



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS**  
**SEPTEMBER/OCTOBER 2015 EXAMINATION**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**COURSE CODE:** BIO 304

**COURSE TITLE:** GENERAL ECOLOGY

**TIME ALLOWED: 2 Hours**

**INSTRUCTION: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER THREE QUESTIONS**

1. (a) Define biogeochemical cycle. (3 marks)  
(b) Photosynthetic plants are of gross importance in the ecosystem.  
Discuss. (5 marks)  
(c) What do you understand by global warming? (2 marks)  
(d) Describe the effect of industrialization on global warming. (7 marks)  
(e) Humans are considered to be initiators of secondary succession.  
Discuss. (8 marks)
2. (a) It is important to sustain the earth's biodiversity. Discuss (6 marks)  
(b) Write **short notes** on the following:  
(i) Territories (3 marks)  
(ii) Population life tables (3 marks)  
(iii) Denitrification (3 marks)
3. (a) Outline the main periods of increase in human population growth rate. (3 marks)  
(b) Enumerate the harmful effects of decreasing the earth's ozone layer. (2 marks)  
(c) Describe the **roles** of the following on population regulation:  
(i) space (5 marks)  
(iii) predator-prey interaction (5 marks)
4. (a) Compare the tropical rain forest and the savanna in terms of rainfall, animal types, vegetation and burning by fire. (8 marks)  
(b) Describe the structure of communities. (7 marks)

5. Enumerate the world's major environmental problems and suggest how they can be tackled. (15 marks)

6, Give a detailed description of the attributes of a population. (15 marks)