



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR

FOURTH YEAR 1ST SEMESTER
MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE
EDUCATION AND EXTENSION

COURSE CODE: AEC 411
COURSE TITLE: NATURAL RESOURCE MANAGEMENT

DATE: 4TH DECEMBER 2023

TIME 9 – 11 AM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over 

KIBU observes ZERO tolerance to examination cheating

QUESTION ONE**30 MARKS**

- (a) Using suitable examples describe non-renewable natural resources **(5 Marks)**
- (b) How does habitat fragmentation threaten natural resources **(5 Marks)**
- (c) Why do managers advocate for integrated natural resource management **(5 Marks)**
- (d) Briefly outline the ethno-cultural approaches to Natural resource management **(5 Marks)**
- (e) Define sustainable development and elaborate the concept of environmental sustainability **(5 Marks)**
- (f) Explain the term market failure as used in Natural resource management **(5 marks)**

QUESTION TWO**20 MARKS**

With the aid of a diagram, illustrate the linkages of the environment within the two sector (firm and Household) economic model

QUESTION THREE**20 MARKS**

- (a) Compare and contrast the following terms as used in Natural resource management
 - (i) Potential and stock natural resources
 - (ii) Policy and institutional failures
 - (iii) Market and non-market valuation techniques
 - (iv) Ecological and economic approaches to management

QUESTION FOUR**20 MARKS**

- (a) Using suitable examples describe the four types of ecosystem services that forests provide. **(10 Marks)**
- (b) Briefly explain these terms in relation to the characteristics of renewable natural resources **(10 Marks)**
 - (i) Regeneration
 - (ii) Species interaction and dependence
 - (iii) growth rate
 - (iv) Common property effect
 - (v) Ecosystem

QUESTION FIVE**20 MARKS**

Despite the abundance of Natural resources, Kenya faces multiple crisis whose combined effect have serious consequences on natural resource management. Discuss any four of these crises.