



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016 Academic Year

K, SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

**FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR IN
ENVIRONMENTAL STUDIES (ENVIRONMENTAL RESOURCE CONSERVATION)**

ERC 212: INTRODUCTION TO WATER AND MARINE RESOURCES

Date:

Time:

INSTRUCTIONS:

Answer Question one and any other two questions

1. a) Explain the meaning of the following terms
 - i) Plankton (2 marks)
 - ii) Estuaries (2 marks)
 - iii) Nekton (2 marks)
 - iv) Kelp forest (2 marks)
 - v) Tsunami (2 marks)
- b) Explain how turbidity and nutrients in water would influence productivity levels and survival of aquatic life. (6 marks)
- c) Explain four major challenges faced in the management of marine fisheries in Kenya. (8 marks)

- d) Explain how mangroves have adapted to the various ecological pressures existing in their environment. (6 marks)
2. a) Critically evaluate Kenya's national policy and legislation on management of marine fisheries. (10 marks)
- b) Explain five major benefits and threats of sea grass beds along the East African coast. (10 marks)
3. Citing examples, discuss how marine organisms are adapted to the epipelagic and mesopelagic environments. (20 marks)
4. 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. (20 marks)
5. Discuss the importance of mangrove forests in Kenya. (20 marks)