

#### COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

## MEC 404: RESOURCE AND ENVIRONMENTAL ECONOMICS

### END OF FIRST SEMESTER EXAMINATIONS

### MAY/JUNE 2020

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# **INSTRUCTIONS**

Answer Question number 1 and ANY other three questions. Total possible mark is 100.

Start each question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the question.

Show all your workings.

Credit will be awarded for logical, systematic and neat presentations.

- 1. Environmental valuation is key to optional utilization of the environment. Using a country of your own choice and with specific examples show how you would appraise the value of an environment. Why is valuation key to sustainable utilization of the environment? Further suggest why resource accounting can be a viable alternative to sustainable use. **[100 marks]**
- The main thrust of Environmental and resource economics is to determine the optimal market allocations of resources and proposing solutions to environmental problems.
  (a) Using illustrations explain the efficient allocation of the following resources
  - (i) Depletable, non-recyclable energy resource such as oil
  - (ii) Replenishable but Depletable resource such as water
  - (iii) Renewable Common Property resource such as fisheries
  - (iv) Toxic substances
  - (v) Recyclable Resources
  - (b) Propose practical and viable solutions to the following problems and demonstrate how the suggested solutions resolve the problem
    - (i) Policy responses to the problem of pollution
    - (ii) Open access resources
    - (iii) Depletable resources
    - (iv) Replenishable but Depletable resources such as water [100 marks]
- 3. (a) Waste management is anchored on three principles: reduce, reuse and recycle. Unpack the above principle with examples from the environment
  - (b) Demonstrate pollutant taxonomy
  - (c) Suggest solutions to pollution problems and demonstrate how they reduce pollution
  - (d) Explain three types of externalities with emphasis on environmental examples and suggest solutions to externalities. (In your response demonstrate how the externality problem is resolved)
  - (e) Economists are interested in climate change. Relate the effect of climate change to economic activities and suggest practical ways of tackling this problem in a global context.
  - (f) The Environmental Management Agencies are mandated to manage the environment and ensure sustainable use of environmental resources. Drawing your examples from the environment define the three main versions of sustainability.
    [100 Marks]

[END OF EXAMINATION]