112

UNIVERSITY OF SWAZILAND

2ND SEM.2014/2015

FINAL EXAMINATION PAPER

PROGRAMME: B.SC. ANIMAL SCIENCE YEAR 3 (DAIRY OPTION)

COURSE CODE: ASD 303

TITLE OF PAPER: DAIRY PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS

THIS PAPER SHOULD NOT BE OPENED UNTIL THE CHIEF INVIGILATOR HAS

GRANTED PERMISSION.

QUESTION 1

a) A dairy farmer has grown ample amount of Rhodes grass and green maize on separate plots that could feed his stock for a year, if preserved.

      i.   Explain to the farmer the objectives and principles of main ways of fodder preservation. **(12 Marks)**

     ii.   Advise him on the appropriate preservation systems including all the necessary steps and requirements. **(13 marks)**

QUESTION 2

a) A dairy farmer wants to make a plan on how to source replacement heifers. Advise him on possible options indicating the advantages and/or disadvantages of the options.

(10 marks)

b) Identify and describe the milking parlour that is more popular. What are the main draw backs of the other common types of milking parlours?

(15 Marks)

QUESTION 3

a) Describe the mammary cell number/population and activity in the following stages of lactation.

      i.   early lactation   **(5 Marks)**
     ii.   The declining phase   **(5 Marks)**

b) State the optimum calving to conception interval and explain four effects of a much shorter interval.

(15 Marks)

QUESTION 4

a) List the local factors that regulate mammary functions and explain the mechanism briefly. **(10 Marks)**

b) A farmer wants to have a policy for culling cows from the herd to have dramatic effects on the reproductive performance of the herd. He is planning the culling rate to be 35%. As a professional comment on his plan.

(15 marks)

QUESTION 5

a) In dairy farms several sets of records must be kept. List five criteria that should be met by records. **(10 Marks)**

b) The dairy wastes resulting from dairy farms require proper attention. Describe the proper treatment methods used nowadays and reasons that necessitate this management. **(15 Marks)**