



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MANAGEMENT
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN
WATER RESOURCES AND ENVIRONMENTAL MANAGEMENT
2ND YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
REGULAR**

COURSE CODE: PES 3213

COURSE TITLE: ENVIRONMENTAL POLLUTION AND CONTROL I

EXAM VENUE: LR 6

STREAM: Water Sciences)

DATE: 17/04/14

EXAM SESSION: 9.00 – 11.00 AM

TIME: 2.00 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.**

Q1. a) With the aid of examples, discuss the major achievements in reduction of environmental pollution since 1960s [20 marks]

b) Explain why environmentalists and health experts are more concerned with anthropogenic routes than natural routes of air pollution [10 marks]

Q2. Explain, with the aid of examples what you understand by Persistent Organic Pollutants (POPs) and discuss their impact on mankind and the natural environment. [20 marks]

Q3. a) Explain with relevant examples what you understand by **Biological Oxygen Demand (BOD)** and **Chemical Oxygen Demand (COD)**. [5 marks]

b) Discuss the ozone layer depletion process and the resultant impact on human health and the environment [15 marks]

Q4. a) Explain five factors that influence the rate of ground water pollution [10 marks]

b) With the aid of examples explain how indoor air pollution can be reduced drastically. [10 marks]

Q5 a) With the aid of examples justify the application of trans-boundary approach to environmental pollution control. [10 marks]

b) Discuss the main barriers to effective enforcement of the Environmental Management and Coordination Act (Noise and Excessive Vibration) Control Regulation of 2009. [10 marks]