



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
SEMESTER 2018/2019 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: PWE 3222

COURSE TITLE: WATER RESOURCES TECHNOLOGY II

EXAM VENUE: STREAM: WATER

DATE: 16/4/19 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.**

Section A: Question is compulsory (30marks)

1. (a) Explain the following terminologies giving relevant examples (i) natural resource (ii) microeconomics **(4marks)**
(b) Differentiate the following terminologies allogenic succession and autogenic succession **(3marks)**
(c) Outline the five key elements of economics and show how they relate to natural resources **(10marks)**
(d) Briefly discuss the role of natural resources with respect to (i) conservation of habitats (ii) cultural values and (iii) integration with economic development **(13marks)**
2. (a) Discuss five reasons why natural resources need to be classified **(10marks)**
(b) List and give examples of five renewable resources **(10marks)**
3. (a) Discuss five causes of market failures in natural resources management **(10marks)**
(b) What is a "common property resource"? Discuss three empirical situations where this term is often used by economists (10marks)
4. (a) Discuss five reasons which predisposes a natural resources to lootability **(10marks)**
(b) List and give examples of five non-renewable resources **(10marks)**
5. (a) Discuss four main approaches in resources management **(10marks)**
(b) Explain three reasons why transaction costs are experienced in exploitation of natural resources **(5marks)**
(c) What is equilibrium? What are the consequences of equilibrium in a free market? **(5marks)**