

(A Constituent College of Moi University)

OFFICE OF THE DEPUTY PRINCIPAL- ACADEMICS AND STUDENTS AFFAIRS

UNIVERSITY EXAMINATIONS 2013/2014 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER EXAMINATION

FOR

THE DEGREE

IN

BACHELOR OF EDUCATION (SCIENCE)

COURSE CODE: ESB 112/ZOO III

COURSE TITLE: VERTEBRATE ZOOLOGY/BASIC ZOOLOGY II

DATE: 23/6/2014 TIME: 9.00AM-12.00NOON

INSTRUCTIONS TO CANDIDATES

- Answer ALL questions section A and any FOUR questions from section B
- Show workings in the answer booklet for award of full marks
- Do not write on the question paper.
- Switch off your mobile phones.
- Each question should begin on a fresh page
- Marks are shown at the end of each question
- Duration is 3 hours

THIS PAPER CONSISTS (3) PRINTED PAGES

PLEASE TURN OVER

SECTION A: SHORT ANSWERS QUESTIONS. ANSWER ALL QUESTIONS IN THIS SECTION (30 MARKS).

QUESTION	ONE:
----------	------

(a)	Draw and label three (3) types of scales you would find in fishes,	(3 Marks)
-----	--	-----------

- (b) Briefly explain the ecological impacts of the advent of Latesniloticus in Lake Victoria (3 Marks)
- (c) Suggest a clear strategy for the conservation of the vertebrate biological diversity in the aquatic ecosystems in Kenya. (2 Marks)

QUESTION TWO:

- (a) Name and briefly explain two characteristic adaptations of Aves that allows them to fit in their habits and habitat. (2 Marks)
- (b) State the three structures shared by every chordate that characterize the group (3 Marks)
- (c) Name the chordate class considered as evidence of the transition of the vertebrates from the aquatic to the dry land environment, and outline why it is considered so (2 Marks)
- (d)Name the unique characteristics of each of the following groups of mammals:

Edentates; Perissodactyls; Probocsideans; Chiropterans; Sirenians.

(5 Marks)

QUESTION THREE:

- (a) Briefly explain the following terms, giving either the scientific name or common name of a living example in each case:

 (a) Oviparous
 - (b) Ovoviviparous
 - (c) Viviparous

(3 Marks)

(b) Define zoonoses and give an example of a zoonotic disease

- (2 Marks)
- (c) Match the common names in box A with the appropriate scientific names in box B:

Α

- a. Sea cow
- b. Omena/Dagaa/Capenta
- c. Tilapia
- d. Lion
- e. Cat fish

- 1	

(5 Marks)

SECTION B: LONG ANSWER/ESSAY QUESTIONS. ANSWER ANY FOUR QUESTIONS IN THIS SECTION

QUESTION FOUR:

With the aid of a clearly labeled diagram describe the digestive system of human being, Homo sapiens, (10 Marks)

QUESTION FIVE:

List the animals found in East Africa known as the big five. Describe the characteristics and adaptations of each one of them. (10 Marks)

QUESTION SIX:

With the aid of appropriate diagrams, compare and contrast. The internal and external characteristics of Scoliodonsorrakowah. and Oreochromisniloticus (10 Marks)

QUESTION SEVEN:

Discuss the migration of Wildebeests, Connochaetestaurinus along the Mara River with reference to ecological and economic impacts on Kenya as a nation (10 Marks)

QUESTION EIGHT:

The origin of life and diversity of vertebrate species: Discuss extensively from all known possible views.

(10Marks)