

**UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES**

**(FIRST SEMESTER)
FINAL EXAMINATION PAPER
DECEMBER 2011**

COURSE CODE: HSC 403

COURSE TITLE: HEALTH SYSTEMS RESEARCH

TIME ALLOWED: 2 HOURS

TOTAL MARKS: 75

No of pages including cover page: 7

INSTRUCTIONS:

- 1) THIS PAPER CONTAINS THREE QUESTIONS.**
- 2) ANSWER ALL THREE QUESTIONS**
- 3) EACH QUESTION IS TO BE ANSWERED ON A SEPARATE SHEET OF PAPER**

QUESTION 1 A

MULTIPLY CHOICE QUESTIONS

IN YOUR ANSWER SHEET WRITE E.G. 1. C

1. All the following are characteristics of a research study EXCEPT;

- a. Problem statement
- b. Systematic
- c. Builds on existing positive data
- d. Public activity

2. All the following are features of experimental studies EXCEPT;

- a. Manipulation of an independent variable causes changes in the dependent variable
- b. Manipulation of dependant variable causes changes in independent variable
- c. Manipulation of control group causes changes in study group
- d. Manipulation of study group causes changes in control group

3. A biased sample;

- a. increases external validity
- b. limits external validity
- c. limits internal validity
- d. increases internal validity

4. A probability sample refers to all EXCEPT;

- a. Able to reduce bias
- b. Estimate error
- c. Able to infer statistics as much as possible
- d. cannot be generalized

5. All EXCEPT one of the following are criterion for analyzing a research problem;

- a. flexibility
- b. feasibility
- c. subject availability
- d. motivation and interest

- 6. Which of the following is a step in developing and refining a research problem?**
- a. Selecting a topic
 - b. Narrowing the topic
 - c. Evaluating research problem
 - d. All the above
- 7. Which of the following is a characteristic of a quantitative method?**
- a. Text based
 - b. Can be valid and reliable
 - c. Unstructured or semi – structured
 - d. More in depth information
- 8. Level three (3) of research questions focuses on;**
- a. determining the relationship between variables
 - b. describes the variables
 - c. determining the reasons for relationship or associations of the variables
 - d. none of the above
- 9. The interpretative phase of the research process can be termed as;**
- a. the documentation period
 - b. the conceptual period
 - c. the analysis period
 - d. the communication period
- 10. A sampling error is referred to as;**
- a. sample statistic
 - b. sample bias
 - c. sample precision
 - d. difference between two samples

QUESTION 1 B.

TRUE OR FALSE QUESTIONS

IN YOUR ANSWER SHEET WRITE T OR F FOR THE CORRECT ANSWER

11. A non probability sample is economical and convenient
T. F.
12. A cohort are people born around the same time T. F.
13. An operational definition is an abstract concept which cannot be measured T.F.
14. A research design refers to the practices and techniques of the study T. F.
15. The first rule of thumb in writing a research problem or topic is to write an active statement T.F.

QUESTION 1 C

**MATCH THE FOLLOWING STATEMENTS
IN YOUR ANSWER SHEET**

WRITE e.g. 16. E

Ref	A		B
16	Ordinal variables	A	Highly structured
17	Stratified sampling	B	Using more than one method or technique for conducting study
18	Bracketing	C	These are grouped variables that are ordered or ranked in increasing or decreasing order
19	Systematic sampling	D	Results attributed to independent variable than confounding factors
20	Triangulation	E	More flexible
21	Close ended questions	F	Random sampling of a pre-determined size which is obtained from each group
22	Internal validity	G	These are variables in which numbers can only have full values
23	Reliability	H	Individuals are chosen at regular intervals
24	Open ended questions	I	Removing all pre-conceived ideas about the population studied
25	Discrete variables	J	Ability to attain same results using the same procedures

[25 MARKS]

QUESTION 2

A. State five (5) steps you would take to ensure quality data

[5 Marks]

B. Explain ten (10) aspects of research methodology that can be evaluated during pre-testing

[10 marks]

C. Suppose you want to conduct a study among nursing students with respect to attitudes towards clinical practice and your study population would be all nursing students from year 1 – 5 at the Faculty of Health Sciences.

C.1. What would be your sampling frame for the respondents?

[2 marks]

C.2. Having identified your sampling frame; explain how you would conduct a systematic random sampling for this study in a population of 1200 students where the sample size at 100.

[8 marks]

[25 MARKS]

QUESTION 3

A. Distinguish between a population and a sample size

[2 marks]

B. Discuss the steps necessary in construction of a questionnaire under the following topics – Content (4 points) and formulating questions (6 points)

[10 marks]

C. A nurse wanted to determine if the number of T.B dropouts would reduce in KaLomahasha community after a campaign compared to KaShewula community among which a campaign was not conducted.

C1. State the research design she would use in this study and why

[2 mark]

C2. Explain the procedure she might have to follow in conducting this study

[8 marks]

C3. State the null hypothesis of this study

[2 marks]

C4 If the number of TB dropouts in Lomahasha community decreased what would be your conclusion of the null hypothesis

[1 mark]

[25 MARKS]

TOTAL [75 MARKS]