



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR
FOURTH YEAR FIRST SEMESTER**

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

COURSE CODE: EBH 4243

COURSE TITLE: ENVIRONMENTAL HEALTH TECHNOLOGIES

DATE: 8TH OCTOBER, 2021

TIME: 1100-1300 HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in section **A** and any **TWO** selected from section **B**.

This paper consists of 2 printed pages. Please turn over

SECTION A: ANSWER ALL QUESTIONS (30MARKS)

1. Define the following terms as used in environmental technology.
 - a) Black Carbon (1mark)
 - b) Eutrophication (1mark)
 - c) Bioremediation (1mark)
2. Define renewable resources and Non renewable Resources giving **2(two)** examples in each case. (3 marks)
3. Briefly describe the one health concept with regards to human health and environment? (3 marks)
4. Although technology is deemed as a solution enabler towards solving environmental problems, it is also part of the problem, explain the statement. (3marks)
5. Define environmental technology. (3 marks)
6. Discuss the various Soil remediation techniques for polluted soils. (3marks)
7. Explain the need for treating waste water. (3marks)
8. Discuss the application of **3RS** in Waste Management. (3marks)
9. Discuss the role of microorganisms in waste management. (3marks)
10. State **3(Three)** advantages of biomimicking /bioleaching over the use of chemicals in the extraction of minerals? (3marks)

SECTION B: ANSWER ANY 2(TWO) QUESTIONS (40 MARKS)

11. Describe the cleaner production technologies adopted in:
 - a. Leather processing (6 marks)
 - b. Sugar processing (6 marks)
 - c. Transport Industry (8 marks)
12. Discuss the anthropogenic activities that lead to environmental degradation? (20 marks)
13. Describe the barriers towards achievement of technological transfers in Africa. (20 marks)
14. Discuss the advancement of technology in safeguarding the environment from irreversible damage. (20 marks)

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