



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN
SPATIAL PLANNING AND BSC WATER RESOURCE AND ENVIRONMENTAL
MANGEMENT
SEMESTER 2018/2019 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: PES 3111

COURSE TITLE: INTRODUCTION TO ENVIRONMENTAL STUDIES

EXAM VENUE:

STREAM: SPATIAL PLANNING

DATE:

EXAM SESSION:

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.**

Q1. a) What is meant by Environmental Studies? Why is it important for Professionals in Spatial Planning and those of Water Resource and Environmental Management to be knowledgeable in Environmental Studies?

[10Mks]

b) Define the following key terms in Environmental Studies

(i) Ecosystem

[2Mks]

(ii) Habitat

[2Mks]

c) Explain at least **FIVE** regulatory functions of the environment? Why are such functions important?

[10Mks]

d) Explain **EITHER** the system theory **OR** the theory of the tragedy of the commons and show its applicability in environmental studies

[6Mks]

2) (a) What is a biochemical cycle?

[1Mks]

b) (i) With the help of a well labelled diagram describe the hydrological cycle

[6Mks]

(ii) Identify at least three anthropogenic activities and explain how they interfere with the hydrological cycle?

[6Mks]

c) What measures would you propose to manage the negative effects of human-induced activities on the hydrological cycle?

[4Mks]

3) (a) Explain the roles played by the following in the environment

(i) Forests,

[4Mks]

(ii) Wetlands

[4Mks]

b)(i) What is urbanization?

[1Mks]

(ii) Explain the impacts of urbanization on the Environment

[6Mks]

4 a) what services does energy provide to mankind?

[4Mks]

b) What is meant by 'energy mix' and what 'energy mix would you recommend for a developing economy such as Kenya? [4Mks]

c) Discuss the environmental effects of energy production, transportation and utilization [9Mks]

4) (a) What is the difference between a hazard and disaster? [2Mks]

b) What are the challenges to pollution control in Kenya? [6Mks]

c) Identify environmental problems caused by solid wastes. [7Mks]

5 (a) What risks does climate change pose to mankind? [7Mks]

b) Differentiate between mitigation and adaptation. [2Mks]

c) Outline key responses/achievements to combat climate change [6Mks]