

NATIONAL UNIVERSITY OF LESOTHO

B.Ed/BSc/B.URP EXAMINATION

GES 2303 – ADVANCED HUMAN AND ENVIRONMENTAL SYSTEMS II

MAY 2023

MARKS: 100

3 HOURS

Instructions: Answer any four (4) questions and where necessary illustrate your answer with the use of appropriate diagram.

Question 1

Distinguish between the following pairs of terms/concepts. Give example of each.

- a) Renewable energy and non-renewable energy (8)
- b) Energy conservation and energy efficiency (8)
- c) Gross primary productivity and net primary productivity (9)

(25 Marks)

Question 2

Do you agree or disagree with the following propositions. Explain why you agree or disagree.

- a) Stabilizing the population is not desirable because, without more consumers, economic growth would decline. (12)
- b) The world will never run out of resources because we can use technology to help us discover substitutes and to help us reduce resource waste. (13)

(25 Marks)

Question 3

- a) Explain any five characteristics of industrialized agriculture. (10)
- b) Explain any three environmental impacts of industrialized agriculture. (15)

(25 Marks)

Question 4

- a) Distinguish between point source and non point source pollution. (10)
- b) Explain why nonpoint source pollution is more difficult to control as opposed to point source pollution (15)

(25 Marks)

Question 5

Explain the meaning of the following terms/concepts as used in environmental science.

- i) Exponential population growth (5)
- ii) Ecological footprint (5)
- iii) Matter quality (5)
- iv) Trophic level (5)
- v) Negative feedback loop (5)

(25 Marks)

Question 6

Explain any four factors that account for the falsification of the Malthusian hypothesis.

(25 Marks)