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(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY**

**MAIN CAMPUS  
MAIN EXAMINATIONS**

**UNIVERSITY EXAMINATIONS (REGULAR)  
2021/2022 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE  
OF B.Sc. IN: ANIMAL PRODUCTION & PROCESSING**

**COURSE CODE: AAP 223**

**COURSE TITLE: DAIRY CATTLE PRODUCTION**

**DATE: 25<sup>TH</sup> APRIL, 2022**

**TIME: 12-2 PM**

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**INSTRUCTIONS TO CANDIDATES**

**Answer ALL questions in section A and ANY TWO questions in section B**

**TIME: 2 Hours**

**Total marks=70**

*MMUST observes ZERO tolerance to examination cheating*

This Paper Consists of 2 Printed Pages. Please Turn Over.

**SECTION A: Answer all questions (30 Marks)**

1. Describe the characteristics and suitability of any ONE dairy breed that farmers can keep in
  - (a) Semi-arid areas of Kenya (3 marks)
  - (b) Highland areas of Kenya (3 marks)
  
2. (a) Outline THREE ways for detecting pregnancy in dairy cattle. (3 marks)  
(b) Highlight THREE major causes of abortion in dairy cattle. (3 marks)
  
3. (a) Describe pre-disposing factors that lead to mastitis infection in dairy. (2 marks)  
(b) Outline FOUR prevention four control methods of mastitis. (2 marks)
  
4. (a) Explain how to deal with a cow that has difficulties during and after calving. (5 marks)  
(b) Explain THREE functions of the alveolus (alveoli) of the mammary glands (3 marks)
  
5. Describe TWO genetic and FOUR management factors that contribute to low milk yield and quality (6 marks)

**SECTION B: Answer any two questions (40 marks)**

6. Discuss the management of cows on the following stages of lactation
  - (a) Early lactation (5 marks)
  - (b) Mid lactation (7 marks)
  - (c) Late lactation (5 marks)
  - (d) Dry Period (3 marks)
  
7. Identify and explain management and policy factors affecting affect profitability of dairy enterprise in Kenya. (20 marks)
  
8. Many small-scale dairy farms farmers do not make optimum profits because of longer calving intervals. Describe how a farmer can reduce the calving interval. (20 marks)