



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

SECOND YEARSEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)

ERC 212: INTRODUCTION TO WATER AND MARINE RESOURCES

DATE:

TIME:

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Explain the meaning of the following terms
- i. Hydrological cycle (2 marks)
 - ii. Plankton (2 marks)
 - iii. Kelp forest (2 marks)
 - iv. Artisanal fisheries (2 marks)
 - v. Coral reefs (2 marks)
- b) Explain the significance of oceanic currents to Marine ecosystems along the East African coastal line (10 marks)
- c) Citing examples, explain how marine organisms adapt to the epipelagic and mesopelagic environments (10 marks)

QUESTION TWO (20 MARKS)

Explain how physicochemical parameters of water would influence productivity and survival of aquatic life

QUESTION THREE (20 MARKS)

Discuss the physical and chemical properties of water that make it unique from other liquids

QUESTION FOUR (20 MARKS)

Using specific examples, discuss the impacts of anthropogenic activities on marine ecosystems in Kenya

QUESTION FIVE (20 MARKS)

Critically analyze Kenya's legislation on conservation, management and development of fisheries and other aquatic resources