



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2023/2024 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER

**SCHOOL OF TOURISM AND NATURAL RESOURCE
MANAGEMENT**

**DIPLOMA IN TOURISM AND WILDLIFE
MANAGEMENT**

COURSE CODE: NDTW 117

COURSE TITLE: BIOGEOGRAPHY AND CLIMATE

DATE: 2/2/2024

TIME: 1100-1300 HRS

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 ALL QUESTIONS (25 MARKS)

1. What makes the equator stand out as the region with the highest levels of biodiversity and species variety compared to other areas on the same continent? **(5 marks)**
2. Humans have shaped the planet, and might be considered the greatest evolutionary force. Explain why? **(5 marks)**
3. State any **two** famous biogeographers and briefly explain their contributions. **(5 marks)**
4. Is climate change real or a hoax? Argue both side of the coin. **(10 marks)**
5. Define the following terms: **(5 marks)**
 - a) Biogeography
 - b) Greenhouse effect
 - c) Biodiversity
 - d) ecological biogeography
 - e) Conservation Biogeography

SECTION B: ANSWER ONLY THREE QUESTIONS (45 MARKS)

6. The theory of island biogeography is a scientific theory that explains the distribution and diversity of species on islands. It was first proposed by Robert MacArthur and E.O. Wilson in 1967 and has since become a cornerstone of the field of ecology. Describe comprehensively the tenets of the theory. **(15 marks)**
7. Relief regions refer to geographical areas that have unique topographical features, such as mountains, plateaus, valleys, and plains. These topographical features determine the climate, soil, and water availability of the area, which in turn affects the type of vegetation and wildlife that can thrive in that area. Describe in details the relief regions of East Africa. **(15 marks)**
8.
 - a) Differentiate between climate and weather. **(3 marks)**
 - b) Describe with relevant examples the ecological (**three** climatic, **three** edaphic and **three** biotic) factors that limit the geographical distribution of organisms/species in the world. **(12 marks)**
9. Discuss how climate change affected ecosystems, and the distribution and abundance of wildlife and vegetation. **(15 marks)**

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