



SOUTH EASTERN KENYA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN DRYLAND ANIMAL SCIENCE

ANS 205: PASTURE AND FODDER PRODUCTION AND UTILIZATION

DATE: 13TH APRIL 2017

TIME: 1.30 -3.30 PM

INSTRUCTIONS TO CANDIDATES

- a. Answer **ALL** questions in **SECTION A**
- b. Answer any **TWO [2]** questions in **SECTION B**

SECTION A [30 MARKS]

1. Using appropriate examples where possible, define the following terminologies
 - a. Pasture (2 marks)
 - b. Nutrient composition (2 marks)
 - c. Net energy (2 marks)
 - d. Palatability (2 marks)
 - e. Supplements (2 marks)
2. a. Using suitable examples, define the term 'biome'. (2 marks)
b. Highlight and briefly discuss the role of **biotic** and **abiotic** factors in pasture production (8 marks)
3. a. Highlight the significance of pasture and forage conservation (2 marks)
b. Write short notes to clearly distinguish the following methods of pasture and forage conservation
 - i. Silage (4 marks)
 - ii. Hay (4 marks)

SECTION B [40 MARKS]

4. a. Define the term 'fodder crops' (2 marks)
b. Discuss the merits and demerits of the following fodder crops used as livestock feed
 - i. Sorghum (*Sorghum bicolor*) (6 marks)
 - ii. Maize (*Zea mays*) (6 marks)
 - iii. Wheat (*Triticum aestivum*) (6 marks)

5. Discuss any **FOUR (4)** important legumes commonly used as livestock forage in Kenya (20 marks)
6. Using specific examples, discuss the contribution of grasses and grasslands to mankind (20 marks)