



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN MARINE RESOURCE (BSMR 15S/YEAR2/SEMESTER 1)

AES 4203: MARINE BIOLOGICAL DIVERSITY

SPECIAL / SUPPLEMENTARY EXAMINATION

SERIES: AUGUST 2017

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

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

Do **Not Write** on the question paper. This paper consists of **2 printed** pages.

QUESTION ONE (30 MARKS)

- a) Define the term biodiversity? **(2 marks)**
- b) What are the key challenges facing the Marine Environment? **(2 marks)**
- c) List the factors affecting the ocean's health? **(1 marks)**
- d) List five coral reef invertebrate animals found in along the Kenyan coast? **(2 marks)**
- e) What is ocean acidification? **(2 marks)**
- f) How does climate change alters ocean chemistry? **(2 marks)**
- g) Explain how threat of marine habitat damage can be controlled in Kenya waters? Give three examples? **(3 marks)**
- h) What are the problems associated with the loss of species to extinctions? **(2 marks)**
- i) Why do we need knowledge of marine biodiversity? **(4 marks)**
- j) What are the gaps in our knowledge of marine biodiversity? **(4 marks)**
- k) Why are species endangered? **(3 marks)**
- l) State three resources that the coral reefs of East African coast provide to the adjacent coastal communities and to society as a whole? **(3 marks)**

QUESTION TWO (20 MARKS)

- a) Threats to marine biodiversity have widespread social, economic, and biological consequences, the combination of which could threaten our own existence. Discuss? **(10 marks)**
- b) State the challenges of marine living resources management? **(10 marks)**

QUESTION THREE (20 MARKS)

- a) Why is marine biodiversity important? **(10 marks)**
- b) How do we know that biodiversity is being lost, given the great uncertainty about species numbers? **(10 marks)**

QUESTION FOUR (20 MARKS)

- a) State four main components of biodiversity? **(10 marks)**
- b) The main impediment to the sustainable management of marine resources in West Africa, and a major threat to conservation of marine biodiversity is weak governance capability. Discuss? **(10 marks)**

QUESTION FIVE (20 MARKS)

The main impediment to the sustainable management of marine resources in West Africa, and a major threat to conservation of marine biodiversity is weak governance capability. Discuss? **(20 marks)**