



1st SEMESTER 2020/2021

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UNIVERSITY OF ESWATINI

FINAL EXAMINATION PAPER

PROGRAMME: B.SC. ANIMAL SCIENCE (DAIRY OPTION) YEAR IV

COURSE CODE: ASD403

TITLE OF PAPER: DAIRY PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

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THE CHIEF INVIGILATOR**

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INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

QUESTION 1

- a. With the aid of a labelled diagram, discuss the relationship between milk production, dry matter intake and body weight/body condition score of lactating dairy cows. **[18 Marks]**

- b. What is lactation persistency? Identify and briefly discuss three factors that affect lactation persistency. **[7 Marks]**

QUESTION 2

- a. Calves rely on their innate immune system and passive immunity to protect them from infections and parasites. Differentiate between innate immunity, passive immunity and active/acquired immunity. **[5 Marks]**

- b. Describe practises which optimise the transfer of passive immunity in calves. **[5 Marks]**

- c. Discuss the feeding of dairy calves from day 7 to weaning. **[15 Marks]**

QUESTION 3

- a. A dairy farmer has asked for your advice on how his dairy cows can calve every year. With your knowledge of the annual calendar for a dairy cow, and with the aid of a well labelled diagram, discuss the aspects of mating management that make it possible for dairy cows to calve every year. **[20 Marks]**

- b. Identifying anoestrous cows early in the breeding season is important for a successful breeding program? Why are some cows anoestrous? **[5 Marks]**

QUESTION 4

Discuss mammogenesis from foetus to adult dairy cows and explain how it is manipulated in dairy cows. **[25 Marks]**

QUESTION 5

a. Briefly discuss how milk secretion and the prevention of milk secretion occur in lactating dairy cows.

[15 Marks]

b. Write short notes on udder hygiene and care.

[10 Marks]