54

UNIVERSITY OF eSWATINI
1st SEM. 2019/2020
RE-SIT EXAMINATION PAPER

PROGRAMME: B.Sc. ANIMAL SCIENCE YEAR 3

                      B.Sc. ANIMAL SCIENCE (DAIRY) YEAR 3

COURSE CODE: ASC305

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

a) Distinguish between a population and a sample. (5 Marks)

b) Briefly discuss 4 reasons why researchers generally work with samples instead of entire populations. (20 Marks)

QUESTION 2

Write short notes on the following:

a) Unintentional bias (5 Marks)

b) Sampling frame (5 Marks)

c) Nonprobability sampling (5 Marks)

d) Experimental unit (5 Marks)

e) Convenience sampling (5 Marks)

QUESTION 3

Identify and discuss ethical considerations a researcher needs to adopt when conducting research. (25 Marks)

QUESTION 4

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

QUESTION 5

An animal nutrition researcher has four sheep fitted with rumen cannula and wants to test the rate of rumen degradation of protein for four different feeds.

a) What experimental design would you suggest in this situation? Justify your answer. (8 Marks)

b) State one advantage and three disadvantages of the design you chose. (8 Marks)

c) List three factors that are considered when choosing a sampling method. (6 Marks)

d) Name the three broad classifications of numbers in research. (3 Marks)