

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**RESIT/SPECIAL EXAMINATION**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN  
WILDLIFE ENTERPRISE AND MANAGEMENT**

**WIEM 311: VERTEBRATE POPULATION DYNAMICS**

**STREAMS: BSC WIEM (Y3S1)**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 12/08/2021**

**2.30 P.M – 4.30 P.M.**

**INSTRUCTIONS**

- **Answer ALL questions in Section A and any TWO questions in Section B.**
- **Do not write anything on the question paper.**

**SECTION A (30MARKS)**

1. Write short notes on the following concepts
  - a) Recruitment (2 Marks)
  - b) Population dynamic (2 Marks)
  - c) Generation time (2 Marks)
2. Briefly explain four features of a population used in determining population growth or Decline (4 marks)
3. Briefly explain the difference between contest competition and scramble competition (4 Marks)
4. Briefly describe the three types of animal dispersion one would find within protected areas (6 Marks)
5. Explain briefly the three factors influencing wildlife distributions (6 Marks)
6. Describe carrying capacity and briefly explain how you can derive it within a national park (4 Marks)

**Section B (40 Marks)**

7. a) Using illustrations, describe the two main growth forms exhibited by wildlife populations (10 Marks)
- b) Using relevant examples, discuss the differentiating characteristics of r and k selected populations (10 marks)
8. Discuss the two main categories of factors influencing population dynamics of wildlife within protected areas (20 Marks)
9. Discuss the anthropogenic threats affecting wildlife populations today (20 Marks)
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