



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2023/2024 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER

**SCHOOL OF NATURAL RESOURCE,
ENVIRONMENTAL STUDIES AND
AGRICULTURE**

**BACHELOR OF ARTS IN GEOGRAPHY AND
GEOSPATIAL TECHNIQUES**

COURSE CODE: GEO 4269-1

TITLE: FLUVIAL GEOMORPHOLOGY

DATE: 18/4/24

TIME: 1100-1300HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in section **A** and any other **THREE** in section **B**.

This paper consists of 2 printed pages. Please turn over

SECTION A – 20 MARKS

1. Define fluvial geomorphology and explain its significance in understanding landscape evolution **(5 Marks)**

2. State five assumptions of Hackian theory of landscape development **(5 Marks)**

3. Describe the processes involved in fluvial erosion, transportation, and deposition **(5 Marks)**

4. Explain the mechanisms of glacial erosion **(5 Marks)**

SECTION B – 30 MARKS

5. By use of examples, explain five impacts of human activities on fluvial systems **(10 Marks)**

6. Critically examine, five principles and methods used in studying fluvial geomorphology **(10 Marks)**
7. Discuss the concept of river channel morphology and the factors that control channel shape and pattern **(10 Marks)**
8. Evaluate the role of sediment transport in shaping river landscapes and the factors that influence sediment transport rates **(10 Marks)**
9. Discuss the interactions between fluvial processes and ecological systems in riparian zones. **(10 Marks)**

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