



## TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**BSSC/BTAP/ BTRE/BMM/16S/YEAR 1/ SEMESTER 2**

**BMM 4105/AES 4101- ENVIRONMENTAL STUDIES**

**END OF SEMESTER EXAMINATION**

**SERIES: SEPT. , 2017**

**TIME: 2 HOURS**

***Instructions to Candidates***

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

***This paper consists of two printed pages.***

***Mobile phones are NOT allowed in the examination room***

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**Question One (30 marks)**

**a.** Define the following terms;

**i.** Thermosphere **(1mark)**

**ii.** Greenhouse effect. **(1mark)**

**iii.** Eutrophication. **(1mark)**

**iv.** Sustainable land management. **(1mark)**

**v.** Energy efficiency. **(1mark)**

**b.** Differentiate between the following terms;

**i.** Species richness and species diversity **(2marks)**

- ii. Global warming and climate change. **(2marks)**
- iii. Wastes and pollutants **(2marks)**
- c. Outline two sources of energy that powers the earth's systems. **(2marks)**
- d. Outline FOUR ways by which human's impact on bio-geological cycles. **(4marks)**.
- e. Explain the effects of urbanization on coastal on the environment. **(3marks)**.
- f. Describe THREE non-fossil fuel sources of environmental pollution. **(3marks)**.
- g. Describe THREE fundamental factors driving environmental pollution. **(3marks)**.
- h. Outline the driving forces of Land use changes in Kenya today. **(4marks)**.

**Question Two:**

Discuss the sources, effects and management of Marine pollution. **(20marks)**.

**Question Three:**

- A. Discuss the components of land degradation and their effects experienced in Kenya today. **(15marks)**.
- B. Describe management measures that can be implemented to control land degradation identified in (A) above. **(5marks)**

**Question Four**

Compare and contrast fossil fuels and HEP as energy source. **(20 marks)**

**Question Five**

Discuss the causes and effects of Ozone depletion and climate change **(20 marks)**