



NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16, Ahmadu Bello Way, Victoria Island

SCHOOL OF SCIENCE AND TECHNOLOGY
October, 2013 Examination

Course Code: BIO 405

TIME: 2 HOURS

Course Title: HYDROBIOLOGY

INSTRUCTION: ANSWER ONLY 4 QUESTIONS

1.
 - a. Define water pollution?
 - b. What are the causes of water pollution?
 - c. Outline the negative effects that could arise as a result of water pollution.
 - d. Mention five water-related diseases and their means of transmission.
2.
 - a. Name the basic types of freshwater ecosystems. Give examples.
 - b. Briefly describe a freshwater ecosystem.
 - c. What are the sources of freshwater?
3.
 - a. Define autotrophic organisms. Give examples.
 - b. Define heterotrophic organisms. Give examples.
 - c. Outline the importance of benthic invertebrates.
 - d. Mention the different communities of benthic organism.
4.
 - a. Define Productivity in ecology.
 - b. Distinguish between primary productivity and secondary productivity
 - c. In aquatic systems, primary production is typically measured using different techniques. Name these techniques.
 - d. Why are wetlands the most productive natural ecosystems?
5.
 - a. Outline the general features of Kainji Lake.
 - b. Why is Lake Tanganyika an important biological resource for the study of speciation in evolution?
 - c. Mention the five major natural vegetation types of Lake Chilwa.
6.
 - a. Outline the role of agriculture in eutrophication.
 - b. What are the symptoms of eutrophication?
 - c. Mention the effects of eutrophication on receiving ecosystem.

