



**National Open University Of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**

**JANUARY/ FEBRUARY 2018 EXAMINATION**

**COURSE CODE: BIO 405 (2 CREDIT UNITS) TIME ALLOWED: 2HOURS**

**COURSE TITLE: HYDROBIOLOGY**

**INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS ONLY**

- 1a Enumerate and any six Effects of Water Pollution on the ecosystem **(6marks)**
- 1b List and explain any four major causes of Eutrophication **(12 marks)**
- 1c Give a general overview of Benthic Invertebrates **(7Marks)**
  
- 2a Outline any five symptoms of eutrophication **(5marks)**
- 2b List any four problems of eutrophication on human societies in Nigeria **(4marks)**
- 2c List and define the three types of Freshwater ecosystem **(6marks)**
  
- 3a Briefly explain how to determine each the following water quality parameters
  - i pH of Water Samples **(2marks)**
  - ii Water Current **(2marks)**
  - iii Total Suspended Solid **(2marks)**
- 3b What is a fresh water ecosystem? **(5marks)**
- 3c How would you determine the major zones in a river ecosystem? **(4marks)**
  
- 4a List the four main techniques for the determination of primary production in an aquatic system **(4marks)**
- 4b List the abiotic characteristics of a freshwater ecosystem **(5marks)**
- 4c Outline and describe briefly any 6 major natural vegetation types of the Lake Chilwa wetland **(6Marks)**
  
- 5a What are the major causes of diarrhoea **(6marks)**
- 5b Outline the Key measures to reduce the number of cases of diarrhoea **(5marks)**
  
- 5c Define any two of the following freshwater habitats **(4marks)**
  - i Montane Freshwaters **(2marks)**
  - ii Xeric Freshwaters and Endorheic (Closed) Basins **(2marks)**
  - iii Temperate Coastal Rivers **(2marks)**