2ND SEM. 2017/2018

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME:	B. Sc. ANIMAL SCIENCE AND B.Sc. AGRICULTURAL EDUCATION YEAR IV
COURSE CODE:	AS 403
TITLE OF PAPER:	DAIRY PRODUCTION AND TECHNOLOGY
TIME ALLOWED:	TWO (2) HOURS
INSTRUCTIONS:	ANSWER FOUR (4) QUESTIONS; AT LEAST TWO (2) QUESTIONS FROM EACH SECTION

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

SECTION A

QUESTION 1

Explain the following:

a. Manipulating animal performance through increased milking frequency **(15 marks)**

b. Milk hold up **(10 marks)**

QUESTION 2

Write short notes on the following:

a. Robotic milking system **(15 marks)**

b. The dominant dairy breed **(10 Marks)**

QUESTION 3

Briefly discuss the following:

a. Five (5) factors to consider when choosing a dairy breed **(15 marks)**

b. Economic importance of dairy science **(10 marks)**

SECTION B

QUESTION 4

Explain the following and give two examples in each case:

a) Exopolysaccharides produced using whey as substrate **(7 Marks)**

b) Sweet cheese **(6 Marks)**

c) Approved milk chemical preservation systems **(12 Marks)**

QUESTION 5

Explain and illustrate the differences between following milk biomolecules

a) β-D Lactose and lactulose. **(15 Marks)**

b) Milk cholecalciferol and triacylglyceride. **(10 Marks)**

QUESTION 6

Discuss the characteristics and technology of traditionally produced emasi. **(25 Marks)**