

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS
RESIT/SPECIAL EXAMINATIONS**

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

WIEM 311: VETERBRATE POPULATION DYNAMICS

STREAMS: BSC WIEM Y3S1

TIME: 2 HOURS

DAY/DATE: THURSDAY 26/07/2018

11.30 A.M – 1.30 P.M

INSTRUCTION:

SECTION A: ANSWER ALL QUESTION (30 MARKS)

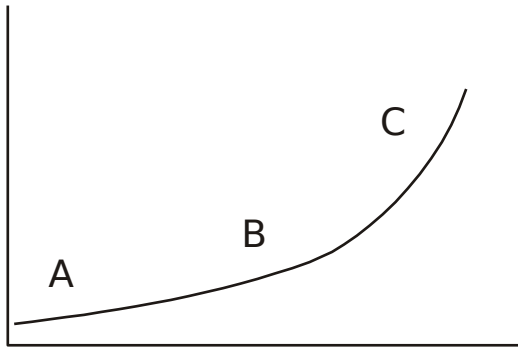
1. Describe how natural populations are dispersed. (3 marks)
2. Briefly explain how predation and competition influences populations (4 marks)
3. a) Define the term survivorship (1 mark)
b) Using examples, explain the different types of survivorship curves (6 marks)
4. Explain the factors that influence population fluctuations (2 marks)
5. a) With named examples differentiate between r- and k- life history strategies in organisms. (4 marks)
- b) Explain why species most with a K-life history strategies are likely to be endangered. (4 marks)
6. Explain three (3) methods you would use to determine population abundance in a protected area. (6 marks)

SECTION B: ANSWER 2 QUESTIONS ONLY (40 MARKS)

7. Discuss exhaustively the factors that influence wildlife population changes and growth. (20marks)
8. Discuss in details the application of population ecology knowledge to wildlife management. (20 marks)

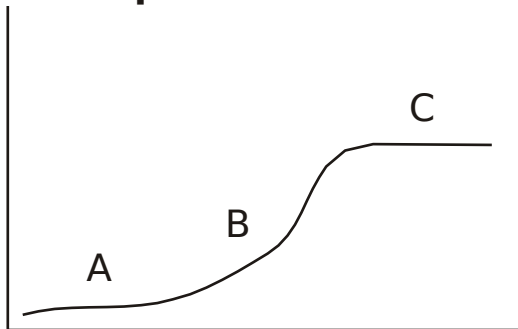
9. The graphs below are different population growth models. Interpret the graphs while describing what is happening at each lettered point and predict what will happen next. Provide a reason for each statement and prediction. The first one has been done for you. (20 marks)

Graph1



This paper consists of 3 printed pages. Please turn over

Graph2



Graph3

