



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
BIOLOGICAL SCIENCES**

1st YEAR 2nd SEMESTER 2016/2017 ACADEMIC YEAR

MAIN CAMPUS-REGULAR

COURSE CODE: SBI 3122

COURSE TITLE: VERTEBRATE BIOLOGY

EXAM VENUE: LAB 1 2ND FL

STREAM: (BED. SC)

DATE: 18/04/17

EXAM SESSION: 11.30 – 1.30 AM

TIME: 2 HOURS

INSTRUCTIONS:

- 1. Answer ALL questions in Section A and any Two (2) questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A. SHORT ANSWER QUESTIONS (30 MARKS)

1. Outline three distinguishing characteristics of phylum Chordata. (3 marks)
2. Describe three features of amniotes. (3 marks)
3. List three systems used in the classification of vertebrates. (3 marks)
4. Explain the importance of binomial nomenclature of vertebrate. (3 marks)
5. State the major distinguishing feature of craniates and name two examples of these vertebrates. (3 marks)
6. Name three classes of lower vertebrates and give one example of each. (3 marks)
7. Name three vestigial structures found in vertebrates. (3 marks)
8. Explain why reptiles are more adapted to terrestrial existence than amphibians. (3 marks)
9. Describe three characteristic differences between a human brain & that of other vertebrates. (3 marks)
10. State three distinctive characteristic differences between Chondrichthyes and Osteichthyes. (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Describe distinguishing and general characteristics of vertebrates. (20 marks)
12. Describe characteristics of different orders in the class Mammalia. (20 marks)
13. Discuss how birds are adapted to flight. (20 marks)
14. Discuss features that make fishes to adapt to different aquatic environments. (20 marks)