



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2023/2024 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER  
EXAMINATIONS**

**FOR**

**BACHELOR OF EDUCATION (SCIENCE)**

**ZOO 2209: VERTEBRATE ZOOLOGY**

**DATE:**

**TIME:**

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**Instructions**

**A. Answer ANY TEN (10) questions.**

**B. Illustrate your answers with diagrams and give examples where appropriate.**

**ANSWER ANY TEN (10) QUESTIONS (50 MARKS)**

1. Define the following terms as used in the study of Vertebrates;
  - a) Paedomorphosis (1 mark)
  - b) Parthenogenesis (1 mark)
  - c) Neoteny (1 mark)
  - d) Viviparity (1 mark)
  - e) Preening (1 mark)
2. Give five similarities of protochordates and chordates (5 marks)
3. Discuss the Importance of vertebrates in life. (5 marks)
4. State and explain the differences between ray finned and lobe finned fishes. (5 marks)
5. Describe morphological features that point to the fact that birds are glorified reptiles. (5 marks)
6. Distinguish between the extant orders of amphibians. (5 marks)
7. Give five aspects of the economic importance of mammals. (5 marks)
8. List five functions of the mammalian skin. (5 marks)
9. Explain the current zoogeographical distribution of the fauna of various vertebrates. (5 marks)
10. Classify reptiles into the various taxonomic orders giving the distinguishing features of each. (5 marks)
11. Outline the processes that led to the evolution of the vertebrates. (5 marks)
12. Construct a scientific key that can be used to identify the classes of vertebrates. (5 marks)
13. Distinguish between prototheria and eutherian mammals. (5 marks)

**14.** Give the general structure of the bony fishes. **(5 marks)**

**15.** Describe the anatomical features of urochordates that ideally places them in the general grouping of fishes **(5 marks)**

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ENDS

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