JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN

AGRICULTURAL EDUCATION AND EXTENSION

1ST YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAS 3121

COURSE TITLE: ZOOLOGY

EXAM VENUE: **STREAM: (BSc. Agricultural Education and Extension)**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions
1. Answer ALL questions in Section A (compulsory) and ANY TWO 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

Answer ALL questions in this section

1. State the three unifying characteristics of animals belonging to class *Mammalia.* (3 marks)
. 2. Give any three functions of mammalian hair. (3 marks)
3. Describe any three unique features of mammals belonging to order *Monotremata.* (3 marks)
4. Birds, just like reptiles are primarily uricotelic. Explain. (3 marks)
5. Outline any three ways by which birds maintain their feathers. (3 marks)
6. Birds use visual and auditory signals to communicate. Elaborate. (3 marks)
7. Briefly explain the benefits of low resting metabolism in reptiles. (3 marks)
8. Define encephalization quotient and explain why reptiles are considered to be less intelligent than mammals and birds. (3 marks)
9. Describe the circulatory system in tadpoles. (3 marks)
10. Briefly explore predatory behavior of adult amphibians. (3 marks)

SECTION B [40 MARKS]

Answer ANY TWO questions from this section

11. Explore parental care and brood parasitism in birds. (20 marks)

12. Examine in detail the feeding and vocalization behavior in amphibians. (20 marks)

13. Demonstrate an understanding of the distinguishing features between lobe-finned fish and ray-finned fish. (20 marks)

14. Analyze the characteristics of reptiles under the following headings:
    a) Defence mechanism (10 marks)
    b) Shedding and regeneration of tails. (10 marks)