



“Investing in Africa’s future”

**COLLEGE OF HEALTH, AGRICULTURE AND NATURAL
SCIENCES**

NAAS304: PASTURE AND RANGE MANAGEMENT

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER 2021

LECTURER: DR. S. CHAKEREDZA

DURATION: 5 HRS

INSTRUCTION

Choose and Answer **ONE** question Only

All Questions Carry Equal Marks (100)

Question 1

1. In morphology of grass species with the aid of a diagram draw and highlight rachis, spikelet, peduncle, flag leaf, culm node, stolon, rhizome. [20]
2. Define the concept of Agroforestry and discuss its role in range and pasture management. [25]
3. Discuss how varying the stocking rate affects gain per animal, gain per hectare and return per hectare. [15]
4. Discuss the challenge of matching animal demand to pasture supply on land in generally good condition. [15]
5. Discuss principles of veld management taking into account problems with carrying capacity. [25]

Question 2

1. Write an essay on the underlying causes, proximate causes and policy arena issues relating to soil erosion in a typical sub-Saharan smallholder area. [20]
2. Write concise notes on the following:
 - a. Carrying capacity [10]
 - b. Stocking rate [10]
 - c. Stocking density [10]
 - d. Grazing Cycle [10]
3. Discuss with the aid of diagrams, the relationship of grazing pressure and animal performance. [15]
4. Define what agroforestry is about and discuss its potential role in range and pasture management. [25]

Question 3

5. What is the advantage of including legumes in pastures? Discuss with the knowledge of ruminant livestock why this is so. [20]
6. In pasture and range management we are interested in plant introduction, species evaluation. Under each of these discuss what will be happening. [30]
7. Pasture Maintenance, Fertilization and Utilization. Under each of these subheading give comprehensive notes. [20]
8. Discuss with the help of a graph the impact of stocking rate. [15]
9. Discuss the relationship of grazing pressure and animal performance. [15]

END OF EXAMINATION PAPER