

CHUKA



UNIVERSITY

UNIVERSITY SUPPLEMENTARY/SPECIAL EXAMINATIONS.

FIRST YEAR EXAMINATION FOR THE AWARD OF CERTIFICATE IN ANIMAL HEALTH

BIOL 00100: BOTANY AND ZOOLOGY

STREAMS

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 12/09/2018

11.30 A.M -1.30 P.M

INSTRUCTIONS:

- Answer ALL Questions in Section A and any TWO in Section B
- Do not write anything on the Question Paper
- Use illustrations where appropriate to enhance your answers

SECTION A [30 MARKS]

Give the function(s) of each of the following organelles of a cell: [5 Marks]

- Golgi apparatus
- Cell wall
- Amyoplast
- Lysosome
- Chloroplast

2. (a) List three differences between eukaryotic and prokaryotic cells. [3 Marks]

(b) Name the discipline of biology that deals with the study of:

- Ants
- Butterflies and moths. [2 Marks]

3. (a) Define the term homeostasis. [2 Marks]

(b) Explain one example of homeostasis in the body of a mammal. [3 Marks]

4. (a) Giving an example of each, distinguish between vital and mechanical functions of plant organs. [4 Marks]

(b) Distinguish between pure botany and applied botany. [1 Mark]

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5. (a) List seven taxa used in the classification of organisms in their sequence from the largest down to species. [3½ Marks]
- (b) Explain the meaning of “genus.” [1½ Marks]
6. (a) Explain briefly what meiosis is. [2 Marks]
- (b) Explain the differences between cytology and cytokinesis. [2 Marks]
- (c) Name of kingdom whose members are only unicellular organism. [1 Mark]

SECTION B: [30 MARKS]

7. Write an essay on the importance of Zoology. [20 Marks]
8. Discuss root modification among members of the Plant Kingdom. [20 Marks]
9. Discuss levels of organization of organisms. [20 Marks]
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