

CHUKA

UNIVERSITY



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS
AND BACHELOR OF EDUCATION**

GEOG 441: APPLIED HYDROLOGY

STREAMS: B.A, B.ED

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 20/12/2023

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS

- **Answer question one and any other two questions**
- **Use illustrations**

1. a) Discuss THREE methods of obtaining water and TWO methods of conserving water in any ASALs in Kenya. (15 marks)
b) Discuss the significance of interception in mitigating erosion and flooding. (15 marks)
2. Explain why there is significant relationship between the types of land use and the lifespan of a lake such as Lake Victoria. (20 marks)
3. What is 'Water Quality', and how do urban settlements influence it? (20 marks)
4. Discuss THREE types and explain their methods of discharge and recharge. (20 marks)
5. There are five major HEP dams in upper Tana River. As a Hydrologist charged with the responsibility of recommending a suitable location for another dam; what hydrological, geologic and demographic factors would you consider? (20 marks)