



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN
AGRIBUSINESS MANAGEMENT,
FOURTH YEAR SECOND SEMESTER 2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAE 3429

COURSE TITLE: ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

EXAM VENUE: LAB 14 STREAM: BSC (AGRIBUSINESS MANAGEMENT)

DATE: 20/12/16 EXAM SESSION: 2.00 – 4.00 PM

TIME: 2.00 HOURS

Instructions:

- 1. Answer ALL question in Section A (compulsory) and ANY other TWO questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A [30 MARKS]

Answer all questions in this Section

1. Explain the roles played by the natural environment in ensuring that the economic system is sustainable. **[5 Marks]**
2. How does the presence of externalities affect the market's ability to achieve allocative efficiency? **[5 Marks]**
3. Explain two views of sustainability. **[4 Marks]**
4. Discuss the three fundamental rules of sustainability. **[6 Marks]**
5. Describe two criteria employed in allocating environmental and natural resource use. **[4 Marks]**
6. Give reasons why environmentalists argue for low discount rate for resource and environmental related investments. **[6 Marks]**

SECTION B [40 MARKS]

Answer any TWO questions in this Section

7.
 - a. Explore the impact of inclusion of environmental costs on the extraction of depletable resources. **[6 Marks]**
 - b. Discuss the characteristics of efficient property right structure. **[8 Marks]**
 - c. Classify environmental goods and services by exclusivity and rivalry in use **[6 Marks]**
8.
 - a. Explain the possible remedies for externalities associated with the environment and natural resources. **[6 Marks]**
 - b. Discuss the main methods for environmental valuations. **[8 Marks]**
 - c. Explain three categories of natural resources citing relevant examples. **[6 Marks]**
9.
 - a. Give reasons why economists engage in the practice of environmental valuation. **[6 Marks]**
 - b. Illustrate graphically and in detail the consequences of having a cartel in the oil and gas industry? **[8 Marks]**
 - c. Discuss four economic management instruments that have been used in order to manage fisheries so as to avoid the problems of overfishing. **[6 Marks]**