



# 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 (RESOURCE CONSERVATION)

ERC 212: INTRODUCTION TO WATER AND MARINE RESOURCES

DATE: 24/9/2019

TIME: 2.00-4.00 PM

---

## INSTRUCTIONS:

Answer question ONE and any other TWO questions

### QUESTION ONE (30 MARKS)

- a) Explain the meaning of the following terms
- i. Plankton (2 marks)
  - ii. Tidal waves (2 marks)
  - iii. Coral reefs (2 marks)
  - iv. Beach Management Unit (2 marks)
  - v. Estuary (2 marks)
- b) Explain the threats faced by Sea turtles along the Kenya Coastal marine ecosystems (5 marks)
- c) Explain five major roles of sea grass beds in the East African Coast (15 marks)

### QUESTION TWO (20 MARKS)

Discuss how marine organisms are adapted to the epipelagic and mesopelagic environments

### QUESTION THREE (20 MARKS)

Discuss the importance of mangrove forests in Kenya

**QUESTION FOUR (20 MARKS)**

Discuss five major factors threatening the coral reef ecosystem along the Kenyan Coast and suggest ways by which it can be managed on a sustainable basis

**QUESTION FIVE (20 MARKS)**

Discuss five major challenges encountered in the management of marine fisheries in Kenya