



**2<sup>ND</sup> SEM. 2011/2012**

**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

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

**COURSE CODE: ASD 403**

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

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

**INSTRUCTIONS: ANSWER ANY 4 QUESTIONS.**

**THIS PAPER MAY NOT BE OPENED UNTIL THE CHIEF  
INVIGILATOR HAS GRANTED PERMISSION.**

**Question 1**

- a) Explain how can a faulty vacuum pressure in a milking machine result in reduction of milk yield. (10 Marks)
- b) Outline the procedure you may follow to milk cows than are within the first 3 days of lactation. (5 Marks)
- c) Compare and contrast the udder anatomy of the dairy goat and the dairy cow. (10 Marks)

**Question 2**

Explain two possible causes for a positive inhibitory substances residue detection in raw milk, and briefly discuss three reasons why such milk should not be sold to consumers. (25 Marks)

**Question 3**

Discuss the developments that have occurred in milking parlour systems over the past years. (25 Marks)

**Question 4**

Discuss robotic milking and explain its significance to the dairy industry. (25 Marks)

**Question 5**

Explain five possible causes of high bacterial cell counts in raw milk and briefly explain how these can be corrected. (25 Marks)