



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR  
FIRST YEAR FIRST SEMESTER**

**SCHOOL OF NATURAL RESOURCES,  
TOURISM AND HOSPITALITY**

**MASTER OF ENVIRONMENTAL STUDIES  
(ENVIRONMENTAL HEALTH)**

**COURSE CODE: SES 801**

**COURSE TITLE: EARTH SYSTEM SCIENCE I**

**DATE: 9TH FEBRUARY 2023**

**TIME: 10.00AM-1.00PM**

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**INSTRUCTIONS TO CANDIDATES**

Section A is compulsory. Answer any **THREE** questions in Section B

This paper consists of 2 printed pages. Please turn over

**SECTION A: (25 MARKS)**

**Q1.** Highlight how energy flows across ecosystems for increased efficiency  
**(5 Marks)**

**Q2.** Briefly discuss the supply side of the environmental concerns in the energy sector in Africa  
**(5 Marks)**

**Q3.** Assess the demand side of the environmental concerns in the energy sector in East Africa  
**(5 Marks)**

**Q4.** Using examples, explain policy strategies for effective management of the mining sector in Kenya  
**(5 Marks)**

**Q5.** Highlight the key challenges and strategies for hydropower energy development in East Africa  
**(5 Marks)**

**Q6.** Assess the applicable policies for Geothermal resources development in Kenya  
**(5 Marks)**

**SECTION B: (45 MARKS)**

**Q7.** Discuss the Integrated Solid Waste Management process for increased efficiency in waste management in Africa  
**(15 Marks)**

**Q8.** Discuss the impacts of Climate Change on Water Resources in Narok County  
**(15 Marks)**

**Q9.** Discuss mechanisms for the management and remediation of polluted soils in Kenya  
**(15 Marks)**

**Q10.** Discuss air pollution policies for enhanced air quality in Kenya  
**(15 Marks)**

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