



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)**