



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

**BACHELOR OF SCIENCE IN MARINE RESOURCE MANAGEMENT &
BACHELOR OF TECHNOLOGY IN RENEWABLE ENERGY**

BSMR 15S/YEAR 2/ SEMESTER 2

BTRE 13S/YEAR 4/SEMESTER 2

AES 4206: ENVIRONMENTAL IMPACT ASSESSMENT AND AUDITING

END OF SEMESTER EXAMINATION

SERIES: JULY 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) Describe the following terms

i. Strategic Environmental Assessment (2 marks)

ii. Environmental Impact (2 marks)

b) Differentiate between Environmental Impact Assessment and Environmental Audit (4 marks)

c) Briefly discuss the THREE main ingredients of an EIA (3 marks)

d) Describe briefly five significances of EIA (5 marks)

e) Name any SIX EIA methodologies that can be used to assess impacts (6 marks)

f) Briefly discuss any THREE questions Environmental Audits aim to answer. (3 marks)

g) Briefly discuss any FIVE principles of EIAs (5 marks)

QUESTION TWO. (20 MARKS)

A factory manufacturing lead batteries has been discharging wastes into the open environment. A local community based organization (CBO) has taken the factory to court for redress on behalf of the residents who are already experiencing adverse health effects.

- a. Explain five directions the court can issue for redress after the CBO proves to the court that the right to a clean and healthy environment of the locals had been violated by the factory management. (10mks)
- b. Explain what could have gone wrong in the decision making for the factory building and operations (10mks)

QUESTION THREE. (20 MARKS)

Strategic environmental assessment is a better servant of the environment than the environmental impact assessment. Discuss (20mks)

QUESTION FOUR. (20 MARKS)

The current construction of the standard gauge railway in Kenya has generated a lot of public protests and resistance for the SGR to pass through the Nairobi national park.

- a. Identify five categories of the public that was necessary to engage in public participation in the construction of the SGR through the Nairobi national Park. For each category, justify your answer (10mks)
- b. Explain why proponents of projects do not welcome public participation in the EIA process (10mks)

QUESTION FIVE. (20 MARKS)

An Investor wants to put up an Industrial Plant for the manufacture of paper and its derivatives for both local and external market. The Investor intends to establish the paper manufacturing mill in a relatively wet and forested parts of Kilifi County (Arabuko Sokoke forest). A part from the paper mill, the Investor will also provide infrastructure and social amenities in the region. In view of the socio economic and bio-physical environmental implications that may result due to the proposal, there has been public debate particularly on the loss of habitat/biodiversity and competition for scarce water resources in the region. Assuming your consultancy firm has won a contract to undertake Environmental Impact Assessment (EIA) study on this proposed project:

- a. Discuss the logical steps in the EIA process that your study team is likely to follow in order to achieve the task assigned to you. (10mks)
- b. Who would you consider to be Key Stakeholders to participate in this EIA study process? Give reasons for your answer (5mks)
- c. Explain at least four (5) issues which should form the scope of the EIA study. (5mks)