



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPACIAL PLANNING AND NATURAL RESOURCES MANAGEMENT
UNIVERSITY EXAMINATION FOR THE DEGREE OF WATER AND ENVIRONMENTAL
MANAGEMENT**

2nd YEAR 2nd SEMESTER 2024/2025 ACADEMIC YEAR

ONLINE STUDENTS

COURSE CODE: PNB 1208

COURSE TITLE: Pollution Control In Tropical Ecosystems

DATE: 16/4/2025

TIME: 9.00-11.00

DURATION: 2HOURS

VENUE: LAB 10

Instructions:

- 1. Answer ALL questions in Section A and any TWO questions in section B**
- 2. Use the answer booklet provided.**

SECTION A: ANSWER ALL QUESTIONS (30MARKS)

1. (a) Differentiate Pollution from pollution process and give appropriate examples **(4marks)**
 - (b) What is a tropical ecosystem? **(1mark)**
 - (c) What is grey water? **(1mark)**
 - (d) Give **three** examples of grey water **(3marks)**
 - (e) Explain the terminology “**eutrophication**” and explain its genesis **(3marks)**
 - (f) Name **three** positive impacts of effective grey water management? **(3marks)**
 - (g) List **four** reasons of using hydrogen peroxide in treating pollutants from industries. **(4marks)**
 - (h) Name five factors governing bio-indicator distribution in aquatic environment **(5marks)**
 - (i) Which are the **three** major categories of wastes which are normally generated? **(3marks)**
 - (j) What is a hazardous waste? **(1mark)**
 - (j) List **five** commonly employed methods for solid waste disposal **(5marks)**.
 - (k) In applying the knowledge and skills gained in this unit, how can you convince your local community members not to pollute the ecosystems around them? **(5marks)**

SECTION B: ANSWER ANY TWO QUESTIONS (40MARKS)

1. (a) Discuss the objectives of wastewater treatment **(10marks)**
 - (b) Discuss the effects of rainwater on tropical forests **(10marks)**
2. (a) Discuss strategies through which eutrophication can be minimized **(10marks)**
 - (b) Why should grey water be treated? **(10marks)**
3. (a) Discuss the criteria used in selecting bio-indicators **(10marks)**
 - (b) Discuss the various steps which should be followed in proper solid waste management **(10marks)**