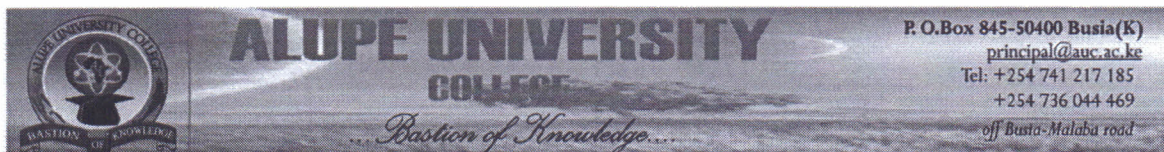


ZOO 112E



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2020 /2021 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

COURSE CODE: ZOO 112E

COURSE TITLE: VERTEBRATE ZOOLOGY

DATE: 27TH JULY, 2021

TIME: 01.00 PM – 04.00 PM

INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

ZOO 112E

REGULAR – MAIN EXAM

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) List the features of the Phylum Chordata. (4 Marks)
- b) Describe osmoregulation in class Osteichthyes. (4 Marks)
- c) Describe four differences between a toad and a frog. (4 Marks)

Question Two

- a) State the reptilian adaptations for terrestrial existence. (4 Marks)
- b) List anatomical modification in birds that enhances flight. (4 Marks)
- c) Explain how agnathans differ from other fishes. (4 Marks)

SECTION B (36 MARKS)

Question Three

- a) "Preening is a very important function in Birds" Explain the statement. (4 Marks)
- b) Explain the role of swim-bladder in fresh water bony fishes. (2 Marks)
- c) Explain three functions of scales on the body of agnatha. (6 Marks)

Question Four

- a) Discuss four characteristic features of adaptive radiation. (8 Marks)
- b) Justify any four triggers of adaptive radiation. (4 Marks)

Question Five

- a) Discuss the adaptative features of lizards. (8 Marks)
- b) Chondrichthyes first appeared on Earth almost 450 million years ago, and these cartilaginous fish today include both fearsome predators and harmless filter feeders. Discuss their features. (4 Marks)

Question Six

- a) Describe using a diagram illustration the external features of a rabbit. (8 Marks)
- b) Discuss the adaptations of a mammal to its external environment. (4 Marks)

Question Seven

- a) Describe four significant events that occurred following the evolution of jawless fish. (8 Marks)
- b) Explain any four external features of a bony fish. (4 Marks)
