



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FOURTH YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE ANIMAL SCIENCE**

2019/2020 ACADEMIC YEAR

SPECIAL EXAMS/RESIT

COURSE CODE: AAS 3477

COURSE TITLE: Beef Cattle and Camel Production

EXAM VENUE:

STREAM: BSc. Animal Science

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

1. **Answer ALL the questions in section A and any TWO 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.**
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SECTION A [30 MARKS]

Answer ALL questions from this Section.

1. (a) Explain the meaning of the term 'genetic maximum potential' as used in livestock production **(2 marks)**
 - (b) Discuss three factors limiting the genetic maximum potential of cattle **(6 marks)**
 - (c) What are the effects of genetic makeup and nutrition on growth and development of animals **(4 marks)**
2. (a) State and explain the two types of extensive beef production systems in the tropics and sub-tropics. **(4marks)**
 - (b) Which factors determine maturity (slaughter weight) of ranch beef animals? **(3 marks)**
 - (c) Cattle handling facilities are essential requirements in a ranch. Outline the four key cattle facilities that a properly designed ranch should have **(4marks)**
- 3 (a) Give three reasons why proper management practices are necessary in a beef herd **(3 marks)**
 - (b) Differentiate between culling and selection. **(2 marks)**
 - (c) Explain why culling is most appropriate at the weaning stage of cattle production **(2 marks)**

SECTION B [40 MARKS]

Answer any TWO QUESTIONS from this Section.

4. Briefly outline ten (10) major constraints to the animal industry in Kenya. Suggest ways that could help the country overcome these constraints. **(20 marks).**
5. a. Discuss compensatory growth and how it can be applied in beef production **(15 marks)**
 - b. Explain the benefits of finishing ranch-reared cattle on cereal ration **(5 marks)**
6. Write short notes on the following:
 - a) Breeding beef balls. **(4 Marks)**
 - b) Bulling heifers. **(4 Marks)**
 - c) Culling. **(4 Marks)**
 - d) Weaning of beef calves. **(4 Marks)**
 - e) Development of camel milk production **(4 Mark)**