



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN BJMC, BJMC, BBJ, BSMR & BSFO

SEMESTER I 2016/2017

AES 4101- ENVIRONMENTAL STUDIES

SERIES: DECEMBER 2016

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.

Question One (Compulsory)

- a. Define the following terms as used in Environmental studies (5 marks)
 - i. Edaphic Factors
 - ii. Ozone layer
 - iii. Radiative forcing
 - iv. Cycling pool
 - v. Sedimentary cycles
- b. Explain three main processes of energy transfer at the global scale. (3marks)
- c. Identify the effects of biodiversity loss in the world today (5marks)
- d. Describe the Indirect influences on hydrological cycle (4marks)
- e. Describe the characteristics of human population necessary to be considered to ensure effective environmental management (3 marks).
- f. Explain five (5) ways through which humans alter the carbon cycle. (5marks)
- g. Describe the 'greenhouse effect'. (5marks)

Question Two

- A. Using a well labelled diagram, describe the composition of the atmosphere based on thermal composition (10marks).

- B.** Describe the sources of energy into the atmosphere, indicating ways by which Energy is transferred within and between environmental systems **(10marks)**

Question Three

- A.** Using a well labeled diagram, describe the principle components of the Hydrological cycle **(15marks)**
- B.** Describe ways through which human influence the hydrological cycle. **(5marks)**

Question Four

- A.** Discuss the Pros and Cons of the establishment of Lamu Port to the Kenya's environment. **(20marks)**.

Question Five

Compare and contrast fossil fuels and solar energy sources **(20 marks)**

