MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL SCIENCE

ESU 305 ENVIRONMENTAL ECONOMICS

DATE: 5/12/2019 **TIME: 8.30-10.30 AM**

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE **(30 MARKS)**

a) Define environmental economics and explain the importance of environmental economics (6 marks)

b) Explain the Coarse theorem and illustrate using diagrams how the social optimal pollution can be achieved. (8 marks)

c) Using diagrams, explain the relevance of Pigouvian tax in controlling pollution. (10 marks)

d) 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)