



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

AUGUST – DECEMBER 2015 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

SCHOOL FOCUSED PROGRAMME

BIO 405: CONSERVATION BIOLOGY

P.O. Box 62157
00200 Nairobi - KENYA
Telephone: 891601-6
Fax: 254-20-891084
E-mail: academics@cuea.edu

Date: DECEMBER 2015

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions

- Q1. a) Give THREE importances of a rare species inventory. **(3 marks)**
- b) Explain the importance of the following types of species in designing a nature reserve
- i Focal species
 - ii Priority taxa
 - iii Flagship species **(6 marks)**
- c) Give reasons why the following steps are necessary during a biodiversity survey, and explain how each is achieved
- i Standardization
 - ii Monitoring
 - iii Sampling effort **(6 marks)**
- d) What encompass the THREE levels of biodiversity and why should each level be conserved. **(6 marks)**
- e) Explain why the following aspects are necessary when designing a nature reserve

- i Diverse reserves
- ii Linkages between reserves
- iii Maintaining ecosystem processes and structures **(9 marks)**

Q2. Explain TEN ways conservation bodies have contributed towards the recovery of endangered biodiversity. Give examples. **(20 marks)**

Q3. Describe FIVE challenges to biodiversity conservation and give ways on how each of the challenges can be overcome. **(20 marks)**

Q4. Discuss the various characteristics that lead to population changes. **(20 marks)**

Q5. a) What is an Environmental Impact Assessment (EIA)? **(3 marks)**

b) What THREE goals does the EIA aim at achieving? **(3 marks)**

c) Explain any SEVEN principles that should be considered in undertaking an Environmental Impact Assessment (EIA) **(14 marks)**

END