

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION

BIOL 00100: BOTANY AND ZOOLOGY

STREAMS: CERT, ANHE Y1S1

TIME: 2 HOURS

DAY/DATE: MONDAY 4/12/2017

11.30 A.M – 1.30 P.M

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 (30MARKS)

1. Explain what each of the following branches of botany or zoology is involved in. [5marks]
 - (i) Morphology
 - (ii) Pharmacognosy
 - (iii) Pathology
 - (iv) Zoography
 - (v) Ornithology
2. (a) Define the term “species” as used in the broader concept. [2marks]
(b) Give examples, distinguish between vital and mechanical functions performed by plants. [3marks]
3. (a) Giving any three taxa used in the classification of organisms. [3marks]

- (b) Give two differences between prokaryotic cells and eukaryotic cells. [2marks]
4. (a) Describe, with the aid of sketches, two types of inflorescences. [4marks]
- (b) Name:
- (i) Two organs of a plant. [1mark]
- (ii) Two organ systems of an animal. [1mark]
- (c) Write correctly the following scientific names in binomial nomenclature:
- (i) PANTHELA LEO. [1mark]
- (ii) lantana camara. [1mark]
- (d) Give the scientific name of the cow or ox. [1mark]
5. (a) Explain the difference between the cells produced through mitosis and those produced through meiosis with regard to sets of chromosomes. [2marks]
- (b) Describe briefly the role played by the seed coat. [4marks]

SECTION B(20MARKS)

6. Write an essay on the importance of botany . [20marks]
7. Discuss root modification in plants . [20marks]
8. Expound on the structure of the animal cell. [20marks]
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