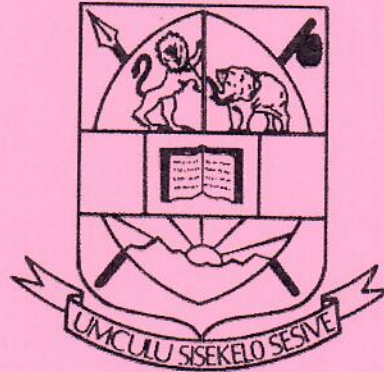


2<sup>ND</sup> SEM.2016/17

PAGE 1 OF 2



UNIVERSITY OF SWAZILAND  
FINAL 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

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

**QUESTION 1: COMPULSORY QUESTION**

- a) Describe five action verbs that can be used in specific research objectives. (10 marks)
- b) Discuss the difference between systematic random sampling and cluster random sampling, indicating conditions under which each of the sampling methods can be used. (20 marks)
- c) Discuss the difference between an independent variable and dependent variable, using examples to illustrate your answer. (10 marks)

**Total marks - 40**

**QUESTION 2**

- a) Discuss the difference between Pretest-Posttest Control-group design and Posttest-Only Control group design. (15 marks)
- b) Discuss five qualities of good research. (15marks)

**Total marks - 30**

**QUESTION 3**

- a) Discuss three common secondary data used in research. (15 marks)
- b) Discuss the difference between Completely Random Design and Randomised (Complete) Block Design, using examples to illustrate your answer. (15 marks)

**Total marks - 30**

**QUESTION 4**

- a) Describe five practices that should be avoided in research. (15 marks)
- b) Using examples, discuss the difference between directional hypothesis and non-directional hypothesis. (15 marks)

**Total marks - 30**