



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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University Examinations 2024/2025

FIRST YEAR FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION

AAP 1104: ECOLOGY, ENVIRONMENTAL PHYSIOLOGY AND SOIL SCIENCE.

DATE: JANUARY 2025

TIME: 1½ HOURS

INSTRUCTIONS:

*Answer question **ONE** and any other **TWO** questions*

QUESTION ONE (30 MARKS)

- a) Define the following terms
 - i. Ecology (1 mark)
 - ii. Biosphere (1 mark)
 - iii. Food chain (1 mark)
 - iv. Soil (1 mark)
 - v. Ecological niche (1 mark)
- b) State three types of soil erosion (3 marks)
- c) Differentiate between a food chain and a food web (4 marks)
- d) State three agents of physical weathering (3 marks)
- e) List three importance of soil moisture (3 marks)
- f) State three types of heterotrophic nutrition (3 marks)
- g) List the effects of air pollution (4 marks)
- h) Define soil sampling and state three importance of soil sampling (5 marks)

QUESTION TWO (15 MARKS)

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Discuss the abiotic factors of an ecosystem

(15 marks)

QUESTION THREE (15 MARKS)

(a)List the characteristics of savannah grassland

(5 marks)

(b)Discuss the differences between physical and chemical weathering

(10 marks)

QUESTION FOUR (15 MARKS)

(a)State the stages of nitrogen cycle

(5 marks)

(b)Describe the flow of energy in an ecosystem

(10 marks)