



**UNIVERSITY OF SWAZILAND**

**2<sup>ND</sup> SEM.2014/2015**

**FINAL EXAMINATION PAPER**

**PROGRAMME: B.SC. ANIMAL SCIENCE YEAR 2 (DAIRY OPTION)**

**COURSE CODE: ASD 201**

**TITLE OF PAPER: ORIENTATION TO DAIRY SCIENCE**

**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**

Write short notes on the following:

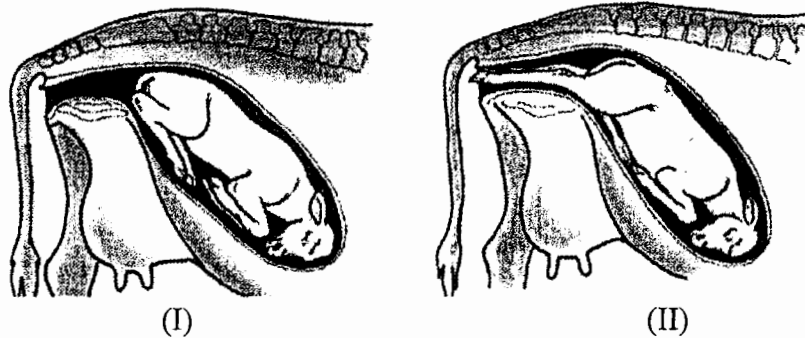
- |                              |            |
|------------------------------|------------|
| I. Homogenization            | (6 Marks)  |
| II. Dehorning                | (7 Marks)  |
| III. Artificial Insemination | (12 Marks) |

**QUESTION 2**

- a) State Udder depth and explain how it is related/or used to evaluate dairy cows. (10 Marks)
- b) Discuss the following with regard to drying a cow:
- |   |           |
|---|-----------|
| I. Ways of drying cows                              | (9 Marks) |
| II. Reasons that necessitate the drying of the cow. | (6 Marks) |

**QUESTION 3**

- a) The following picture shows different birth positions. Identify the positions and give explanation of possible assistance required. (10 Marks)



- b) The milking procedure is the first step in obtaining clean milk in the dairy industry. Identify and discuss the elements of hygienic milking operation. (15 Marks)

**QUESTION 4**

- a) A farmer has several heifers in his farm and he needs assistance on how to go about the selection of replacements. Please advise the farmer so that he can select the appropriate heifers for breeding. (13 Marks)
- b) Identify and explain TWO basic milk quality tests. (12 Marks)

**QUESTION 5**

- a) Identify THREE milk preservation techniques and briefly discuss the mechanisms involved in each technique. **(13 Marks)**
- b) Explain the purposes of castration in dairy farms and briefly describe the difference among the methods commonly used. **(12 Marks)**