



AFRICA UNIVERSITY

(A United Methodist-Related Institution)

Investing in Africa's Future

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

1st SEMESTER EXAMINATIONS 2019

COURSE CODE

ANE301

COURSE TITLE

**ENVIRONMENTAL AND ECOLOGICAL
REHABILITATION**

DATE OF EXAMINATION

November 2019

TIME

3 Hours

EXAMINER(S)

Dr. Z. Furusa

GENERAL INSTRUCTIONS TO CANDIDATES

- 1. Do NOT write your name on the answer sheet.**
- 2. Use answer sheets provided.**
- 3. Answer any Four (4) questions.**
- 4. Read and understand all questions and instructions before you answer.**
- 5. Where necessary, illustrate your answers with sketches, figures and diagrams.**
- 6. Each question is marked out of 25 marks.**
- 7. Take note of mark distribution in each question.**
- 8. Begin your answer for each question on a new page.**
- 9. Credit is given to neat presentation of answers.**

1. a) Identify the three elements of a mine rehabilitation plan. (3 marks)
b) Discuss the six environmental issues which should be dealt with during and after mining/ (12 marks)
c) Explain why monitoring and evaluation is important in mine rehabilitation. (10 marks)
2. Critically examine 5 of the different global habitats, their destruction and rehabilitation. (25 marks)
3. a) Identify a terrestrial, alien invasive species of your choice and discuss its impact on the environment. (15 marks)
b) Elaborate on how to destroy the invasive species. (10 marks)
4. Choose any two of the following methods of rehabilitation and discuss how each strategy is used in the rehabilitation of a wetlands or freshwater system:
a) Hypo-limnetic withdrawal,
b) Dilution and flushing,
c) Phosphorus precipitation and inactivation and
d) Aeration and Sediment removal. (25 marks)
5. Using a known case study of your choice, critically explore the rehabilitation of areas where landslides took place. (25marks)
6. Evaluate the contribution of sustainable development in the management of resources. In what way is this strategy connected to rehabilitation of degraded environments. (25 marks)

The End