



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2020/2021
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN REAL ESTATE MANAGEMENT
BRE 303: NATURAL RESOURCE ECONOMICS

DATE: WEDNESDAY 7TH APRIL 2021

TIME: 11.00 A.M - 1.00 P.M

INSTRUCTIONS:

Answer question **ONE** and any other **TWO** questions

Question ONE (Compulsory)

- a) Natural resources can be categorized in a number of ways. Discuss the three main classifications, citing examples in each classification. (12 marks)
- b) Define and distinguish the following concepts:
 - i. Positive and Normative Economics (4 marks)
 - ii. Static Efficiency and Dynamic Efficiency (4 marks)
- c) The manner in which producers and consumers use environmental resources depends on the property rights governing those resources.
 - i. Define property rights. (1 mark)
 - ii. Highlight the three main characteristics that an efficient property rights structure should exhibit. (9 marks)

Question TWO

- a) With relevant examples, distinguish between Negative Externalities and Positive Externalities (4 marks)
- b) Welfare economics theory points to a set of eight circumstances, such that a system of free markets would sustain an efficient allocation of resources. Discuss this set of circumstances. (16 marks)

Question THREE

In natural resource economics, while no generally accepted standards of fairness or justice exist, some have more prominent support than others.

- a) Define Intertemporal Fairness (2 marks)
- b) Discuss the development of the sustainability criterion according to the following contexts:
 - i) John Rawls Philosophy (6 marks)
 - ii) John Hartwick's Philosophy (6 marks)
- c) Recognizing the weaknesses in the two definitions of the above philosophies has led some economists to propose a new definition "Environmental Sustainability Criterion". Discuss. (6 marks)

Question FOUR

Natural resource valuation techniques attempt to determine the willingness to pay or accept for the beneficial use or services that natural resources provide. Outline the methods below and discuss 4 advantages and 4 limitations of each:

- a) Travel Cost Method (10 marks)
- b) Contingent Valuation Method (10 marks)

Question FIVE

Economists argue that environmental assets, because they are free or underpriced, tend to be overused or abused, thereby resulting in environmental damage. Economic incentives seek to correct this situation by setting a price for environmental damage or creating ownership rights to environmental goods.

- a) Discuss the two main types of economic instruments for providing an incentive to use resources sustainably (10 marks)
- b) Discuss the set of criteria used in determining which incentive policies should be adopted (10 marks)