



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## UNIVERSITY EXAMINATIONS 2023/2024

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF  
BACHELOR OF EDUCATION ARTS

### EGE 3251: PHYSICAL GEOGRAPHY

DATE: APRIL 2024

TIME: 2 HOURS

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INSTRUCTIONS: Answer Question ONE and any other TWO questions.

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#### QUESTION ONE (30 MARKS)

- a) Explain three factors that affect condensation. (6 Marks)
- b) Distinguish between ground water recharge and ground water discharge. (6 Marks)
- c) Discuss how climate, vegetation, and time affect the rate of weathering. (6 Marks)
- d) King's landscape cycle discusses the process of pediplanation which shapes the erosion surface. Explain different stages of King's cycle of pediplanation (8 Marks)
- e) Identify and explain any two hydrologic processes within Lake Nakuru. (4 Marks)

#### QUESTION TWO (20 MARKS)

- a) Explain five major factors which are involved in controlling the movement of water masses in the hydrologic cycle. (10 Marks)
- b) With the aid of a well labelled diagram, explain how a bay is formed. (10 Marks)



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

### **QUESTION THREE (20 MARKS)**

- a) The flow of any stream is determined by two major factors. The geomorphological factors and climatological variables. Elucidate five geomorphological factors. (10 Marks)
- b) Many counties in Kenya have resulted to drilling bore holes to solve the problems of water shortage. This poses a great risk if rate of water extraction will be greater than rate of recharge. Examine five consequences of excessive water extraction. (10 Marks)

### **QUESTION FOUR (20 MARKS)**

- a) Discuss five reasons why deposition occurs along the coastal areas. (10 Marks)
- b) Provide a distinction between a confined aquifer and a leaky aquifer. (10 Marks)

### **QUESTION FIVE (20 MARKS)**

- a) Explain the effect of weathering on landform formation. (10 Marks)
- b) Many counties in Kenya have resulted to drilling bore holes to solve water shortage problems. This poses a great risk if the rate of water extraction will be greater than rate of recharge. Clarify five consequences likely to face these counties due to excessive water extraction. (10 Marks)

