



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE IN COMMUNITY HEALTH

MPH/19J/YEAR 1/ SEMESTER 2

AES 5101: ENVIRONMENTAL IMPACT ASSESSMENT AND AUDIT

END OF SEMESTER EXAMINATION

SERIES: APRIL 2019

TIME: 3 HOURS

Instructions to Candidates

This paper consists of SIX questions

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

This paper consists of two printed pages.

Mobile phones are NOT allowed in the examination room

QUESTION ONE (30 MARKS)

- a) Briefly describe three components of the environment (6 marks)
- b) Explain any three environmental crisis that warranted the need for an EIA tool (6 marks)
- c) Contrast Environmental Impact Assessment (EIA) with Strategic Environmental Assessment (SEA) (6 marks)
- d) State any six objectives of Environmental Auditing (6 marks)
- e) You have been appointed to train students on community participatory process in EIA. Briefly, describe three methods used to engage the community in the participatory process by highlighting strength and weakness of each method (6 marks)

QUESTION TWO (30 MARKS)

- a) International agreements on environment have played an important role in checking impacts resulting from development on the environment. Discuss how the following agreements have contributed to environmental protection:
- i. Agenda 21 (10 marks)
 - ii. Framework Convention on Climate Change (10 marks)
 - iii. Convention on Biological Diversity (10 marks)

QUESTION THREE (30 MARKS)

Assuming you are leading a team to conduct EIA for establishment of a gas station, advise your team on the methods that you would use to identify environmental impacts (30 marks)

QUESTION FOUR (30 MARKS)

- a) As a public health officer, explain why periodic environmental auditing is important in the health sectors (15marks)
- b) Identify and elaborate three types of environmental audit (15 marks)

QUESTION FIVE (30 MARKS)

Read the following abstract and answer the corresponding questions:

A chemistry fabric has been working in an industrial area for 15 years already. In the last 5 years the production of this fabric has doubled. An urban area near the fabric has been complaining about the bad smell coming from this fabric. For this reason the community asked the Municipality to perform an environmental evaluation to this fabric since never before has any evaluation been executed. The fabric hired an Environmental Consultancy in order to perform this evaluation. You are the leader of this consultancy.

- a) Briefly explain five possible environmental issues that may be experienced by the community? (10 marks)
- b) Discuss three types of environmental audit that you may consider to undertake (20 marks)

QUESTION SIX (30 MARKS)

Stake holder engagement is an important exercise in Strategic Environmental Assessment:

- a. Describe possible methods of stakeholder engagement (15 marks)
- b. Explain advantages of their engagement in a policy development process (15 marks)