



**FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE
DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH**

**BARCHELOR OF SCIENCE HONOURS DEGREE IN ANIMAL SCIENCE
PASTURE AND FORAGE AGRONOMY (LAS 2203)**

JUNE 2024

MAIN EXAM

Time Allowed: 3 Hours

Additional Material: None

Examiner's Name: C. Matitima

Instructions to Candidates

- 1. The paper consists of seven questions; answer ALL questions in Section A and ANY TWO questions in Section B.*
- 2. Marks for each question are shown in brackets. Where a questions has subdivisions, the marks for each subdivision are given.*

MARK ALLOCATION

| SECTION | MARKS |
|-------------------------------|--------------|
| Section A | 60 |
| Section B | 40 |
| TOTAL ATTAINABLE MARKS | 100 |

This paper consists of 3 printed pages

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SECTION A: Answer all questions in this section.

Question 1

- a. With the aid of well labeled diagrams, differentiate between the two types of leaves giving relevant examples of each. [10]
- b. Using examples, state the different classifications of forages. [3]
- c. How would you identify good quality forage? [7]

Question 2

- a. Give an outline of how grass responds to defoliation. [3]
- b. Discuss the factors affecting pasture adoption, establishment and management in Zimbabwe. [7]
- c. Discuss how you can increase pasture adoption and establishment in Zimbabwe taking into the factors you mentioned above. [10]

Question 3

- a. Name two pastures (one grass and one legume) and classify them according to life span, growth habit, importance and propagation means. Give scientific names for each. [4]
- b. Describe the types of undesirable plants and give examples of each. [10]
- c. Briefly describe ley pastures and their advantages to farmers. [6]

SECTION B: Answer any two questions in this section.

Question 4

In Gwanda State University farm, they are currently producing banner grass. During the rainy season, the farm experiences surplus harvests. However, during the dry season there will be shortages of feed for the livestock. Advise the farm manager on the different methods used as preservation. Your advice should include the detailed processes involved in each method. Give a recommendation on which method you think is suitable for Gwanda State University and state your reasons. [20]

Question 5

- a. Give a detailed outline of the different growth habits of legumes. Give examples of each. [10]
- b. What is seed dormancy and how is it broken? [10]

Question 6

- a. What are natural pastures? [2]
- b. State the characteristics of natural pastures. [8]
- c. Outline the methods used to improve natural pastures. [10]

Question 7

Describe how you would establish and manage a named legume pasture plant. [20]