



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

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

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

2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAS 3322

COURSE TITLE: GENERAL RANGE MANAGEMENT

EXAM VENUE:

STREAM: BSc. ANIMAL SCIENCE

DATE:

EXAM SESSION:

TIME: 2 HOURS

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 questions from this Section.

1. Define the following terms with examples:
 - a. Rangelands (2 marks)
 - b. Range management (2 Marks)
 - c. Range science (2 Marks)

2. Briefly explain the principle practices that are employed in the management of range lands (6 marks)

3. Explain the following giving examples
 - a. The prairie (3 marks)
 - b. Grasslands (3 marks)
 - c. Shrub lands (3 Marks)

4. Discuss the following
 - a. Range utilization (3 Marks)
 - b. Range land resources (3 marks)
 - c. Tragedy of the commons (3 Marks)

SECTION B [40 MARKS]

Answer ANY TWO questions from this Section.

5. Range land classification in Kenya has been based on three main characteristics, state them and discuss the ecological zones classified. (20 Marks)

6. Livestock has been used as a tool in range management; discuss clearly outlining the production systems. (20 Marks)

7. Define the term defoliation and discuss the following (20 marks)
 - a. plant physiological effects of defoliation
 - b. plants morphological effects of defoliation
 - c. defoliation effect on the physical environment

8. Discuss the general factors considered in range improvement (20 marks)