



**EMBU UNIVERSITY COLLEGE**  
**(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)**

**SECOND SEMESTER EXAMINATIONS 2013/2014**

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF**  
**SCIENCE IN PLANT ECOLOGY**

**SBT 510: EUTROPHICATION AND POLLUTION**

**DATE: APRIL 10, 2014**

**TIME: 8.30AM – 10.30AM**

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**INSTRUCTIONS:**

**ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS.**

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**QUESTION ONE**

- a) Describe 3 environmental degradation processes that may lead to eutrophication and pollution  
(15 marks)
- b) Discuss nutrient loss and surface nutrient concentration due to watershed manipulation  
(10 marks)

**QUESTION TWO**

- a) Discuss Nitrogen and Phosphorus cycling in sediments and water interfaces of aquatic ecosystems  
(25 marks).

**QUESTION THREE**

- a) Outline five (5) different forms of urban pollution and their sources (15 marks).
- b) Enumerate the similarities and differences between fresh water and marine water pollution (10 marks)

**QUESTION FOUR**

- a) Discuss bio-amplification of pesticides in aquatic ecosystems (10 marks)
- b) Explain self-purification of water in continuous flow water systems

**QUESTION FIVE**

Discuss Environmental Impact Assessment and Impact Mitigation of eutrophication and pollution. (25 marks)

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