MACHAKOS UNIVERSITY

University Examinations for 2016/2017 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL STUDIES (ENVIRONMENTAL RESOURCE CONSERVATION)

ERC 321: WATER AND MARINE RESOURCES MANAGEMENT

DATE: 27/7/2017 **TIME: 2:00 – 4:00 PM**

INSTRUCTIONS: Answer Question **one** and any other **two** questions

1. a) Explain the meaning of the following

   i) Eutrophication (2 marks)
   ii) Lotic ecosystems (2 marks)
   iii) Land use planning (2 marks)
   iv) Aquatic pollution (2 marks)

   b) Using examples, explain the effects of physical alternation of aquatic ecosystems (10 marks)

   c) Explain the effects of heavy metals to fresh water and marine resources in Kenya (10 marks)

2. Describe the basic steps followed in land use planning. (20 marks)
3. Discuss five impacts of human activities on aquatic environments in Kenya and their effects to biodiversity (20 marks)
4. Discuss two major categories of aquatic ecosystems in Kenya. (20 marks)
5. Citing examples, discuss five challenges facing the management of aquatic resources in Kenyan Lakes and suggest possible remedial measures that can be used to manage the resources sustainably (20 marks)