



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2008/2009

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE AND BACHELOR OF EDUCATION

SZL 312: LIMNOLOGY

DATE: Friday, 5th December, 2008

TIME: 2.00 p.m. – 4.00 p.m.

INSTRUCTIONS:

Answer **ALL** questions in Section A and any **ONE** in Section B. In each Section, all questions carry equal marks. Illustrate your answers with well-labeled diagrams wherever appropriate and give relevant examples.

SECTION A: ANSWER ALL QUESTIONS (40 marks)

1. Explain the adaptive significance of cyclomorphosis to zooplankton.
2. Describe briefly the effects of temperature on the specific gravity of water.
3. Explain the relationship between vegetation cover and precipitation levels in a given area.
4. Describe briefly the feeding adaptations of lotic invertebrates.
5. Outline the effects of sediments on the biota of inland water bodies.
6. Distinguish between class I and class II lakes according to the classification of Talling and Talling (1965).

7. Describe briefly the process of treatment of drinking water.
8. Outline the main functions of wetlands.

SECTION B: ANSWER ANY ONE QUESTION (30 marks)

9. Discuss vertical migration as an adaptive feature of zooplankton in inland lakes.
10. Discuss the characteristics of the different types of lentic ecosystems.