



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

SECOND YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF
ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)

ERC 212: INTRODUCTION TO WATER AND MARINE RESOURCES

DATE: 6/12/2017

TIME: 11.00-1.00 PM

INSTRUCTIONS:

Answer Question one and any other two questions

1. a) Explain the meaning of the following terms
 - i. Eutrophication (2 marks)
 - ii. Tides (2 marks)
 - iii. Plate tectonics (2 marks)
 - iv. Nekton (2 marks)
 - v. Estuaries (2 marks)
- b) Explain the role of mangrove forests in the Kenyan coastal line (10 marks)
- c) Explain five physicochemical characteristics of water that affect productivity and survival of aquatic life (10 marks)
2. Citing examples, discuss how marine organisms have adapted to the pelagic environments. (20 marks)
3. Critically evaluate Kenya's national policy and legislation on management of marine fisheries. (20 marks)
4. Using examples, discuss the major threats faced by marine ecosystems in East Africa and indicate their mitigation measures (20 marks)
5. a) Explain five major roles of sea grass beds (10 marks)
- b) Discuss the significance of oceanic circulations and currents in the Indian ocean (10 marks)