



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**THIRD YEAR FIRST SEMESTER EXAMINATION FOR DEGREE
OF BACHELOR OF SCIENCE (ENVIRONMENTAL SCIENCE)
AND (GEOGRAPHY AND NATURAL RESOURCE
MANAGEMENT) WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

NES 302: BIODIVERSITY AND CONSERVATION

Date: 13th December, 2016

Time: 12.00 - 3.00pm

INSTRUCTIONS:

- Answer Question ONE and any other TWO

1. a) Explain the importance of the following considerations in the design of a biological reserve:
 - i. Proximity. [5 marks]
 - ii. Shape. [5 marks]
 - iii. Size [5 marks]
 - b). Describe the methods that can used to determine the areas of conservation priority. [15 marks]
 2. Discuss the challenges faced in conservation of biological diversity in Kenyan protected areas. [20 marks]
 3. Explain the following components of biological diversity:
 - a. Ecosystem diversity [6 marks]
 - b. Genetic diversity [6 marks]
 - c. Species diversity [8 marks]
 4. Discuss the limitations of Convention on International Trade in Endangered Species (CITES) ban on ivory trade. [20 marks]
 5. a) Explain the ecological correlates of species vulnerability to extinction after habitat fragmentation. [8 marks]
 - b) Describe the approaches used to estimate the minimum viable population. [12 marks]
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