



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR  
BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)

ENS 245: ENVIRONMENTAL HYDROLOGY

DATE: 24/3/2021

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

Answer question ONE and any other TWO questions

### QUESTION ONE (30 MARKS)

- Using an illustration, describe the main components of the hydrological cycle (10 marks)
- Briefly discuss any **five** factors contributing to surface water pollution in Kenya (10 marks)
- Highlight the significance of the water cycle in environmental management (10 marks)

### QUESTION TWO (20 MARKS)

Discuss **four** advantages of using groundwater in socioeconomic development of your County.

### QUESTION THREE (20 MARKS)

Suppose you have been appointed to advise the Governor of your County on sustainable management of water resources, give a detailed account of what your advice would entail.

### QUESTION FOUR (20 MARKS)

Discuss any **five** factors contributing to increasing water utilization in your County.

### QUESTION FIVE (20 MARKS)

Discuss any **four** strategies of coping with drought occurrence in your community.