**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**Plot 91, Cadastral Zone, NnamdiAzikiwe Express way,Jabi-Abuja.**

**FACULTY OF SCIENCE**

**JANUARY 2018 EXAMINATION**

**PROGRAMME**

**COURSE CODE: BIO 313**

**COURSE TITLE: ANIMAL ECOLOGY**

**CREDIT UNIT: 3**

**TIME ALLOWED: 2HOURS**

**TOTAL MARKS: 70%**

**INSTRUCTION: ANSWER FOUR QUESTIONS IN ALL BUT QUESTION ONE IS COMPULSORY**

1a. Define the term population. **2marks**

b. Differentiate between density and population distribution. **6marks**

c. List five limiting factors in an ecosystem. **5marks**

d. State the four population logistics growth phases. **4marks**

e. State the importance of the measurement of population dynamics.**5marks**

f. Explain static life tables. **3marks**

**25marks**

2a. What are the abiotic factors that affects populations. **3marks**

b. List the parameters affecting macro-invertebrates distributions. **7marks**

c. Mention five macro-invertebrates. **5marks**

**15marks**

3a. Define the term survivorship curve. **2marks**

b. With the aid of diagrams, show the types of survivorship curves. **8marks**

c. State the importance of stage-dependent life-tables. **5marks**

**15marks**

4a. What is Competition. **3marks**

b. Explain the type of Competitions by Mechanisms.**10marks**

c. State the main consequences of competition. **2marks**

**15marks**

5a. Define the term population cycle. **2marks**

b. Explain the relationships between Predators and Prey. **10marks**

c. State the factors influencing population control. **3marks**

**15marks**