



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN MARINE RESOURCE

BSMR 16S/YEAR1/SEMESTER 1

AES 4111: INTRODUCTION TO ZOOLOGY
END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt question ONE (Compulsory) and any other TWO questions.

Circle the correct answer in section A.

SECTION A, 30 marks

Question one

- Differentiate between heterotrophs and autotrophs. (2 marks)
- Distinguish between endoderms and ectoderms. (5 marks)
- Briefly describe the Cell theory. (5 marks)
- Define binomial nomenclature and state its basic rules? (5 marks)
- Briefly explain the meaning and importance of Bioluminescence (5 marks)
- Differentiate between mutualism and commensalism. (6 marks)
- Briefly explain the meaning of the term cryptic colouration. (2 marks)

SECTION B

Question Two

Describe the general characteristics of Nematodes. (20 marks)

Question Three

The Arthropods are by far the largest of the animal phyla, abundant in virtually every habitat. Describe the reasons for its success. (20 marks)

Question Four

Using examples describe ecological interactions between organisms within an ecosystem. (20 marks)

Question Five

Describe how fish are adapted for their environment. (20 Marks)