



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
MARINE RESOURCE MANAGEMENT

BMRM 13S

AAB 4111: INTRODUCTION TO ZOOLOGY

SEMESTER EXAMINATION

DECEMBER 2013 SERIES

2 HOURS

Instructions to candidates:

This paper consist of **FIVE** questions

Answer question **ONE** (compulsory) and any other **TWO** questions

QUESTION ONE

- a) Define Biology **(3marks)**
- b) Give a taxonomy classification of:
- (i) Human beings
 - (ii) Maize plants
- (3marks)**
- c) Draw and label a generalized plant cell as seen under the electronic microscope **(3marks)**
- d) If motor vehicle is able to move and break down fuel to carbon (IU) oxide (carbon dioxide) and water, yet it is not classified as a living thing. List other characteristics of living things that are not shown by a motor vehicle. **(3marks)**
- e) What do zoologist strive to understand? **(3marks)**

- f) Define metamorphosis and highlight two example. **(3marks)**
- g) Briefly explain why use Binomial nomenclature? **(3marks)**
- h) State the theories of the origin of life. **(3marks)**
- i) Briefly describe how fish obtain oxygen from the environment? **(3marks)**
- j) Briefly explain how fish reproduce? **(3marks)**

QUESTION TWO

Discuss the characteristic of amphibians **(20marks)**

QUESTION THREE

Explain how scientists classify animals? Discuss the logic behind it. **(20marks)**

QUESTION FOUR

Draw a diagram of the external anatomy of fish and label different types of fins. **(20marks)**

QUESTION FIVE

Discuss how do fish maintain their salt and water balance?. **(20marks)**