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1ST SEM. 2018/2019

UNIVERSITY OF ESWATINI

FINAL EXAMINATION PAPER

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

COURSE CODE: ASC305

TITLE OF PAPER: RESEARCH METHODS

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS.

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GRANTED BY THE CHIEF INVIGILATOR.**

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QUESTION 1

Describe the following terms:

- a. Research (5 Marks)
 - b. Research design (5 Marks)
 - c. Experimental unit (5 Marks)
 - d. Population (5 Marks)
 - e. Sampling (5 Marks)
- (25 Marks)

QUESTION 2

Discuss the characteristics of a well-designed experiment. (25 Marks)

QUESTION 3

Write short notes on the following:

- a. Scientific method of doing research (10 Marks)
 - b. Choice of research area and sources of research topics (10 Marks)
 - c. Disadvantages of stratified random sampling. (5 Marks)
- (25 Marks)

QUESTION 4

Suppose that you have four (4) different diets which you want to compare. The diets are labelled as Diet A, Diet B, Diet C and Diet D. You are interested in how the diets affect milk production in dairy cows. You have sixteen (16) dairy cows, which are homogenous, available for the experiment.

- a. Which design is most appropriate to conduct the study? Explain your answer and further state the advantages and limitations of your design. (13 Marks)
 - b. Lay out the experimental design. (5 Marks)
 - c. Outline the different methods that you can use to assign the dairy cows to the four (4) treatment groups. (7 Marks)
- (25 Marks)

QUESTION 5

The types of research are classified into three broad categories. Discuss them. (25 Marks)