



**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAMME: BSC AGRIC. 4 (LWM)

COURSE CODE: LUM 410

TITLE OF PAPER: RESEARCH METHODS

TIME ALLOWED: TWO (2) HOURS

SPECIAL MATERIAL REQUIRED: NONE

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO
OTHER QUESTIONS.**

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GRANTED BY THE CHIEF INVIGILATOR**

SECTION I: COMPULSORY QUESTION**QUESTION 1**

Discuss in detail the methods to be used to collect data for research on the effect of a new irrigation system on the yield of sugarcane in a community irrigation scheme in the lowveld, highlighting the type of data to be collected, the research design to be used, and the analytical procedure to follow. (40 marks)

SECTION II: ANSWER TWO QUESTIONS FROM THIS SECTION**QUESTION 2**

A published scientific paper is useless unless it is “received” and “understood” by its intended “audience”. Discuss the validity of this statement highlighting the fundamental contents and characteristics of a scientific paper. (30 marks)

QUESTION 3

Discuss the threats to validity of data, illustrating how they bring about errors in data collected. (30 marks)

QUESTION 4

- (a) “Scientific communication is a *two-way process*” Discuss the validity of this statement. (10 marks)
- (b) A scientific paper should have a descriptive summary called *abstract* and an *introduction*, among other parts. Discuss the main contents of:
- (i) an abstract (10 marks) and
 - (ii) an introduction (10 marks)