



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

**FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN
ENVIRONMENTAL STUDIES (COMMUNITY DEVELOPMENT)**

**ECD 204: COMMUNITY WATER RESOURCES AND SANITATION
MANAGEMENT**

Date:

Time:

INSTRUCTIONS: Answer Question **one** and any other **two** questions

1. a) Explain the meaning of the following terms
 - i) Electrical conductivity (2 marks)
 - ii) Cleaner production (2 marks)
 - iii) Eutrophication (2 marks)
 - iv) Water quality assessment (2 marks)
 - v) Waste management (2 marks)
- b) Explain four principal objectives of water quality monitoring (8 marks)
- c) Explain the concept of pollution prevention as applied in waste management (6 marks)
- d) Explain three major challenges of solid waste management in Kenya (6 marks)

- vi) a) Nairobi River is heavily polluted along its course, discuss five possible causes of water pollution along this river. (10 marks)

- b) Explain four factors that influences dissolved oxygen levels in fresh water ecosystems in Kenya (10 marks)
 - vii) Using examples, discuss the implications of wastes on community water resources in Kenya (20 marks)

 - viii) Critically evaluate Kenya's Water Act and Public Health Act in relation to community water resources and sanitation management (20 marks)

 - ix) Describe the treatment and disposal methods for wastewaters as practiced in Kenya (20 marks)