

ZOO 112E



**ALUPE UNIVERSITY
COLLEGE**

...Bastion of Knowledge...

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OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2018 /2019 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER REGULAR EXAMINATION

**FOR THE DEGREE OF BACHELOR OF
EDUCATION (SCIENCE)**

COURSE CODE: ZOO 112E

COURSE TITLE: VERTEBRATE ZOOLOGY

DATE: 18TH APRIL, 2019

TIME: 9.00 AM – 12.00 PM

INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

ZOO 112E: VERTEBRATE ZOOLOGY

STREAM: BED (SCIENCE)

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer **ALL** questions from section A and any **THREE** from section B.
 - ii. Diagrams should be used whenever they serve to illustrate the answer.
 - iii. Do not write on the question paper.
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SECTION A (24 MARKS)

Question One

- a) Describe unique features of sub-phyla of phylum chordate giving an example in each case (6 Marks)
- b) Outline the unique features common to all chordates (4 Marks)
- c) Highlight two adaptation features on transition of chordates from water to land (2 Marks)

Question Two

- a) Give an account of any three characteristics are more advanced in the lampreys than amphioxus (6 Marks)
- b) Give three reasons why members of order Anura must return to breed in water (6 Marks)

SECTION B(36 MARKS)

Question Three

- a) Highlight five skeletal modifications on transition of reptiles to mammals (5 Marks)
- b) Describe three clades of class mammalia based on parity. (5 Marks)
- c) Give one advantage of heterodont teeth over homodont teeth (1 Mark)
- d) Differentiate between the heart of amphibians and that of birds (2 Marks)

Question Four

- a) Explain why the following have two modes of respiration
 - i) Lamprey (2 Marks)
 - ii) Frog (3 Marks)
- b) Explain three reasons why certain bird species migrate (6 Marks)
- c) Describe the role of gill arches in jawless fishes (1 Mark)

Question Five

Discuss the adaptations that made flight in birds successful (12 Marks)

Question Six

- a) Distinguish between Orders Artiodactyla and Perissodactyla (6 Marks)
- b) Discuss the importance of Class Reptilia (6 Marks)

Question Seven

Give an account of the functions of the mammalian skin (12 Marks)

