

**UNIVERSITY OF SWAZILAND**

**FACULTY OF HEALTH SCIENCES**

**FINAL EXAMINATION**

**MAY, 2006**

**PROGRAMME : POST DIPLOMA CERTIFICATE IN MENTAL  
HEALTH NURSING**

**COURSE : NUR 333**

**TITLE OF PAPER : RESEARCH METHODS**

**DURATION : 3 HOURS**

**MARKS: : 100**

**INSTRUCTIONS**

- 1 ANSWER ALL QUESTIONS**
- 2 WRITE EACH QUESTION ON A SEPARATE SHEET OF PAPER**

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

**QUESTION ONE**

In order to be of use to the researcher, a data-collecting instrument should comprise certain basic characteristics.

- a) Mention four (4) of these basic characteristics..... (4 marks).
  
  - b) Briefly describe factors that influence the reliability of a measuring instrument..... (8 marks).
  
  - c) Internal validity concerns the soundness of an investigation. In particular studies of cause and effect need to be internally valid.  
To demonstrate causality, what three conditions should be met?  
.....(3 marks)
  
  - d) Threats to internal validity may be removed or reduced by controlling for confounding or extraneous variables in several ways. Using the following ways of control, describe how each one of them can be applied for countering threats to internal validity in a study:
    - I. Inclusion of a control group.....(2 marks).
  
    - II. Appropriate sampling methods.....(2 marks).
  
    - III. Appropriate assignment procedures.....(2 marks).
  
    - IV. Use of valid and reliable measuring instrument..... (2 marks).
  
    - V. Removal of other expected extraneous variables..... (2 marks).
- Total.....25 marks

## QUESTION TWO

As a researcher, you are requested by the mental health institution administrators to conduct a study on the “prevalence of alcohol use among rural 6<sup>th</sup> and 7<sup>th</sup> grade children”. You know that the children as participants of this study have a right to know what will happen to them and to sign a consent form for voluntary participation.

Discuss how you would address the concept of informed consent for your research participants, 6<sup>th</sup> and 7<sup>th</sup> grade children.

Total..... 25 marks

## QUESTION THREE

The purpose of sampling is to enable the researcher to obtain the desired information in a reliable manner without involving the whole population.

A Define the following terminologies in sampling:

1. Population.....(2 marks)
2. Stratum.....(2 marks)
3. Convenience sampling.....(2 marks)
4. Sample.....(2 marks)
5. Sampling Frame.....(2 marks)

B. What is the rationale for using samples?.....(2 marks)

Give one reason why criteria for inclusion in the sample must be specified?..... (1 mark)

C. What five (5) important factors you would consider in choosing a sample size for your proposal?..... (5marks).

D. As a researcher, you would like to study the effects of music on mentally disturbed persons.

- i. What would be your target population?..... (1 mark)
- ii. What would be your accessible population?..... (1 mark)

E. Cross match the sample type with the design that commonly apply sample types:  
(5 marks)

Sample type	Design
1 Purposive	Quantitative
2 Convenience	Quasi experimental
3 Simple random	Qualitative
4 Systematic random	Experimental
5 Quota	No-experimental

Marks .....(5marks)

Question Four

- a) Outline the advantages that you would use as criteria for choosing either an interview or questionnaire for data collection in your proposal. Give five (5) advantages for each technique... (10 marks).
- b) Mention the three (3) most frequently used research techniques for data collection..... (3 marks).
- c) State two (2) classifications of data-collection interviews (2 marks).
- d) Give two (2) facts you would consider to include or implement under the following headings, if you were to use interviews for data collection in your proposal:
  - 1. Interview questions.....(2 marks)
  - 2. Recording interviews.....(2 marks)
  - 3. Interviewer training.....(2 marks)
  - 4. Focus group interview.....(2 marks)
  - 5. Time and setting for interviews.....(2 marks)

Total..... 25 marks