

CHUKA UNIVERSITY
MAIN EXAMINATION
ZOOL 103: VERTBRATE ZOOLOGY
SUPPLEMENTARY EXAMINATION

SECTION A (30 MARKS)

1. Explain how mammals and differ in their method of thermoregulation (6 marks)
2. Explain the differences in the structure of the circulatory system between fish, amphibians and mammals (6 marks)
3. Describe metamorphosis in amphibians and how the adaptations relate to both aquatic and terrestrial environments (6 marks)
4. Explain the significance of the amniotic egg in the evolution of reptiles, birds and mammals (6 marks)
- 5.

SECTION B (40 MARKS)

6. Describe the various mechanisms of respiration in vertebrates as adapted to their environments (20 marks)
7. Describe the major adaptive differences between the nervous system of fish and that of terrestrial vertebrates and how it aids in their survival (20 marks)
8. Describe the major types of fins and tails found in different classes of fishes, including their structure and function (20 marks)