



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR IN ENVIRONMENTAL STUDIES & COMMUNITY DEVELOPMENT

BACHELOR OF SCIENCE IN COMMUNITY RESOURCE MANAGEMENT

ECD 204: COMMUNITY WATER RESOURCES AND SANITATION MANAGEMENT

DATE: 26/7/2019

TIME: 11.00-1.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Explain the meaning of the following terms
- i. Eutrophication (2 marks)
 - ii. Electrical conductivity (2 marks)
 - iii. Biochemical Oxygen Demand (2 marks)
 - iv. Turbidity (2 marks)
 - v. Chemical Oxygen Demand (2 marks)
- b) Explain the importance of water quality monitoring in Kenya (10 marks)
- c) Explain four factors that influences dissolved oxygen levels in fresh water ecosystems in Kenya (10 marks)

QUESTION TWO (20 MARKS)

Discuss four major causes of water pollution in Machakos County and suggest viable mitigation measures

QUESTION THREE (20 MARKS)

Explain the wastewater treatment and disposal process as practiced in Kenya

QUESTION FOUR (20 MARKS)

Discuss how water resources are managed in Kenya

QUESTION FIVE (20 MARKS)

Using an illustration, explain the hierarchy of solid waste management