



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

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

ERC 212: INTRODUCTION TO WATER AND MARINE RESOURCES

DATE: 25/3/2021

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

1. a). Explain the meaning of the following terms
 - i. Plankton (2 marks)
 - ii. Tidal waves (2 marks)
 - iii. Nekton (2 marks)
 - iv. Beach Management Unit (2 marks)
 - v. Eutrophication (2 marks)
 - b). Explain the threats faced by Sea turtles along the Kenya Coastal marine ecosystems (5 marks)
 - c). Using a diagram differentiate the pelagic and benthic environments of the sea (5 marks)
 - d). Discuss the significance of oceanic currents to Marine ecosystems along the East African coastal line (10 marks)
2. Discuss the importance of mangrove forests in Kenya (20 marks)

3. a) Explain five major roles of sea grass beds in the East African Coast (10 marks)
b) Explain five major challenges faced in the management of marine fisheries in Kenya (10 marks)
4. Sustainable Development Goal 14 aims to conserve and sustainably use the oceans, seas and marine resources for sustainable development by the year 2030. Explain efforts Kenya has taken towards achieving this goal (20 marks)
5. The productivity of aquatic systems depends on their water quality. Discuss (20 marks)