

MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT DEPARTMENT OF ENVIRONMENTAL SCIENCES

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

ENS 245: ENVIRONMENTAL HYDROLOGY

DATE: 24/3/2021 TIME: 2.00-4.00 PM

INSTRUCTIONS;

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Using an illustration, describe the main components of the hydrological cycle (10 marks)
- b) Briefly discuss any **five** factors contributing to surface water pollution in Kenya (10 marks)
- c) 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 advice 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.