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ACP 803



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**FIRST YEAR FIRST SEMESTER EXAMINATIONS
MAIN EXAMINATION**

FOR THE DEGREE OF MASTERS IN:

AGRICULTURE EDUCATION AND EXTENSION

COURSE CODE: ACP 803

COURSE TITLE: PASTURE AND FODDER CROPS

DATE: 17. 04. 2023

TIME: 2 – 5 PM

INSTRUCTIONS TO CANDIDATES

Answer FOUR questions

SECTION A: Answer FOUR questions (60 Marks)

1. The vicious cycle of livestock deaths in the arid and semi-arid lands (ASALs) of Kenya due inadequate forage is a threat to the livelihood of the people. As a forage scientists discuss innovative technological approaches that can contribute to future forage availability in in the ASALs.

(15 marks)

2. Discuss opportunities/strategies within forage production and dairy cattle feeding practices that can reduce emission of greenhouse gases in smallholder crop-livestock system.

(15 marks)

3. Forage conservation is a promising strategy to make forage feeds available throughout the year in the smallholder crop-livestock mixed.

(a) Discuss in detail the plant, conservation process and storage factors that affect feed value of conserved forages.

(10 marks)

(b) Give FIVE reasons as to why forage conservation has not been widely adopted in sub-Saharan Africa.

(5 marks)

4. Discuss TWO forage intensification strategies that can sustainably increase feed availability in smallholder crop-livestock mixed farming system.

(15 marks)

5. Discuss the processes involved in ensuring that Napier grass planting materials supplied to farmers are free from Napier stunt and Napier head-smut diseases.

(15 marks)