



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

SPECIAL / SUPPLEMENTARY EXAMINATION

SERIES: AUGUST 2017

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

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

Do **not write** on the question paper. This paper consists of **1 printed** page.

Question One

- Differentiate between Homologous and Analogous structures in Evolutionary Systematics. **(5 marks)**
- Differentiate between pseudocoelomate and acoelomate animals. **(5 mark)**
- Describe the economic important of marine fishes. **(5 marks)**
- Name equipment used in deep ocean floor sampling. **(6 marks)**
- Name the nine phyla of the animal kingdom. **(5 marks)**
- Describe the term Allopatric Speciation. **(4 marks)**

Question Two

Describe how marine organisms use colouration for survival in the marine environment. **(20 marks)**

Question Three

What is the Island Biogeography Model? **(20 marks)**

Question Four

In comparison with other marine environment, whether as predator or prey, the need to adapt to predation is especially important in the epipelagic. Using examples, describe how predators and preys in the epipelagic areas survive. **(20 marks)**

Question Five

Discuss threats to marine life, and marine conservation techniques enhance the environment and increase survival of species. **(20 Marks)**