



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
THIRD YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM AND NATURAL
RESOURCE MANAGEMENT
BACHELOR OF SCIENCE IN
ENVIRONMENTAL MANAGEMENT/URP**

**COURSE CODE: URP 3201 AND EEM
3227**

**COURSE TITLE: WATER
RESOURCE PLANNING AND
MANAGEMENT/ WATER RESOURCE
MANAGEMENT**

DATE: 26/4/2019

TIME: 8.30-10.30AM

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: ANSWER ALL QUESTIONS

1. Explain the two approaches employed in water resources planning and management (4 marks)
2. Explain the three types of aquifers (6 marks)
3. Differentiate between infiltration and percolation (2 marks)
4. Explain the components of water resource system (6 marks)
5. Differentiate between a water resource planner and a water resource decision maker (2 marks)
 - a) Define term integrated water resource management (2 marks)
 - b) Highlight the importance of stakeholder involvement in water resources management (3 marks)

SECTION B: ANSWER ANY THREE QUESTIONS

6. Maasai Mara University intends to develop a water drinking treatment and supply system within the university and the immediate surrounding areas. Identify and discuss the planning and management aspects that must be considered. (15 marks)
7. Discuss the Dublin guiding principles on Water and Sustainable Development (15 marks)

8. Explain the factors that would enhance groundwater recharge through infiltration/ percolation (15 marks)
9. Explain the various ways human activities can contribute to groundwater contamination (15marks)

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