

**UNIVERSITY OF AGRICULTURE, ABEOKUTA  
DEPARTMENT OF BIOLOGICAL SCIENCES  
SECOND SEMESTER 2009/2010  
ZOO 364: EVOLUTION OF CHORDATE**

**INSTRUCTIONS: ANSWER ALL QUESTIONS IN GENERAL PLUS YOUR GROUP QUESTION  
TIME ALLOWED: 1.30 HOURS**

**GENERAL**

1. Define evolution?
2. Which chordate group evolved first?
3. Which chordate group evolved last?
4. Draw the evolution tree of the phylum chordata.
5. What is Natural Selection?
6. Define a species?
7. List the four main characteristic of chordate?
8. Name a prominent characteristic of chordate which is lost in higher chordate.
9. The habitat of the first chordate was?
10. Which organism were the first to change habitat?

**GROUP 1**

Draw a named extinct aves. Describe the key reptilian and avian characteristics of this bird.

**GROUP 2**

Draw a named reptile. What are the key features that enable the reptiles to survive on land?

**GROUP 3**

List the classes of amphibians. What are the limitations that prevented them from full adaptation to land dwelling.

**GROUP 4**

List all the known skeletal and non skeletal characteristic of mammals. The first mammals lived on what diet?

**GROUP 5**

Draw a named placodermic chordate. Describe the important feature of this chordate

**GROUP 6**

Draw a named urochordate. Why is the group classified as chordate?

**GROUP 7**

Draw a named cephalochordate. What are the chordate features of the group?

**GROUP 8**

Draw a named living agnatha. Describe the key features of living agnatha

**GROUP 9**

Draw and describe the surviving group member of the Chondrichthyes

**GROUP 10**

Draw a named Osteichthyes. What are the key adaptations of this group to survival in their habitat?

**GROUP 11**

Draw the fin of crossopterygian and the limb of an amphibian. What are the similarities in their structure and transition to land (tetrapods)?