



“Investing in Africa’s future”

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

NAAS 417/ AAS 307: DAIRY MANAGEMENT

END OF SECOND SEMESTER FINAL EXAMINATIONS

MAY/JUNE 2020

LECTURER: MR. P. B. MUVHURINGI

DURATION: 48 HRS

INSTRUCTION

Choose and Answer **ONE** question Only

All Questions Carry Equal Marks (100)

Question 1

1. a. Discuss the nutritional challenges and remedies for dairy farmers when feeding the transition dairy cow. [25]
- b. Identify challenges which are faced by the dairy industry in Zimbabwe. Suggest ways to improve the dairy industry. [25]
- c. Describe and explain the following in milk quality analysis
- i. Organoleptic tests [10]
- ii. Methelene blue test [10]
- iii. Freezing point determination test [10]
- iv. Total bacterial Count [10]
- v. Somatic Cell Counts [10]

Question 2

2. a. Which dairy parlour will you choose for a smallholder dairy farmer? Explain why you will recommend that dairy parlour ? [20]
- b. Identify and explain causes of milk contamination and suggest ways of reducing milk contamination on a dairy farm. [20]
- c. Advise the farmer on the role of the following in galactopoiesis
- i. Hormones [20]
- ii. Milking frequency [10]
- iii. Milking interval [10]
- d. Suggest and recommend a farmer on how to feed the transition dairy cow. [20]

Question 3

3. a. Which breed of dairy cattle will you recommend for a smallholder farmer in Mutasa District? In you answer indicate the reasons for choosing that breed. [25]
- b. Describe and illustrate the calving interval. [10]
- c. Describe and explain the following in milk quality analysis;
- i. Strip cup [10]
- ii. Resazurin test [10]

- iii. Somatic cell Counts [10]
- iv. Gerber test [10]
- v. Total bacterial Counts [10]

d. Select a feeding system in dairy production that you will recommend to a new smallholder farmer and highlight the reasons for choosing that feeding system.

[15]

END OF EXAMINATION PAPER