



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SZL 204: HYDROBIOLOGY

DATE: Wednesday, 7th December, 2011

TIME: 8.00a.m. – 10.00a.m.

INSTRUCTIONS

Answer **ALL** questions in **Section A** and **ONE** question in **Section B**.

Illustrate your answers and give examples where appropriate.

SECTION A: Answer all questions [40 Marks]

1. Define the following terms
 - (a) Trophic level
 - (b) Watershed
 - (c) Eutrophication
 - (d) Stratification
 - (e) Wetland.
2. Recently a developer was allowed to drain the Yala swamp for agriculture and aquaculture. Explain the effects of the project on the environment.
3. Briefly describe how the hydrological cycle has been affected by global warming.
4. Diagrammatically illustrate the relationship between pH, CO₂, H₂CO₃, HCO₃⁻ and CO₃⁻ in a natural water body.

5. Give an account of the factors limiting production in aquatic ecosystems.
6. Describe how the changes in the Mau forest land utilization will affect the associated aquatic habitats.
7. Outline the economic and ecological importance of wetlands.
8. Describe how one can determine the extent of the euphotic zone in a shallow water body.

SECTION B: Answer any **ONE** question [30 Marks]

9. Write essay on the impact of pollution in the aquatic ecosystems.
10. Write an essay on aquatic weed control.
11. Discuss the food webs and chains in the aquatic habitats.