



**TECHNICAL UNIVERSITY OF MOMBASA**

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**BACHELOR OF SCIENCE IN MARINE RESOURCE MANAGEMENT**

**BSMR 14S/YEAR 4/ SEMESTER 1**

**AES 4405: EMERGING ISSUES IN MARINE RESOURCE MANAGEMENT**

**SPECIAL/ SUPPLIMENTARY EXAMINATIONS**

**SERIES: SEPTEMBER 2018**

**TIME: 2 HOURS**

***Instructions to Candidates***

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

***This paper consists of two printed pages.***

***Mobile phones are NOT allowed in the examination room***

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**QUESTION ONE. (30 MARKS)**

a) Define the following terms in respect to marine resource management:-

- i. Bioprospecting (2 marks)
- ii. Pollution (1 mark)
- iii. IUU (2 marks)
- b) (i) What is marine debris (2 marks)  
(ii) State three effects of marine debris on coastal marine fauna (3 marks)
- c) (i) What causes sea level rise (2 marks)  
(ii) Explain the effects of sea level rise on coastal mangrove forests (3 marks)
- d) (i) Outline the importance of community participation in marine resource conservation (2marks)  
(ii) State three ways in which mangrove degradation affects marine fauna (3 marks)

e) State the core role of the following international environmental treaties/agreements that have contributed to the conservation, wise use and management of marine resources (5 marks)

- i. Bonn Convention on Conservation of Migratory Species
- ii. United Nations Framework Convention on Climate Change
- iii. United Nations Convention on the Law of the Sea
- iv. United Nations Convention on Biological Diversity
- v. Convention on International Trade in Endangered Species

f) (i) What is waste disposal (2 marks)

(ii) A Car battery production firm has been set up in a coastal town; carefully state three environmental impacts it's likely to pose onto the marine environment (3 marks)

### **QUESTION TWO (20 MARKS)**

Discuss any ten importance of MPAs in marine resource management

### **QUESTION THREE (20 MARKS)**

Explain five impacts of climate change on coastal marine resources

### **QUESTION FOUR (20 MARKS)**

Discuss any five ways through which coastal erosion influences the socio-economic development of coastal communities

### **QUESTION FIVE (20 MARKS)**

Fishing “down” the food web is not only a concept but also an emerging issue in commercial fisheries, Discuss.