



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR:
BSSC/BTAP/ BTRE/BSMM/16S/YEAR 1/ SEMESTER 2**

BMM 4105/AES 4101- ENVIRONMENTAL STUDIES

SPECIAL SUPPLEMENTARY 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

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)**