



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF COMMERCE (FINANCE)

ESU 305: ENVIRONMENTAL ECONOMICS

DATE: 26/7/2019

TIME: 8:30 – 10:30 AM

INSTRUCTIONS:

- (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 (COMPULSORY) (30 MARKS)

- a) Define environmental economics and explain the importance of environmental economics
(6 marks)
- b) Explain the Coase theorem and illustrate using diagrams how the social optimal pollution can be achieved.
(8 marks)
- a) Using diagrams, explain the relevance of Pigouvian tax in controlling pollution.
(10 marks)
- b) Elaborate on the following environmental concepts
 - i) Information Asymmetry (2 marks)
 - ii) Global warming (2 marks)
 - iii) Environmental Impact Assessment (2 marks)

QUESTION TWO (20 MARKS)

- a) Examine four key economic incentives to pollution control. (8 marks)
- b) Using diagram, explain the relevance of Pigouvian tax-subsidy solution in controlling negative externality. (4 marks)
- c) Discuss how the environment affects the economy (8 marks)

QUESTION THREE (20 MARKS)

- a) “The Environmental Kuznets Curve (EKC) is often used to describe the relationship between economic growth and environmental quality.” Explain the major connection between environment and economic growth (8 marks)
- b) Explain important steps of carrying out Environmental impact assessment of any environmental aspect . (12 marks)

QUESTION FOUR (20 MARKS)

- a) Define and outline features of an adequate set of property rights. (5 marks)
- b) Write brief and detailed notes following environmental concepts
 - i) Externality theory (5 marks)
 - ii) Environmental modeling (5 marks)
 - iii) Kyoto protocol (5 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) Explain international trade agreements that have an impact on global environment (10 marks)