

MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2023/2024 ACADEMIC YEAR FIRST YEAR FIRST SEMESTER

SCHOOL OF NATURAL RESOURCE, ENVIRONMENTAL STUDIES & AGRICULTURE

CERTIFICATE IN TOURISM AND WILDLIFE MANAGEMENT

COURSE CODE: CTW 008

COURSE TITLE: INTRODUCTION TO ECOLOGY.

DATE: 5/2/2024 TIME: 1100-1300 HRS

Instructions:

Answer ALL questions in section A and any other THREE in section B.

SECTION A – (25 MARKS)

QUESTION ONE

- **A.** Define the following (5 Marks)
- I. Camera trapping
- II. Ecotone
- III. Keystone Species
- IV. Commensalism
- V. Amensalism
 - **B.** State the law of competitive exclusion principle (3 Marks)
 - **C.** With the aid of diagrams, show the difference between a food web from a food chain (3 Marks)
 - **D.** Describe the different types of competition (5 Marks)
 - **E.** State abiotic factors of the environment that sustain the lives and reproductive cycles of organisms. (5mks)
 - **F.** Distinguish between the following terms as used in ecology (4 Marks)
 - a) Niche segregation from realized niche
 - b) Territory and home range

SECTION B-(45MARKS)

QUESTION TWO

With the aid of diagrams, and or illustrations, discuss in details the differentiate the types of ecological succession (15 Marks)

QUESTION THREE

With appropriate examples, discuss strategies different prey species use to avoid predation (15 Marks)

QUESTION FOUR

Discuss in details biotic interaction between and among organisms (15 Marks)

QUESTION FIVE

- a) With the aid of a diagram, show the difference between exponential and logistic population growth (5 Marks)
- b) Give detailed distinction between R-selected and K-selected species (10 Marks)