



UNIVERSITY OF SWAZILAND

2ND SEM. 2013/2014

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.

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

QUESTION 1

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

QUESTION 2

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

QUESTION 3

Discuss environmental and summer mastitis in the dairy herd. (25 Marks)

QUESTION 4

Compare and contrast:

- a) The tandem and the herringbone milking parlour systems. (8 Marks)
- b) The portable and abreast parlour systems. (5 Marks)
- c) Hand milking and machine milking systems. (12 Marks)

QUESTION 5

Outline a HACCP programme for pasteurised milk production in the factory. (25 Marks)