

**Technical University of Mombasa**

**Faculty of Applied and Health Sciences**

**Department of Environment and Health Sciences**

**Degree of Bachelor of Science in Marine Resources Management**

**BSMR 14S / Year 2 / Semester 2**

**Code: AES 4210: Introduction to Oceanography**

**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 page**

**QUESTION ONE**

**SECTION A:**

- a. Explain the term Oceanography? [ 3 marks ]
- b. (i). Why is the study of oceanography important? [ 1.5 marks ]
- b. (ii). State the effects Ocean Acidification on Corals and Shellfish? [ 1.5 marks ]
- c. (i). Why is Jacques Cousteau important to oceanography? [ 1.5 marks ]

- c. (ii). What Nutrients are found in the ocean? [ 1.5 marks ]
  
- d. (i). Tsunamis are there in the oceans. What can be done? [ 1.5 marks ]
  
- d. (ii). State the ecosystem response to climate? [ 1.5 marks ]
  
- e. (i). Explain Ocean Heating and Cooling? [ 1.5 marks ]
- e. (ii). What are Oil Spills and Oil Seeps? [ 1.5 marks ]
  
- f. (i). Explain how upwelling impact fish population? [ 1.5 marks ]
  
- f. (ii). Explain Nutrient Pollution and Dead Zones in the ocean? [ 1.5 marks ]
  
- g. State the Geographic Distribution of Coral Reefs? [ 3 marks ]
  
- h. (i). State what happens during an El Nino? [ 1.5 marks ]
- h. (ii). Show the evidence for Continental Drift? [ 1.5 marks ]
  
- i. List of Environmental Issues in Oceanography? [ 3 marks ]
  
- j. What have the experts done for the public to believe that there is Climate Change and Rising Sea Level? [ 3 marks ]

## **SECTION B:**

- 2. Explain the Derelict Fishing Gear and Ghost Fishing? [ 20 marks ]
  
- 3. (i). Oceans hold around 50 times more carbon than the atmosphere. Explain? [ 10 marks ]
- 3. (ii). State 5 facts about Oceanography? [ 10 marks ]

4. The Atlantic Ocean is getting bigger and the Pacific Ocean is getting smaller. Discuss? [ 20 marks ]

5. (i). Explain for every species of marine life we know of, at least another three are yet to be discovered? [ 10 marks

5. (ii). Discuss the reasons of scientists studying Oceanography? [10 marks ]