

BONDO UNIVERSITY COLLEGE

UNIVERSITY EXAMINATION 2012/2013 1ST YEAR 2ND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

WITH IT (REGULAR)

COURSE CODE: SZL 102 TITLE: VERTEBRATE ZOOLOGY DATE: 3/12/2012 DURATION: 2HOURS

TIME: 12.00-14.00PM

INSTRUCTIONS:

- 1. Answer <u>ALL</u> questions in section A
- 2. Answer any <u>TWO</u> questions in section
- 3. Use illustrations where appropriate

SECTION A (30 Marks):

INSTRUCTIONS: ANSWER ALL QUESTIONS IN THIS SECTION

- Q1. List the characteristics of the phylum Chordata. (3 marks)
- Q2. Giving an example in chordates, describe retrogressive metamorphosis. (3 marks)
- Q3. Compare and contrast sub-phylums Urochordata and Cephalochordata. (3 marks)
- Q4. Describe gaseous exchange in class Osteichthyes. (3 marks)
- Q5. Explain the advantages of evolution of amniotic eggs in vertebrates. (3 marks)
- Q6. Describe reproduction in amphibians. (3 marks)
- Q7. State the reptilian adaptations for a terrestrial existence. (3 marks)
- Q8. List anatomical modification in bird's that enhances flight. (3 marks)
- Q9. Describe thefunctions of the following in vertebrates. (3 marks)
 - a) Stratum basaleb) Haversian canals
 - c) Tunic
- Q10. State the limitations of using fossil records in explaining vertebrate evolution.(3 marks)

SECTION B:

INSTRUCTIONS: Answer any TWO questions (20 Marks each question)

- Q11. Discuss vertebrate ancestry.
- Q12. Write an essay on vertebrate modes of feeding.
- Q13. Describe the origin and early evolutionary radiation of reptiles.
- Q14. Write an essay on comparative anatomy and physiology of vertebrate digestive system.