



**UNIVERSITY OF SWAZILAND**

**2<sup>ND</sup> SEM. 2016/2017**

**FINAL EXAMINATION PAPER**

**PROGRAMME: B. Sc. ANIMAL SCIENCE DAIRY OPTION YEAR IV**

**COURSE CODE: ASD 204/ASD 403**

**TITLE OF PAPER: MILKING AND MILK HYGIENE**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER ANY 4 QUESTIONS.**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY  
THE CHIEF INVIGILATOR**

**QUESTION 1**

Describe and illustrate the major anatomical differences amongst the mammary glands of the dairy sheep, dairy goat and dairy cow. (25 Marks)

**QUESTION 2**

Discuss the developments and innovations in dairy milking systems. (25 Marks)

**QUESTION 3**

Discuss three types of unhygienic milk and explain reasons why the unhygienic milk should not be mixed with saleable milk. (25 Marks)

**QUESTION 4**

Write brief notes about the following:

- a) Herringbourne parlours (8 Marks)
- b) CMT (5 Marks)
- c) Dye reduction tests (12 Marks)

**QUESTIONS 5**

Discuss in detail three types of mastitis found in dairy herds, under the following headings: causal organisms, transmission, herd affected and control strategies. (25 Marks)