



# MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES AND COMMUNITY  
DEVELOPMENT

SECOND YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF  
ENVIRONMENTAL STUDIES (COMMUNITY DEVELOPMENT)

ECD 204: COMMUNITY WATER RESOURCES AND SANITATION MANAGEMENT

DATE:18/12/2017

TIME:8.30-10.30 AM

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**INSTRUCTIONS:**

*Answer Question one and any other two questions*

**QUESTION ONE (30 MARKS)**

- a) Define the following terms
- i. Water resources (2 marks)
  - ii. Secchi penetration (2 marks)
  - iii. Salinity (2 marks)
  - iv. Sanitation (2 marks)
  - v. sustainable development (2 marks)
- b) Giving examples, explain three groups of water quality parameters (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)

**QUESTION TWO (20 MARKS)**

- a) The water in Masinga Dam in Kenya has been found to have high turbidity, explain the term turbidity and discuss four possible causes of it in this Dam. (10 marks)
- b) Explain four consequences of increased water temperatures in Lake Victoria ecosystems (10 marks)

**QUESTION THREE (20 MARKS)**

Following the recent ban on plastic use in Kenya, this will result to a positive impact towards improvement of water quality, discuss (20 marks)

**QUESTION FOUR (20 MARKS)**

Using examples discuss implications of eutrophication on community water resources (20 marks)

**QUESTION FIVE (20 MARKS)**

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