

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF SPATIAL PLANNING

# UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN WATER RESOURCES AND ENVIRONMENTAL MANAGEMENT YEAR TWO SEMESTER II 2018/2019 ACADEMIC YEAR

**CENTRE: MAIN CAMPUS** 

**COURSE CODE: PES 3224** 

COURSE TITLE: POLLUTION PROCESSES IN TROPICAL ECOSYSTEMS

EXAM VENUE: STREAM: WATER RES & ENV MGT

DATE: 2/5/19 EXAM SESSION: 12.00 – 2.00PM

**TIME: 2 HOURS** 

### **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.

# **Question one**

a. What is Pollution and what can we do about it?

[5 marks]

- b. Outline any five major air pollutants you know[5marks]
- c. Explain any five known Impacts of e-waste on the environment and human health[5 marks]
- d. Briefly explain any five objectives of waste water treatment [5 marks]
- e. Explain the chemical changes that take place in a water body that is under Eutrophication[10 marks]

#### **Question 2**

With appropriate and concrete examples discuss the waste management hierarchy [20 marks]

## **Question three**

Discuss the major anthropogenic impacts on ecosystem degradation recommending remedial interventions where necessary [20 marks]

#### **Question four**

With concrete examples discuss the merits and demerits of Solid Waste Management (SWM) strategies [20 marks]

# **Question five**

Discuss Climate Change with respect to Air Pollution and Ozone layer depletion. [20 marks]