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**TECHNICAL UNIVERSITY OF MOMBASA**  
**FACULTY OF APPLIED AND HEALTH SCIENCES**  
**DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR:**  
**BACHELOR OF SCIENCE IN MARINE RESOURCE MANAGEMENT**  
**BSMR 17S/YEAR 1/ SEMESTER 1**  
**AES 4104: COASTAL GEOMORPHOLOGY**  
**SPECIAL/ SUPPLEMENTARY EXAMINATIONS**  
**SERIES: SEPTEMBER 2018**  
**TIME: 2 HOURS**

***Instructions to Candidates***

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

***This paper consists of two printed pages.***

***Mobile phones are NOT allowed in the examination room***

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**QUESTION ONE. (30 MARKS)**

- a) Define the following terms (5marks)
- i. Shore
  - ii. Dune
  - iii. Nearshore zone
  - iv. Barrier islands
  - v. headland
- b) Explain how waves and tides shape and modifies a coastline. (4marks)
- c) State FOUR factors influencing species' presence and distribution in littoral ecosystem. (4marks)
- d) State FOUR human activities affecting marine ecosystems. (4marks)
- e) Briefly describe feature's that arise from sea level change. (4marks)
- f.) review FIVE main processes responsible for coastal erosion (5marks)
- g.) highlight factors considered in restoration of a tidal ecosystem (4marks)
- f.) review FIVE main processes responsible for coastal erosion (5marks)
- g.) highlight factors considered in restoration of a tidal ecosystem (4marks)

**QUESTION TWO. (20 MARKS)**

Classify the major zones of marine habitats in the Mediterranean region. (20marks)

**QUESTION THREE. (20 MARKS)**

Discuss major coastal uses in Kenya.

(20marks)

**QUESTION FOUR. (20 MARKS)**

Discuss emergent and submergent coasts.

(20marks)

**QUESTION FIVE. (20 MARKS)**

Discuss the abiotic change in coastal marine environments

(20marks)