



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN MARINE RESOURCE

BSMR 15S/YEAR2/SEMESTER 1

AES 4203: MARINE BIOLOGICAL DIVERSITY

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

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.

QUESTION ONE (30 MARKS)

- a). Why is biodiversity being lost? (2 marks)
- b). How do we regulate the use of resources and the protection of the environment on the high seas outside of the jurisdiction of states? (2 marks)
- c). State three major threats to mangrove biodiversity? (3 MARKS)
- d). What is Biological Diversity and why is it so valuable? (3 marks)

- e). What influences biodiversity? (2 marks)
- f). State the effects of overfishing on marine biodiversity? (3 marks)
- g). Name five Marine ecosystems in Western Indian Ocean? (3 marks)
- h). What are the key challenges facing the Marine Environment? (2 marks)
- i). Assuming a somewhat alarmist scenario, if enough trees and forests and related ecosystems vanish or deteriorate sufficiently. State four situations that will happen into the world? (3 marks)
- j). Why study biodiversity? (2 marks)
- k). The oceans will never become acidic, so why should we care? (2 marks)
- l). Compare invertebrates and vertebrates to adaptation to the Environment? (3 marks)

QUESTION TWO (20 marks)

- a). The UN's 3rd Global Biodiversity Outlook, explained that the rate of biodiversity loss has not been reduced because the 5 principle pressures on biodiversity are persistent, even intensifying. Explain? (10 marks)
- b). Each form of life works together with the surrounding environment to help recycle waste, maintain the ecosystem, provide services that others—including humans—use, benefit from. State what the ocean ecosystems can do? (10 marks)

QUESTION THREE (20 marks)

Key challenges in the governance of marine biodiversity in areas beyond national jurisdiction include? (20 marks)

QUESTION FOUR (20 marks)

- a). State the challenges of marine living resources management? (10 marks)

b). Discuss the potential of marine diversity contribution to medical science? (10 MARKS)

QUESTION FIVE (20 marks)

i. Discuss the major threats to marine biodiversity? (10 marks)

ii). Describe the human impacts in Western Indian Ocean? (10 marks)