



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR  
BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)

ERC 321: WATER AND MARINE RESOURCES MANAGEMENT

DATE: 24/3/2021

TIME: 2.00-4.00 PM

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## INSTRUCTIONS;

Answer question ONE and any other TWO questions

### QUESTION ONE (30 MARKS)

- a) Explain the following
- i. Eutrophication (2 marks)
  - ii. Lotic ecosystems (2 marks)
  - iii. Coral reefs (2 marks)
- b) Explain four routes by which pesticides contaminate the aquatic environments (12 marks)
- c) Explain four physicochemical characteristics of water that influence productivity and survival of aquatic life (12 marks)

### QUESTION TWO (20 MARKS)

Discuss the two major categories of aquatic ecosystems in Kenya

### QUESTION THREE (20 MARKS)

Citing examples, discuss the major challenges faced in the management of fisheries in Kenya and suggest possible ways in which fisheries resources can be managed sustainably

### QUESTION FOUR (20 MARKS)

Discuss the effects of human activities on aquatic environments in Kenya

### QUESTION FIVE (20 MARKS)

Using examples, explain the benefits of marine resources to local communities living along the Kenyan Coast.