



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

14/16, Ahmadu Bello Way, Victoria Island

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**October, 2013 Examination**

**Course Code: ESM 424**

**TIME: 2 hours**

**Course Title: FRESHWATER ECOLOGY**

1. Many microorganisms play foundational roles in aquatic ecosystems. Mention and discuss five any that microorganisms constitute part of the fresh water organisms.  
(17½marks)
2. Some of the abiotic factors affecting the functioning of the freshwater ecosystem are **temperature** related. Discuss.  
(17½marks)
3. For each action that man takes in his lifestyle, there is a resultant effect on the ecosystem, discuss some of these effects on freshwater communities.  
(17½marks)
4. (a) Some animals have developed adaptations that allow them to travel through lotic water without being inhibited in same spot. Discuss.  
(13½marks).  
(b) List four sources through which lotic water communities can be formed  
(4marks).
5. Identify and explain the possible strategies for the management of freshwater ecosystem (17½marks)
6. (a) Identify and explain the three main areas of the freshwater environment.  
(11½marks)  
(b) List the major factors affecting the oxygen concentration in lentic water.  
(6 marks)