

**MAASAI MARA UNIVERSITY**

**DRAFT REGULAR UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT**

**BACHELOR OF SCIENCE IN WILDLIFE MANAGEMENT**

**COURSE CODE: WLM 344**

**COURSE TITLE: POPULATION ECOLOGY**

**DATE: TIME:**

**INSTRUCTIONS TO CANDIDATES**

Answer **ALL** questions in section **A** and any other **THREE** in section **B.**

***This paper consists of 2 printed pages. Please turn over***

**Section A: Answer all question (25 marks)**

1. Explain what the following terms means: **(5 marks)**

i) Deme

ii) Natality

iii)Demography

iv) Population carrying capacity

v) Metapopulation

2. Explain three (3) factors that affect population fluctuations **(3 marks)**

3. a) What is animal population density **(1 marks)**

 b) Describe two (2) methods you would use to obtain animal density in a

 protected area **(6 marks)**

4. Explain the model used to utilize wild animal population sustainably

 **(4 marks)**

5. Explain how competition and predation influences animal populations

 **(6 marks)**

**Section B: Answer three (3) questions only (45 marks)**

6. With named examples, discuss the different survivorship curves occurring

 in wild populations **(15 marks)**

7. Exhaustively describe how organisms life history strategies affect their

 population **(15 marks)**

8. Exhaustively discuss the factors that influence wildlife population changes

  **(15 marks)**

9. Discuss in details the application of population ecology knowledge to wildlife management **(15 marks)**