



UNIVERSITY OF SWAZILAND  
SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME; BSc. AGRICULTURAL AND BIOSYSTEMS ENGINEERING YR 3

COURSE CODE:                    ABE 305

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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CHIEF INVIGILATOR

**QUESTION 1: COMPULSORY QUESTION**

- a) Discuss two purposes of a hypothesis. (10 marks)
- b) Discuss five questions that a researcher should ask herself/himself when identifying a research problem. (15 marks)
- c) Discuss five aspects that should be included in literature review. (15 marks)

**QUESTION 2**

- a) Discuss the difference between simple random sampling and stratified random sampling, indicating conditions under which each of the sampling methods can be used. (15 marks)
- b) Discuss five factors to be considered when designing a survey research. (15 marks)

**QUESTION 3**

- a) Discuss the conditions under which line graphs can be used to present results of a research, using examples to illustrate your answer. (15 marks)
- b) Discuss the conditions under which focus group discussion can be used to collect research data. (15 marks)

**QUESTION 4**

- a) Discuss four situations when research can be needed. (15 marks)
- b) Discuss what is meant by the statement that Research objectives should be "SMART". (15 marks)