

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN  
BIOLOGY**

**ZOOL 313: TERRESTRIAL ECOLOGY**

**STREAMS: BSC (BIOLOGY) Y3S2**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 16/04/2019**

**8.30 A.M. – 10.30 A.M.**

**INSTRUCTIONS:**

- Answer ALL questions in section A and any TWO in section B

**SECTION A (30 MARKS)**

- Q1. Differentiate between
- (a) Ruminant and cecal grazers (2 marks)
  - (b) Venomous and constrictor snakes (2 marks)
  - (c) Pre-copulatory and post-copulatory behaviour (2 marks)
- Q2. Explain how eye-sight is important in predator-prey survival in terrestrial ecosystems. (6 marks)
- Q3. Describe non-chemical plant defenses against herbivory. (6 marks)
- Q4. (a) Describe survival strategies employed by organisms in dry lands. (4 marks)
- (b) Explain the role of microorganisms in dry land environments. (2 marks)
- Q5. Describe factors that influence successful plant animal dispersal associations. (6 marks)

**SECTION B (40 MARKS)**

- Q6. Give a detailed account of the feeding habits of birds. (20 marks)

- Q7. Discuss the adaptations of desert flora and fauna in respect to water scarcity. (20 marks)
- Q8. Give a detailed account of terrestrial biomes with respect to precipitation, location and productivity. (20 marks)
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