



GARY MAGADZIRE SCHOOL OF AGRICULTURE

DEPARTMENT OF SOIL AND PLANT SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE CROP SCIENCE (SOIL AND PLANT SCIENCES)

LEVEL 4 SEMESTER 1

MAIN EXAMINATION QUESTION PAPER

MODULE CODE: ACS 422

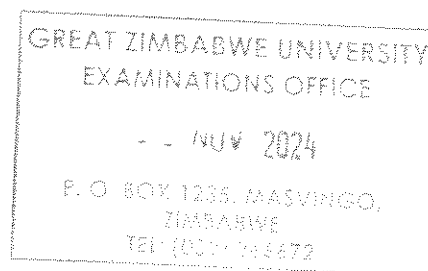
MODULE NARRATION: GLOBAL ENVIRONMENTAL ISSUES AND CLIMATE CHANGE

DATE:

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES:

- 1. Answer any FOUR questions.**
- 2. Each question carries 25 marks.**



1. Briefly explain how the following actions may help to reduce different forms of pollution:
 - a) Recycling of waste material. [5]
 - b) Resource recovery [5]
 - c) Sanitary landfills [5]
 - d) Incineration [5]
 - e) On-site disposal compositing [5]
 - f) Enacting strict legislation [5]
2. Discuss any five strategies that may be used by smallholder farmers in Zimbabwe to reduce the impact of climate change. [25]
3. Briefly explain:
 - a) How human health is affected by climate change [5]
 - b) The difference between meteorological and agricultural drought [5]
 - c) Carbon foot print in agriculture [5]
 - d) The conditions associated with *El Nino* and drought in southern Africa region [5]
 - e) The differences between climate change and climate cycles [5]
4. Describe the following terms in relation to pollution science:
 - a) Thermal pollution [5]
 - b) Bioremediation [5]
 - c) Smog pollution [5]
 - d) Desalinisation [5]
 - e) Visual pollution [5]
5. Discuss the view that the “Pfumvudza/Intwasa” method of growing cereals is an innovative strategy to address the problems of climate change and food shortages in Zimbabwe. [25]
6. Discuss the effects of climate change on livestock production [25]

END OF EXAMINATION PAPER