



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2015/2016**

**THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL  
SCIENCE WITH INFORMATION TECHNOLOGY**

**MAIN CAMPUS**

**NES 302: BIODIVERSITY AND CONSERVATION**

Date: 16<sup>th</sup> January, 2016

Time: 8.30 - 10.30 am

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INSTRUCTIONS:

- Answer Question ONE and any other TWO Questions.

1. a) Describe the consequences of habitat fragmentation on biological communities. [15 marks]
- b). Explain the relevance of the following to biodiversity conservation:
  - i. Genetic diversity [5 marks]
  - ii. Captive breeding [5 marks]
  - iii. Population bottleneck [5 marks]
2. Discuss the institutional structure and legal framework for management of biodiversity in Kenya. [20 marks]
3. Discuss the techniques employed in preventing the extinction of endangered animals in Kenyan protected areas. [20 marks]
4. a) Suppose African Elephants are to be taken for captive breeding programme from Tsavo East National park. Describe two approaches that can be used to determine the minimum viable population. [14 marks]
- b) Describe the correlates of an organism's vulnerability to extinction. [6 marks]
5. Discuss the efforts put in place by East African community to conserve the biodiversity of Lake Victoria. [20 marks]
6. Discuss how the Convention on Biological Diversity has been domesticated in Kenya [20 marks]

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