



SOUTH EASTERN KENYA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURAL RESOURCE MANAGEMENT

ART 601: AGRICULTURAL PRODUCTION SYSTEMS

DATE: 06TH DECEMBER, 2017

TIME: 9.00 -12.00 PM

Instructions: Answer ALL questions in section A and any two questions in section B

SECTION A: ANSWER ALL QUESTIONS (30 Marks)

Question 1

- a) Using the classic studies on two species of barnacles by J. H. Connell of the University of California, Santa Barbara, and G. F. Gause on three species of paramecium, differentiate between “a fundamental niche” and “a realized niche” (10 marks)
- b) Describe the formation of marine dead zones (10 marks)
- c) Discuss in detail the important issues that are common to all nutrient cycles in tropical climates (10 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 Marks)

Question 2

Discuss the current trends in Agricultural production in Africa (20 marks)

Question 3

Discuss the implications of altered nutrient cycles for human well-being (20 marks)

Question 4

Discuss how the unprecedented loss in biodiversity threatens Agricultural revolution in Kenya (20 marks)