

BINDURA UNIVERSITY OF SCIENCE EDUCATION
BACHELOR OF ENVIRONMENTAL SCIENCE DEGREE

AGA220

Department of Animal Science
BSc Animal Science and Technology Part II Examination
Rangeland Ecology and Management

3 HOURS (100 Marks)

INSTRUCTIONS TO CANDIDATES

Answer any **FOUR** questions. Each question carries **25 Marks**

NOV 2024

1. Discuss the following terms as they relate to livestock grazing:
 - i. Stocking rate. [4 Marks]
 - ii. Rotational Grazing. [4 Marks]
 - iii Top Hamper [4 Marks]
 - iv Period of rest. [4 Marks]
 - v Sweet veld [4 Marks]
 - vi Use of fire [5 Marks]
2. Discuss the responses of grass plants to defoliation. [25 Marks]
3. Discuss the changes in nutritive value of rangelands over a year in Zimbabwe. [25 Marks]
4. Outline the main features of the following:
 - a. Hay [7 Marks]
 - b. Silage [9 Marks]
 - c. Crop residues [9 Marks]
5. Discuss the Carbon Cycle and show how rangelands can contribute to reduced climate change. [25 Marks]
6. Discuss the challenges that face rangeland managers in communal areas of Zimbabwe. [25 Marks]

END OF PAPER