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University Examinations 2024/2025

THIRD YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

EGE 3301: GEOMORPHOLOGY

DATE: JANUARY 2025

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a. Describe the conditions essential for the development of Karst scenery. (5 marks)
- b. With the aid of well labelled diagrams, illustrate any TWO types of plate boundaries that form as a result of plate tectonics. (8 marks)
- c. Analyze the FOUR factors that control the morphology of slopes. (8 marks)
- d. Illustrate ways in which humans have modified the fluvial landforms. (3 marks)
- e. Examine THREE interventions that can be adopted to mitigate the occurrence of landslides in Kenya. (6 marks)

QUESTION TWO (20 MARKS)

Write explanatory notes on the following concepts as used in Geomorphology:

- a. Dynamic Equilibrium (5 marks)
- b. Graded Stream Concept (5 marks)
- c. Process-Response Systems (5 marks)
- d. Geomorphic Threshold (5 marks)

QUESTION THREE (20 MARKS)

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With the aid of well labelled diagrams, describe any two resultant landforms of each of the following geomorphic processes:

- a. Fluvial process (4 marks)
- b. Karst process (4 marks)
- c. Fluvial Process (4 marks)
- d. Glacial Process (4 marks)
- e. Coastal Process (4 marks)

QUESTION FOUR (20 MARKS)

- a) Describe the interior structure of the earth. (8 marks)
- b) Analyze the relationship between the Earth's interior and its surface geology and topography. (12 marks)

QUESTION FIVE (20 MARKS)

Discuss the applications of geomorphology in various fields of development. (20 marks)