



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURE AND FOOD SCIENCES**

**FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN ANIMAL SCIENCE 2017/2018 ACADEMIC YEAR**

COURSE CODE: AAS 3421

COURSE TITLE: BEEF AND CAMEL PRODUCTION

EXAM VENUE:

STREAM: (BSc. Animal Science)

DATE: 2 HOURS

EXAM SESSION:

TIME:

Instructions:

Answer **ALL** the questions in section **A** and any **TWO** in section **B**.

Do not write on this question paper.

Each question in section **B** carries equal marks.

SECTION A [30 MARKS]

Answer All Questions in this Section

1. a) Explain the main types of beef production systems practiced in the world. [3marks]
b) State and explain the two types of extensive beef production systems in the tropics and sub-tropics. [2marks]
c) Which are the main camel genetic resources of Kenya? Outline their distribution and distinguishing features. [5marks]

2. a) State four main factors that determine economic beef production from a large scale ranch. [4marks]
b) Which factors determine maturity (slaughter weight) of ranch beef animals? [2marks]
c) There are many ways to design a ranch layout. Give the four main determinants of a ranch design layout. [4marks]

3. a) Cattle handling facilities are an essential requirement in a ranch. Outline the four key cattle facilities that a properly designed ranch should have. [4marks]
b) The breeding beef herd should essentially produce all animals in the various age groups. State the main determinants of the numbers of animals produced by the breeding herd. [3marks]
c) State the three main aims of all management practices in a beef herd. [3marks]

SECTION B [40 MARKS]

Answer any TWO QUESTIONS in this Section

4. “Compensatory growth is the most important characteristic of growing animals.” Discuss this statement in the context of tropical ranch beef production. [20 Marks]

5. Discuss briefly the following aspects of ranch beef production:
a) Paddock design and numbers of paddocks. [10marks]
b) Herd management. [10marks]

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 Marks]

