

**TECHNICAL UNIVERSITY OF MOMBASA**

**FACULTY OF APPLIED AND HEALTH SCIENCES**

**DEPARTMENT OF ENVIRONMENT OF HEALTH AND HEALTH SCIENCES**

**University Examination for the Degree of Bachelor of Science in Marine Resources**

**Management**

**BSMR 15S / Year 1 / Semester 2**

**Code: AES 4106: Introduction to Marine Ecology**

**SEMESTER EXAMINATION**

**Series: May / 2016**

**TIME: 2 Hours**

**Instructions to candidates:**

This paper consist of FIVE questions

Answer question ONE (compulsory) and any other TWO questions

**This paper consists of two printed pages**

## QUESTION ONE

### SECTION A:

- i. Define the term Echolocation? [ 3 marks ]
- ii. How can one prevent loss of biotic diversity?[ 3 marks ]
- iii. Why is a J- shaped growth curve unlimited? [ 3 marks ]
- iv. Define the term carrying capacity?[ 3 marks ]
- v. Explain the term eurythermal? [ 3 marks ]
- vi. What is trophic group amensalism?[ 3 marks ]
- vii. What are the two possible functions of bioluminescence? [ 3 marks ]
- viii. Define ciguatera and explain why the term has significance in marine ecology? [ 3 marks ]
- ix. When corals get too warm / cold they sometimes expel their zooxanthellae. This loss of the endosymbiont is known as? [ 3 marks ]
- x. State two examples of marine regions that rely heavily on allochthonous production?[ 3 marks ]

### SECTION B:

2. (a). Marine ecosystems are among the largest of earth's. Explain?[ 10 marks ]
2. (b). Why do Kenyan scientists see little degradation on the intertidal rocky shore?[ 10 marks ]
3. Describe 5 mechanisms by which pelagic organisms avoid sinking into the abyssal?[ 20 marks ]

4. Biological interactions are extremely important in the Rocky intertidal zone. Give two specific examples of organisms and their biotic interactions in temperate rocky intertidal ecosystems? (20 Marks).
5. Does trawling destroy marine habitats and biodiversity? Discuss? [ 20 marks ]