

**CHUKA**



**UNIVERSITY**

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**RESIT/ SPECIAL EXAMINATIONS**

**FIRST YEAR EXAMINATION FOR THE AWARD OF  
CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION**

**BIOL 00100: BOTANY AND ZOOLOGY**

**STREAMS: CERT (ANHE) YISI**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 26/07/2018**

**11.30 AM – 1.30 PM**

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**INSTRUCTIONS:**

- **Answer ALL questions in section A and any Two questions in section B**
- **Do not write anything on the question paper**
- **Use illustrations where appropriate to enhance your answers**

**SECTION A (50 MARKS)**

1. Explain the involvement of any three branches of botany and three of zoology [6 marks]
2. (a) Define the term “species” [2 marks]  
(b) Give two distinguishing characteristics of eukaryotic cells. [2 marks]  
(c) State two functions of plant roots. [2 marks]
3. (a) Explain the meaning of binomial nomenclature. [2 marks]  
(b) Write correctly the following scientific names in binomial nomenclature:
  - (i) Coffea ARABICA [2 marks]
  - (ii) MUSCA Domestica [2 marks]
  - (iii) Felis concolor [2 marks]  
(c) Give the scientific names of the following organisms:

- (i) Domestic dog [2 marks]
  - (ii) Mango tree [2 marks]
4. With the aid of sketches, describe the following:
- (i) Raceme inflorescence [3 marks]
  - (ii) Fibrous roots [3 marks]
5. (a) Explain the meaning of homeostasis [2 marks]
- (b) Explain an example of homeostasis in the human body [4 marks]
6. (a) Explain the events that take place during cytokinesis. [2 marks]
- (b) Explain the most important similarity between cyanobacteri and plants. [2 marks]
7. (a) Name three types of cells found in animals. [3 marks]
- (b) Distinguish between an organ and an organ system [4 marks]
8. Explain how daughter cells by mitosis differ from those by meiosis with respect to sets of chromosomes. [3 marks]

**SECTION B (20 MARKS)**

9. Write an essay on the importance of the study of zoology. [20 marks]
10. Describe the general structure of an animal cell with reference to the functions of its parts. [20 marks]
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