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# UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR

## FIRST YEAR SECOND SEMESTER MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL  
BIOTECHNOLOGY, AND AGRICULTURAL ECONOMICS

**COURSE CODE:** SZL 124  
**COURSE TITLE:** BASIC ZOOLOGY

**DATE:** Friday, 10<sup>th</sup> August 2018. **TIME:** 9:00 – 11:00 a.m.

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### INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



1. a) Outline the steps followed in the scientific method of zoological studies. (5 marks)  
b) Define the following terminologies:
  - i) Biosphere
  - ii) Community
  - iii) Saprophytic heterotrophs
  - iv) Amniotes
  - v) Alternation of generations (5 marks)c) Explain how variation leads to the formation of a new species (5 marks)  
d) Name the disease associated with the following organisms:
  - i) *Plasmodium*
  - ii) *Leishmania*
  - iii) *Trypanosoma*
  - iv) *Schistosoma*
  - v) *Entamoeba histolytica* (5 marks)e) State how the following function is accomplished:
  - i) Locomotion in *Physalia*
  - ii) Feeding in Hirudinea
  - iii) Protection in Chitons
  - iv) Defense in ciliates
  - v) Feeding in cestodesf) Outline the lines of evidence of evolution. (5 marks)
2. Discuss the economic importance of arthropods, giving specific examples. (20 marks)
3. Give a comparative account of the life cycles of Obelia (Hydrozoa, Calyptoblastea) and Aurelia (Scyphozoa, Semeostomeae). (20 marks)
4. Discuss advances of reptiles over amphibians. (20 marks)
5. Account for the success of flight in class aves. (20 marks)