#### **UNIVERSITY OF SWAZILAND**

## **FACULTY OF HEALTH SCIENCES**

### **FINAL EXAMINATION**

DECEMBER, 2015

COURSE : HSC 403

TITLE OF PAPER : HEALTH SYSTEMS RESEARCH

DURATION : 2 HOURS

MARKS: 75

### **INSTRUCTIONS:**

- 1. DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR
- 2. ANSWER ALL THREE (3) QUESTIONS
- 3. EACH QUESTION IS TO BE ANSWERED ON A SEPARATE SHEET OF PAPER

### **MULTIPLE CHOICE QUESTIONS**

# For the following multiple choice questions write the number and the corresponding letter of the correct response, for example; 16 - D

- 1. All the following are characteristics for consideration of a population when choosing a data collecting technique EXCEPT;
- A. Educational background
- B. Mapping
- C. Age structure
- D. Socio-economic status
- 2. Which statement best describes qualitative research?
- A. Studies are conducted in natural settings.
- B. Data are collected from a large number of subjects.
- C. Data collected tend to be numeric.
- D. The research design is objective.
- 3. Critique of a research study always include all EXCEPT;
- A. Determining its strengths and weaknesses
- B. Researching similar studies
- C. Using data more than 10 years
- D. Explaining your own personal opinions
- 4. For which of the following research questions would qualitative methods be most appropriate?
- A. Which pain medications decrease the need for sleep medication in elderly patients?
- B. What is the meaning of health for People Living with HIV?
- C. Under what conditions does a decubitus ulcer heal most quickly?
- D. How does frequency of medication administration impact the degree of pain experienced following knee replacement surgery?

- 5. Which of the following phrases would be found in a report of a quantitative study?
- A. "A convenience sample was chosen?"
- B. "The phenomenon studied was?"
- C. "Data were analyzed and interpreted?"
- D. "Researchers sought to explore the meaning of the hospital experience?
- 6. If you decide to study the relationship of eating breakfast and performance in class, which would be the independent variable:
- A. Student's characteristics
- B. Meal patterns
- C. Performance in class
- D. Eating breakfast
- 7. The sampling method where each member of the study population has an equal chance to be selected as a subject is called:
- A. Purposive sampling
- B Selective sampling
- C Random sampling
- D. Convenient sampling

Situation: Backache after duty hours has become common among staff nurse assigned in the stroke unit. A group of nurses decided to make a retrospective study

- 8. A retrospective study would involve a nurse who suffered from backache:
- A. Any time before or after the start of the study
- B. During the period of the study
- C. Previous to the study

- D. No particular period9. Fifty nurses consented to be subjects of the study, 25 nurses with backache and 25 nurses without backache. Which group is the control?
- A. Group without backache
- B. Group without lifting activity
- C. No group
- D. Group with backache
- 10. A researcher wants to determine some of the problems that are experienced by diabetic clients when using insulin injection. The investigator went into a clinic where he personally knows several diabetic clients who have problems with Insulin injection. The type of sampling done by the investigator is called:
- A. Probability sampling
- B. Purposive sampling
- C. Snowballing sampling
- D. Incidental sampling
- 11. Which of the following might prevent the conduct of a research study?
- A. Excessive risk to research participants
- B. Identified problem understudy is covered in literature
- C. Costs for conducting the study is low
- D. The problem is based on untested nursing theories
- 12. What is information that an investigator collects from the participants;
- A. Hypothesis
- B. Data
- C. Variable
- D. Concept

- 13. The primary purpose for conducting literature review is to;
- A. Organise materials related to the problem of interest
- B. Generate broad background and understanding of information related to the research problem of interest
- C. Select topics related to the problem of interest
- D. Gather general knowledge
- 14. In a study of patients on Antiretroviral therapy the researcher used real names of the participants on the field notes. Which ethical concept was violated?
  - A. Right to self determination
  - B. Right to privacy
  - C. Right to confidentiality
  - D. Right to fair treatment
- 15 Level three (3) of the research questions focus on;
  - A. Determining the relationship between variables
  - B. Describes variables
  - C. Determines the reasons for the association or relationships of variables
  - **D.** None of the above

## TRUE OR FALSE

For the following statements write "T"	if the statement is tr	ue or "F" if the s	tatement is
false. Eg 1 - T			

16. Ethnography is a quantitative studyT F
17. Independent is the variable that is predicted to change T F
18. Qualitative study are text based T F
19. A hypothesis that is assumed by the researcher is a null hypothesis T F
20. A quasi experimental study is a relational study used to substitute an
experimental studyT F
21. Correlational studies determine relationshipsT F
22. Phenomenological studies do not seek to determine lived experiencesT F
23. Convenience sampling can be carried out for both qualitative and quantitative studiesT F
24. Highly flexible research questions are used in qualitative studiesT F
25. Objectives are not derived from research problemT F

# TOTAL = 25 MARKS

# QUESTION 2

Differentiate between these concepts:

Differentiate between these concepts.	
2.1 Correlational and comparative studies	(4)
2.2 Validity and reliability	(4)
2.3 Sample statistic and sample parameter	(4)
2.4 State five (5) characteristics of a simple descriptive study	(5)
2.5 Discuss how you would deal with threat to validity in a study	(6)
2.6 When is purposive sampling used?	(2)

TOTAL = 25 MARKS

## **QUESTION 3**

3.1 What aspects of research methodology can be evaluated during pre-testing? State five (5) aspects	
	(5)
3.2 Explain four (4) disadvantages of the observation technique of data gathering	(4)
Statement: What are effects of mixed feeding on babies less than 6 months?	>
3.3 State a directional hypothesis and purpose for the above mentioned statemen	
3.4 Determine the types of variables for the following	(4)
<ul> <li>A. A variable that is manipulated in the study</li> <li>B. A variable that is measured by kilometres</li> <li>C. A variable that is ordered or ranked</li> <li>D. A variable that may influence findings</li> <li>E. A variable in which you are assign a name and restrict according to the meaning of that particular thing</li> </ul>	(6)
Statement: There is poor utilization of family planning services among students of the Faculty of Health Sciences, Mbabane	(2)
3.5 Refine the topic above to a be researchable	
3.6 Determine what questions you would ask to determine feasibility of the study mention four (4) questions	(4)

TOTAL - 25 MARKS

**GRAND TOTAL - 75 MARKS**