



MASEÑO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE WITH INFORMATION TECHNOLOGY
(MAIN CAMPUS)

NES 205: FRESH WATER ECOLOGY

Date: 25th November, 2013

Time: 8.30 - 10.30 a.m.

INSTRUCTIONS:

- **Answer Question ONE and any other TWO questions.**

1. (a) (i) Distinguish between freshwater and marine waters. (4mks)
(ii) Describe the processes that lead to "plankton bloom". (7mks)
- (b) Explain briefly the structure and functions of a pond community. (9mks)
- (c) Examine the salient features of any lotic ecosystem. (10mks)
2. Write explanatory notes on the:
(a) origins of lakes and ponds (10mks)
(b) biotic zonation of deep lakes. (10mks)
3. (a) Explain the sources of freshwater pollutants. (6mks)
- (b) Discuss plausible conservation measures for lakes and rivers. (14mks)
4. (a) Describe the sampling process of phytoplankton population. (8mks)
- (b) Giving examples, describe the nature and ecological adaptations of plant inhabiting torrential forms. (12mks)
5. Contrast the characteristics of slowly flowing waters with that of a lake. (20mks)
6. Discuss the significance of freshwater ecosystems. (20mks)

