



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE AND BACHELOR OF EDUCATION
SMR 102: NATURAL HISTORY OF EAST AFRICAN COAST

DATE: Friday, 30th March, 2012

TIME: 2.00 p.m. – 4.00 p.m.

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 with diagrams and give examples where appropriate.

SECTION A

Answer **ALL** questions (40 marks)

1. Explain how abiotic synthesis of organic molecules occurred according to the theory of naturalistic origin of life.
2. Outline the groups of animals that evolved from each of the five reptilian stocks found in the Mesozoic era.
3.
 - a) Name two groups of vertebrate animals predominant in oceanic islands.
 - b) State three reasons why there are fewer species of animals in the oceanic islands than on adjacent mainland.
4. Explain why Arabuko – Sokoke forest reserve is of high conservation value.

5. Describe the Caste system of *Trinervitermes*.
6. Enumerate five groups of animals found in the East African mangrove forest and state their importance.
7. Give a brief account of the two types of sounds produced by birds.
8. Distinguish between disruptive and countershading types of colouration in animals.

SECTION B

Answer any **ONE** question (30 marks)

9. Write an essay on the natural history of a named baboon commonly found along the lowland coastal forests of East Africa.
10. Discuss the feeding and reproductive behaviour of the Leatherback Sea turtle citing threats to its conservation.
11. Describe in detail the adaptations of whales and dolphins to their marine environment.