

UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

**FOURTH YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN GEOGRAPHY**

GEOG 416: WATER RESOURCE MANAGEMENT

STREAM: R

TIME: 2 HRS

DAY: FRIDAY [8.30 – 10.30 A.M]

DATE: 06/02/2026

THIS QUESTION PAPER CONSISTS OF TWO (2) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

INSTRUCTIONS

- Attempt **ALL** questions in section **A** and any **2** in section **B**

SECTION A (30 MARKS)**QUESTION ONE (30 MARKS)**

a) Define the following terms:

- | | |
|------------------|----------|
| i) Aquifer | (1 Mark) |
| ii) Water waste | (1 Mark) |
| iii) Watershed | (1 Mark) |
| iv) Water rights | (1 Mark) |

b) Describe “The Watershed Approach” and its main components.

(8 Marks)

c) Water demand and supply is affected by several factors; discuss any **four** factors affecting each.

(8 Marks)

d) Describe the “Integrated Flood Management (IFM)” and **four** strategic options for flood management.

(10 Marks)

SECTION B (40 MARKS)**QUESTION TWO (20 MARKS)**

Discuss the outlined actions of Goal No. 3 on “Wisely Using All Wetlands” of the Strategic Plan of the Convention on Wetlands.

(20 Marks)

QUESTION THREE (20 MARKS)

Describe the causes of the water crisis in Kenya and suggest relevant solutions.

(20 Marks)

QUESTION FOUR (20 MARKS)

Explain the pros and cons of groundwater resources globally.

(20 Marks)

QUESTION FIVE (20 MARKS)

Discuss structural best management practices in watersheds applicable in Kenya

(20 Marks)