



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF EDUCATION**

**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF EDUCATION**

**SCIENCE/ARTS/SPECIAL NEEDS**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2016/2017 ACADEMIC YEAR**

**REGULAR (KISII CAMPUS)**

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**COURSE CODE: EMA 111**

**COURSE TITLE: ENVIRONMENTAL EDUCATION**

**EXAM VENUE: STREAM: (BED ARTS/ SCIENCE/SPECIAL NEEDS)**

**DATE: EXAM SESSION:**

**TIME: 2.00 HOURS**

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**Instructions:**

- 1. Answer question 1 (Compulsory) and ANY other 2 questions**
- 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.**

**1. Define the following concepts**

- a) i)ecosystem  
ii) Decomposers  
iii)Biodegradable  
iv) Symbiosis  
v)Biosphere (5mks)
  - b) Discuss two categories of people who benefits from environmental education (5mks)
  - c) Describe the symbiotic relationship of three organisms (6mks)
  - d) Discuss how cultural change has replaced traditional value with western value (6mks)
  - e) State and explain how the cultural change has impacted on the environment (8mks)
2. Analyze critically the problems of waste polythene paper bags in your local shopping centre and how it is managed (20mks)
3. Discuss the earth's atmosphere with the help of a diagram and discuss the last 4 earth's atmosphere (20mks)
4. a)Explain the Dimensions of environment as adapted by O'donoghue (10mks)
- b) Explain five principals of environmental education (10mks)
5. a)Discuss the problems of environmental education (10mks)
- b) Explain the international environmental education programme (10mks)