

**CHUKA**



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**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN ANIMAL  
SCIENCE**

**AGRI 271: PASTURE AND FODDER CROPS**

**STREAMS:**

**TIME:2 HOURS**

**DAY/DATE: THURSDAY 13/04/2023**

**8.30 A.M. –10. 30 A.M.**

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**INSTRUCTIONS**

Label your answer clearly  
Don't mix up answers

**ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B:**

Section A:

1. a) Distinguish between:
  - i. Pasture and fodder (2 marks)
  - ii. Pollarding and lopping (2 marks)
  - iii. Scarification and inoculation (2 marks)
- b) Explain the procedure for pasture legume seed inoculation (3 marks)
2. One of the importance of pasture and fodder is to improve soil fertility through mineral recycling, formation of organic matter and redistribution of nutrients, discuss (6 marks)
3. a) Illustrate the herds movements in a rotational grazing systems (3 marks)
- b) Why is it recommended that a livestock feed ration should not contain very high amount of-
  - i. Leucaena (2 marks)
  - ii. Sesbania (2 marks)

4. Explain the two phases during the silage making process (8 marks)

**SECTION B**

5. a) Discuss over sowing /sod seeding as a method of pasture and fodder establishment (10 marks)
- b) Explain the various method that are applied in improving natural pastures (10 marks)
6. a) Briefly discuss various modification of rational grazing systems (10 marks)
- b) Explain how double fertilization occurs in grasses and states its importance (10 marks)
7. Discuss *Pennisetum purperum* as one of the major source of fodder crop in Kenya under the following
- i. Growing condition and establishments (10 marks)
  - ii. Varieties grown in Kenya (4 marks)
  - iii. Management (6 marks)
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