



UNIVERSITY OF SWAZILAND

1st SEM. 2017/2018

RE-SIT / SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: B.Sc. ANIMAL SCIENCE YEAR 3 AND B.Sc. ANIMAL SCIENCE (DAIRY) YEAR 3

COURSE CODE: ASC 305

TITLE OF PAPER: RESEARCH METHODS

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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

QUESTION 1

Discuss the concepts of literature review and problem statement and their significance in research. **(25 Marks)**

QUESTION 2

Discuss the concepts of hypothesis and objectives and their significance in research. **(25 Marks)**

QUESTION 3

Discuss the concept of natural variation and how it forms the basis of the principles of scientific experimentation. **(25 Marks)**

QUESTION 4

The University has offered you only **SIX** dairy cows to use in your research project with the topic below. The project is supposed to be completed within a period of three months. Read the topic below and answer the questions that follow:

“Effects of Dietary Supplementation with Three Graded Levels of Moringa Leaf Meal on Productive Performance and Milk Composition in Holstein Dairy Cows”

- (a) What would be the hypothesis for such a study? **(2 marks)**
 - (b) What would be its main or general objective? **(2 marks)**
 - (c) **Name and illustrate** the experimental design you think would be most appropriate for the study, including the **number of experimental units** that you believe would be scientifically reasonable **(18 marks)**
 - (d) What would be the **THREE** typical dependent variables in the study? **(3 marks)**
- (25 Marks)**

QUESTION 5

Based on your knowledge of how to write a research proposal, write comprehensively a typical **Materials and Methods** section of a research project with the following topic:

***"Melia azedarach* Leaf Meal as an Alternative Antibiotic for Broiler Chickens".**

(25 Marks)