



# MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (AGRIBUSINESS AND TRADE)

AGB 410: ENVIRONMENTAL ECONOMICS.

DATE: 16/12/2021

TIME: 11.00-1.00 PM

---

## INSTRUCTIONS:

- (i) This examination consists of Five questions.
- (ii) Answer question one (Compulsory) and any other two questions.
- (iii) Abide by all rules and regulations concerning this exam carefully.
- (iv) Follow the guidelines on submission of exam script to the letter.
- (v) Violating any of the rules is an exam irregularity and may lead to discontinuation from the University.

### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define environmental economics and explain its importance. (6 marks)
- b) “The Environmental Kuznets Curve (EKC) is often used to describe the relationship between economic growth and environmental quality.” Critically analyse this statement. (8 marks)
- c) Using diagrams, assess the relevance of Pigouvian tax in controlling pollution. (10 marks)
- d) Evaluate six functions of NEMA. (6 marks)

### QUESTION TWO (20 MARKS)

- a) Examine four key economic incentives to pollution control. (8 marks)
- b) Discuss how the environment affects the economy. (12 marks)

### QUESTION THREE (20 MARKS)

- a) Analyse four causes of market failure. (8 marks)
- b) Explain the important steps of carrying out Environmental impact assessment of any environmental project. (12 marks)

**QUESTION FOUR (20 MARKS)**

- a) Evaluate on any 5 sustainable development goals. (10 marks)
- b) Elaborate on the following concepts as they relate to environmental economics:
  - i. Information Asymmetry. (2 marks)
  - ii. Global warming. (2 marks)
  - iii. Environmental Impact Assessment. (2marks)
- c) While giving examples of each differentiate between positive and negative externalities. (4 marks)

**QUESTION FIVE (20 MARKS)**

- a) Define the term sustainable development (2 marks)
- b) Explain the policies that a country can adopt to ensure sustainable development. (8 marks)
- c) Write detailed notes on two international trade agreements that have an impact on the global environment. (10 marks)