

## **MAASAI MARA UNIVERSITY**

# REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

# SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT BACHELOR OF SCIENCE IN WILDLIFE MANAGEMENT

COURSE CODE: WRM 3108
COURSE TITLE: POPULATION ECOLOGY

DATE: 13<sup>TH</sup> DECEMBER 2018 TIME: 8.30 -10.30AM

#### **INSTRUCTIONS TO CANDIDATES**

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

This paper consists of 2 printed pages. Please turn over

### Section A: Answer any three question (25 marks)

- 1. a) Distinguish semelparity from iteroparity (2 marks)
  - b) Explain the different patterns of survival occurring in different organisms (3 marks)
- 2. Describe how competition affects population growth (5 marks)
- 3. Explain the impacts of predation to population growth of prey species

(5 marks)

- 4. a) Explain the impacts of niche overlap among species (3 marks)
- b) Explain the negative impact of having few individuals in a closed vertebrate population (2 marks)
- 5. Briefly describe how sustainable harvest can be applied on a given vertebrate population (5 marks)

### Section B: Answer three questions only (45 marks)

- 6. Discuss methods you would use to determine wildlife populations in a given protected area (15 marks)
- 7. Explain exhaustively the importance of population ecology in the management of an endangered species (15marks)
- 8. Discuss the three types of survival curves occurring in animal populations

(15 marks)

9. Discuss factors that influences vertebrate population growth (15 marks)