



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

MAIN EXAM

2021/2022 ACADEMIC YEAR

**FIRST YEAR SECOND SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL
HEALTH**

COURSE CODE: HEH 126

COURSE TITLE: ECOLOGY AND HEALTH

DATE: 19/04/2022

TIME: 8.00-10.00 AM

**INSTRUCTIONS TO CANDIDATES: ANSWER ALL QUESTIONS IN SECTION A
AND ONLY TWO QUESTIONS IN SECTION B.**

TIME: 2 HOURS

MARKS: 70

MMUST observes ZERO tolerance to examination cheating

Paper Consists of 3 Printed Pages. Please Turn Over



SECTION A

**SHORT ANSWERS – ANSWER ALL QUESTIONS IN THIS SECTION
(EACH QUESTION IS 4 MARKS / TOTAL MARKS = 40)**

1. Distinguish between the types/models of population growth. Use a graph to illustrate these differences.
2. Explain how ecosystems maintain their balance and stability.
3. Outline how the built environment impacts on human health and the environment.
4. Differentiate between the Liebig's law and the Shelford's law.
5. Outline the value of Biodiversity to humans.
6. Explain 2 benefits and 2 draw backs of GMOs. Use examples where appropriate.
7. Explain the basic characteristics of the theory of natural selection by Charles Darwin.
8. Outline the characteristics of good bio indicators.
9. Describe how deforestation impacts human health.
10. Explain some characteristic features of sustainable ecosystem management.

SECTION B

ESSAY QUESTIONS

ANSWER ANY TWO QUESTIONS (EACH QUESTION IS 15 MARKS/ TOTAL MARKS = 30)

1. Write an essay on:
 - a. Features of Climate Change.
 - b. Effects of global climate change on ecological systems and human health.
2. Discuss the various methods used to dispose of waste in many countries.
3. Write an essay on the six problems and six solutions of pollution and health.

END