

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION
(SCIENCE) AND BACHELOR OF SCIENCE**

ZOOL 103: VERTEBRATE ZOOLOGY

STREAMS: BED(SC), BSC Y1S2

TIME: 2 HOURS

DAY/DATE: FRIDAY 12/04/2019

11. 30 A.M – 1.30 P.M

INSTRUCTIONS

- **Answer all question in section A and two other questions in section B**

SECTION A: (30 MARKS) ANSWER ALL QUESTIONS

1. (a) Describe the general characteristics of class cyclostomata. [4 marks]
(b) Distinguish between metatheria and Eutherian mammals. [2 marks]
2. (a) Describe reproduction in reptiles. [4 marks]
(b) ‘Reptiles are better adapted to terrestrial life than amphibians’ give four adaptive modifications of reptiles to support this statement. [2 marks]
3. (a) State four types of Avian migration. [2 marks]
(b) Describe the four types of feathers found in birds. [4 marks]
4. (a) Give four general features of phylum chordata. [2 marks]
(b) Describe metamorphosis in Amphibians. [4 marks]
5. (a) Explain the significance of jaws to organisms that possess them. [2 marks]
(b) Describe the process of thermoregulation in crocodiles. [4 marks]

SECTION B (40 MARKS) ANSWER ANY 2 QUESTIONS

6. Discuss the adaptive features of birds to flight [20 marks]
7. (a) Describe the general features developed in amphibians that enabled them to occupy terrestrial habitats. [10 marks]
(b) Explain the distinguishing features of class Mammalia. [10 marks]

8. Describe in detail the adaptive features of bony fishes that have lead to their success in aquatic environment. [20 marks]
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