (5 Marks)  
b) Briefly discuss genotype selection including its relation to animal performance. (3 Marks)  
c) Using examples briefly discuss homeostasis and how it affects animal production. (3 Marks)

## SECTION B (40 Marks)

### Answer Any Two Questions from this Section

4. Explain the challenges facing the agricultural sector as outlined in the Kenya Vision 2030. (20 Marks)
5. Describe the features of the dairy industry and the challenges facing smallholder dairy farmers in Kenya? ( 20 Marks)
6. Explain briefly **why** and **how** the following management practices are carried out in the beef cattle industry.
  - (i) Castration ( 5 Marks)
  - (ii) Branding ( 5 Marks)
  - (iii) Dehorning ( 5 Marks)
  - (iv) Synchronization of estrus ( 5 Marks)