



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF **PURE AND APPLIED SCIENCES**

DIPLOMA IN ANALYTICAL CHEMISTRY

DIPLOMA IN MICROBIOLOGY AND BIOTECHNOLOGY

(DAC 11M / DIMBT 11M)

AES 2303: ENVIRONMENTAL MANAGEMENT

SPECIAL/SUPPLEMENTARY: EXAMINATIONS

SERIES: FEBRUARY 2013

TIME: 2 HOURS

INSTRUCTIONS:

You should have the following for this paper

- *Answer booklet*

This paper consists of **FIVE** questions.

Answer Question **ONE (compulsory)** and any other **TWO** questions

This paper consists of 2 PRINTED pages

Question ONE

- a) Define the following terms
 - (i) Transboundary pollution (2marks)
 - (ii) Sustainable development (2marks)
- b) Explain FIVE advantages of an ISO 14001 certified firm (5marks)
- c) Explain THREE environmental effects and THREE health effects of air pollution (6marks)
- d) Explain FOUR advantages carrying out an EIA (4marks)
- e) Explain THREE land pollutants resulting from agricultural activities (3marks)
- f) Briefly explain bioaccumulation of heavy metals in food chains (4marks)
- g) Using examples distinguish between renewable and non-renewable natural resources (4marks)

Question TWO

Discuss causes of water pollution (15marks)

Question THREE

Outline the process of carrying out an EIA (15marks)

Question FOUR

Discuss the provisions of the 1999 EMCA Act (15marks)

Question FIVE

Discuss the following global environmental issues

- (i) Ozone layer depletion (6marks)
- (ii) Acid rain (5marks)
- (iii) Solid waste accumulation (5marks)