



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

**MAIN CAMPUS
MAIN EXAMINATIONS**

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN BIOLOGY**

COURSE CODE: SZL 223

COURSE TITLE: AQUATIC ECOLOGY

DATE: THURSDAY, 21ST APRIL 2022 TIME: 3:00 – 5:00 P.M.

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in section A and ANY TWO questions in section B

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

SZL 223: AQUATIC ECOLOGY

SECTION A (SHORT ANSWER QUESTIONS, 40 MARKS)

1. Explain why water is regarded as a compound with abnormal characteristics. (5 marks)
2. Define the following:
 - a) Precipitation
 - b) Evaporation
 - c) Condensation
 - d) Evapotranspiration
 - e) Infiltration (5 marks)
3. Compare oxygen solubility in lentic and lotic systems. (5 marks)
4. Explain the importance of lakes to man. (5 marks)
5. Give one characteristic of each of the following:
 - a) Mixolimnion
 - b) Pycnocline
 - c) Monimolimnion
 - d) Chemocline
 - e) Ectogenic meromixis (5 marks)
6. Explain how a water body gains and loses oxygen. (5 marks)
7. Highlight features of biological success of planktonic organisms. (5 marks)
8. Highlight various forms of nitrogen occurrence in water bodies. (5 marks)

SECTION B (ESSAY QUESTIONS, 30 MARKS)

9. Describe horizontal and vertical lake zonation and explain the distribution patterns of organisms in these zones. (15 marks)
10. Describe how you would quantify suspended solids in water. (15 marks)
11. Discuss the significance of Lake Morphometry the lake production. (15 marks)