



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR:**

DEGREE IN MARINE RESOURCE

BSMR 14S/YEAR3/SEMESTER 1

**AES 4301: COASTAL CLIMATE AND DYNAMICS**

END OF SEMESTER EXAMINATION

**SERIES: AUGUST 2017**

**TIME: 2 HOURS**

**DATE: Pick Date Sep 2017**

## **Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt question ONE (Compulsory) and any other TWO questions.

**Circle the correct answer in section A.**

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## **QUESTION ONE (30 MARKS)**

- a) State and explain any five climatic elements [5Mks]
- b) Millennium declaration of 2000 involved a commitment by 189 countries across the Globe that by 2015 poverty shall be reduced by 50%, explain any five of the MDGs that were set [5Mks].
- c) State five effects of Greenhouse gases (GHGs) [5Mks]
- d) Outline five climate change adaptation measures [5Mks]
- e) Briefly explain the three types of climatology [3Mks]
- f) State two effects of increasing temperature on Polar Regions [2Mks]

g) Describe how sea level rise impacts coastal aquaculture [5Mks]

**QUESTION TWO (20 MARKS)**

Discuss the potential impacts of climate change on human health [20Mks]

**QUESTION THREE (20 MARKS)**

Describe how global warming impacts any two Ocean ecosystems [20Mks]

**QUESTION FOUR (20 MARKS)**

Compare and contrast the polar climate versus tropical rainy climate [20mks]

**QUESTION FIVE (20 MARKS)**

Explain how climate change is likely to impact marine life [20Mks]