



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2018/2019 ACADEMIC YEAR  
FIRST YEAR FIRST SEMESTER**

**SCHOOL OF TOURISM AND NATURAL  
RESOURCE MANAGEMENT  
BACHELOR OF SCIENCE  
(ENVIRONMENTAL BIOLOGY AND HEALTH)**

**COURSE CODE: EBH 1103/AHP 1105  
COURSE TITLE: INTRODUCTION TO ECOLOGY  
AND BIODIVERSITY**

**DATE: 7<sup>TH</sup> DECEMBER 2018**

**TIME: 1430 - 1630HRS**

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**INSTRUCTIONS TO CANDIDATES**

**ATTEMPT ALL QUESTIONS IN SECTION A AND ANY 3 IN SECTION B**

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Support your answers with relevant examples and illustrations and clearly show your calculations, where relevant.

*This paper consists of 2 printed pages. Please turn over*

## **SECTION A (25 MARKS)**

**Attempt ALL questions in this section.**

1. State 5 ABIOTIC factors that affect freshwater organisms.
2. Explain the differences between:
  - i) Endangered and Vulnerable species
  - ii) Keystone and Flagship species
  - iii) Net primary production and Gross primary production
3. Using a labelled diagram, explain the difference between Geometric and Logistic growth curves
4. Explain what you understand by the concept of niche differentiation and resource partitioning. What is its ecological significance?
5. State any 5 ecological functions of wetlands.

## **SECTION B ( 45 MARKS)**

**Attempt ANY THREE questions.**

6. Discuss the major causes of biodiversity loss in the tropics.
7. Discuss the major causes of human – wildlife conflict in the Masa Mara ecosystem.
- 8a. What is primary production.?
- 8b. Discuss the major factors limiting primary production in terrestrial ecosystems.
9. Discuss the categorization of threats to biodiversity according to IUCN.

**\*\*\*\*\* END OF EXAM QUESTIONS\*\*\*\*\***