

89.

**UNIVERSITY OF SWAZILAND  
FINAL EXAMINATION PAPER MAY 2005**

**TITLE OF PAPER : RESEARCH METHODS IN GEOGRAPHY**

**COURSE NUMBER : GEP 323**

**TIME ALLOWED : THREE HOURS**

- INSTRUCTIONS :**
- 1. ANSWER THREE (3) QUESTIONS.**
  - 2. QUESTION ONE IS COMPULSORY.**
  - 3. ANSWER TWO (2) QUESTIONS FROM SECTION B.**
  - 4. WHERE APPROPRIATE, ILLUSTRATE YOUR ANSWER WITH EXAMPLES.**

**MARK ALLOCATION : QUESTION ONE IS WORTH FORTY (40) MARKS AND THE OTHER QUESTIONS THIRTY (30) MARKS EACH.**

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

**GEP 323 RESEARCH METHODS IN GEOGRAPHY****SECTION A: COMPULSORY QUESTION (40 MARKS)****QUESTION 1**

- a) Evaluate the following research design with respect to methods used and the control provided.

A researcher wanted to ascertain if homogeneous grouping improves learning in a first course in biology. The researcher designated one of two high schools in a small town to serve as the experimental school and the other, as the control. Both schools had about the same number of students in each of four sections of science. In the experimental school pupils were grouped homogeneously on the basis of Intelligent Quotient (IQ) and scores on the achievement tests in science. In the control school pupils were placed in sections at random. At the end of the year all pupils were given a standardized test in biology. Statistical tests showed the experimental group to be superior on the test. The researcher concluded that homogeneous grouping results in greater learning in biology. (12 marks)

- b) Distinguish the four main types of experimental (true) research designs and discuss the advantages and disadvantages of each. (28 marks)

**SECTION B: ANSWER TWO QUESTIONS****QUESTION 2**

Compare face-to-face interviews, telephone and self-administered questionnaires with respect to:

- (a) Response rates and sampling quality (12 marks)  
(b) Time and cost: and (8 marks)  
(c) Type – complexity and sensitivity of questions asked. (10 marks)

**QUESTION 3**

- a) Using examples, explain how you would go about conducting survey research on the Internet. (15 marks)
- b) Describe sources of measurement error in surveys attributable to the (i) interviewer and (ii) respondent. (15 marks)

QUESTION 4

- a) Compare validity and reliability with respect to the:
- i) Meaning of each concept
  - ii) Relative importance of each concept
  - iii) Extent to which one depends on the other.
- (10 marks)
- b) Using examples, explain how the pretest-post-test control group design adequately controls for each of the major threats to internal validity. (20 marks)

QUESTION 5

- a) Describe the purposes for which evaluation research is conducted. (6 marks)
- b) Using examples explain the differences between formative, diagnostic and summative evaluation. (24 marks)