



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL SCIENCES

ESU 305 ENVIRONMENTAL ECONOMICS

DATE: 27/9/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS TO CANDIDATES

- (i) Answer question one (Compulsory) and any other two questions**
- (ii) Do not write on the question paper**
- (iii) Show your working clearly**
- (iv) Written material or electronic gadgets including mobile phones are not allowed in exam room.**

QUESTION ONE (30 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) Examine four key economic incentives to pollution control. (8 marks)
- d) Discuss three international trade agreements that have an impact on global environment (12 marks)

QUESTION TWO (20 MARKS)

- a) Define a property right and point out some of its characteristics. (10 marks)
- b) Explain the Inverted U- kuznet curve and its limitations (10 marks)

QUESTION THREE (20 MARKS)

Write brief notes on the following environmental concepts

- a) Information Asymmetry (6 marks)
- b) Global warming (6 marks)

- c) Environmental Impact Assessment (8 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss how the environment affects the economy. (8 marks)
- b) Clearly distinguish between the following paired concepts.
- i. Environmental Economics and Resource Economics. (4 marks)
 - ii. Ambient Standard and Emission standard. (4 marks)
 - iii. Ultimate resource and steady state economics. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Using diagrams, explain the relevance of Pigovian tax in controlling pollution. (10 marks)
- b) Explain the Coase theorem and illustrate using diagrams how the social optimal pollution can be achieved. (10 marks)