



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN MARINE RESOURCE

BSMR 16S/YEAR1/SEMESTER 1

AES 4104: COASTAL GEOMORPHOLOGY

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 (Compulsory) (30 marks)

a) Define the following terms:

- i. Coast (2 marks)
- ii. Coastal zone (2 marks)
- iii. Offshore zone (2 marks)
- iv. Littoral zone (2 marks)
- v. Beach (2 marks)
- vi. Shore (2 marks)
- vii. Continental shelf (2 marks)

b) i) Name the five main coastal erosion processes (5 marks)

ii) Describe how each of the above processes occur (5 marks)

c) Processes at work in coastal waters provide the energy that shapes and modifies a coastline by eroding, transporting and depositing sediment. State any TWO (2) of these processes. (2 marks)

d) Describe the difference between eustatic sea level rise and isostatic sea level rise? (4 marks)

Question Two

Oceans and continents have been formed and disappeared to be replaced by others through the movement of lithospheric plates. Discuss the THREE (3) types of boundaries that will emerge as a result of this movements giving examples of features found in each. (20 marks)

Question Three

- a) Discuss FIVE (5) erosional coastal and marine features (10 marks)
- b) Discuss FIVE (5) depositional coastal and marine features (10 marks)

Question Four

If coastal resource system are to remain productive, their management requires a holistic and comprehensive approach. A multi-sector management programme such as Integrated Coastal Zone Management (ICZM) must be devised so that all stakeholders and all affected government agencies are involved.

- a) Describe FIVE (5) driving forces behind the devastation of coastal resources (10 marks)
- b) Discuss any FIVE (5) Integrated Coastal Zone Management (ICZM) efforts that can benefit a country or region (10 marks).

Question Five

- a) Explain the difference between emergent and submergent coastlines (4 marks)
- b) Discuss any TWO (2) features found along emergent coastlines and TWO (2) features found along submergent coastline. (16 marks)