

ZOO 210



**ALUPE UNIVERSITY**

**COLLEGE**

*... Bastion of Knowledge...*

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**OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, STUDENT AFFAIRS AND RESEARCH**

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# **UNIVERSITY EXAMINATIONS**

## **2018 /2019 ACADEMIC YEAR**

### **SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION**

## **FOR THE DEGREE OF BACHELOR OF SCIENCE IN MICROBIOLOGY**

**COURSE CODE: ZOO 210**

**COURSE TITLE: INVERTEBRATE ZOOLOGY**

**DATE: 17<sup>TH</sup> DECEMBER, 2018**

**TIME: 2.00 PM – 5.00 PM**

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### **INSTRUCTIONS TO CANDIDATES**

- SEE INSIDE



**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**ZOO 210**

**ZOO 210: INVERTEBRATE ZOOLOGY**

**STREAM: BSc in Microbiology**

**DURATION: 3 Hours**

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**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) Distinguish between open and closed circulatory systems. (2 Marks)
- b) Categorize invertebrates based on the absence or presence of germ layers. (4 Marks)
- c) Enumerate six locomotory structures present among the invertebrates. (3 Marks)
- d) Outline three features of the Phylum Porifera. (3 Marks)

**Question Two**

- a) Complete the table below:

<b>Invertebrate (s)</b>	<b>Excretory mechanism</b>	<b>Mark(s)</b>
Sponges		(1 Mark)
Flatworms		(1 Mark)
Molluscs		(1 Mark)
Insects		(1 Mark)
Echinoderms		(1 Mark)

- b) Tabulate three differences between protostomes and deuterostomes. (4 Marks)
- c) State three functions of coelom in the life animals. (3 Marks)

**SECTION B (36 MARKS)**

**Question Three**

- a) Explain the diverse grades of organization exhibited in invertebrates. (10 Marks)
- b) Outline the asexual modes of reproduction in the Phylum Protozoa. (2 Marks)

**Question Four**

- a) Briefly explain any three types of specialized cells present in the phylum Porifera.(6 Marks)
- b) Explain three theories that point out the origin of coelom. (6 Marks)

**Question Five**

- a) Using relevant examples, define radial and bilateral symmetry of the animal kingdom. (4 Marks)
- b) Describe how the coelom is formed schizocoely. (8 Marks)

**Question Six**

- a) Outline the general lifecycle of *Plasmodium*. (8 Marks)
- b) Give an explanation of how fertilization occurs in sponges. (4 Marks)

**Question Seven**

- a) Sponges depend on water currents through water canal systems for survival. Give account of three principal types of water canal systems present in sponges. (9 Marks)
- b) Compare and contrast the locomotory structures, mode of nutrition and reproduction in Class Mastigophora and Class Sporozoa. (3 Marks)



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