



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SZL 414: TROPICAL DIVERSITY

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DATE: MONDAY 2ND APRIL 2012

TIME: 2.00 P.M. – 4.00 P.M.

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INSTRUCTIONS

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

Within a section ALL questions carry equal marks. Illustrate your answers and give examples where appropriate.

SECTION A: Answer ALL questions (40 marks)

1. Explain the following terms:
 - a) Endangered species
 - b) Threatened species
 - c) Mega diversity countries
 - d) Alpha diversity
 - e) Beta diversity
2. Explain how island community biodiversity differs from other large ecosystems.
3. Describe how you would determine the diversity index of a given habitat.
4. Outline the factors which have led to tropical rain forest degradation.
5. Outline the ecological life history traits that determine animal species sensitivity to fragmentation of the habitat
6. Distinguish between a *Game Reserve* and a *National Park*
7. Describe the uses and value of biodiversity.
8. Explain the effect of climate change on global biodiversity.

SECTION B: Answer any ONE question (30 marks)

9. Discuss how the metapopulation model can be used in biodiversity conservation.
10. Discuss the factors which can lead to species extinction