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.**

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**)