## **UNIVERSITY OF SWAZILAND**

## **FACULTY OF HEALTH SCIENCES**

#### FINAL EXAM

#### **DECEMBER 2016**

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**
- 4. NUMBER OF PAGES 7

#### **MULTIPLE CHOICE QUESTIONS**

Choose the most appropriated answer as follows 29 - C

- 1. A research team measured ambient noise levels in patient rooms. They also observed patient stress levels and the duration of visits by family and friends. The team found that high ambient noise was associated with high patient stress and short family visits. This is an example of which type of study?
- A. Correlational
- B. Retrospective
- C. Experimental
- D. Ethnographic
- 2. When measuring or evaluating results, various methodologies can be used. Which of the following describes the use of multiple methods to strengthen the validity and reliability of a research project?
- A. Triangulation
- B. Correlation
- C. Qualitative research
- D. Applied research
- 3. The research team is starting to create hypotheses for their research study. What MUST the team include in the hypotheses to properly evaluate their design features?
- A. Research design and methodology
- B. Baseline data
- C. Prediction of expected relationships
- D. Primary focus of the research
- 4. A researcher wants to make sure that a new observation tool they developed has a high degree of reliability. How should the researcher ensure the observation tool is reliable?
- A. Submit the tool to the Institutional Review Board (IRB).
- B. Test the tool in a variety of settings both within and outside the hospital.
- C. Ask a team of expert researchers to validate that the tool is measuring what it's supposed to measure.
- D. Have several researchers use the tool within a specified time frame and place, with the same subjects and see if similar results are achieved.
- 5. A project team wants to make sure that a patient satisfaction tool they developed has a high degree of external validity. What does external validity mean?

- A. The tool is transferable to a variety of healthcare settings.
- B. The tool generates results that are significant to p < 05
- C. The tool measures what it is supposed to measure.
- D. The tool generalizes information to theoretical constructs.

## 6. When might a researcher not carry out a full review of the literature at the start of a study?

- A. In the case of some qualitative research designs so that the researcher is not influenced or biased by the ideas that already exist.
- B. To save time.
- C. To save money.
- D. If the literature is old and will not provide a firm basis for the study.

#### 7. Which one of the following is not a qualitative approach to research?

- A. Grounded Theory
- B. Philanthropy
- C Ethnography
- D. Phenomenology

#### 8. Which of the following is not a quantitative research design?

- A. Statistics
- B. Quasi-experiment
- C. Survey
- D. Randomised Control Trial

#### 9. Emic perspective' refers to:

- A. Etic perspective
- B. Insider's view
- C. Outsider's view
- D. Holistic view

#### 10. Which is a characteristic of qualitative research methods?

- A. Random sampling
- B. Introduction of a treatment
- C. Naturalistic inquiry

- D. Use of a control group
- 11. Ethics in research has always been an issue when it comes to the identity of the respondents. When the topics of research are very sensitive, which of the following rights of individual participants must be ensured when the researcher cannot link the information given by the respondent from the source of the information?
  - A. Confidentiality
  - B. Anonymity
  - C. Virility
  - D. Beneficence
- 12. "Knowledge and practices of prevention of needle prick injuries of Staff Nurses in a certain private hospital in Manzini "Based on the research title which of the following will be the general objective?
  - A. This study aims to determine the level of knowledge and practice of prevention of needle prick injuries of Staff Nurses in a certain private hospital.
  - B. This study aims to determine if there is a significant relationship between levels of knowledge regarding prevention of needle prick injuries and sociodemographic of Staff Nurses in a certain private hospital.
  - C. The study aims to determine the levels of knowledge regarding prevention of needle prick injuries of Staff Nurses in a certain private hospital.
  - This study aims to determine the sociodemographic of Staff Nurses in a certain private hospital

## 13. All of these are specific objectives EXCEPT:

- A. This study is for nursing researchers in the future.
- B. This study aims to determine if there is a significant relationship between levels of knowledge regarding prevention of needle prick injuries and socio-demographic of Staff Nurses in a certain private hospital.
- C. The study aims to determine the levels of knowledge regarding prevention of needle prick injuries of Staff Nurses in a certain private hospital.
- D. This study aims to determine the socio demographic of Staff Nurses in a certain private hospital.

## 14. Which of the following is not a null hypothesis?

- A. There is no relationship between the level of knowledge and practice of prevention of needle prick injuries
- B. There is no relationship between the practice of prevention of needle prick injuries and sociodemographic profile of staff nurses
- C. There is a significant relationship between the knowledge and sociodemographic profile of staff nurses
- D. All the above

15.	In the	literatur	e report	of a stu	dy on qւ	uality o	f life, t	he res	searcher	describ	es
two	previ	ious inve	stigation	ıs sugge	esting th	nat spir	ituality	y is re	lated to	quality o	ρf
life	. This	informat	ion sugg	ests the	curren	t study	is sig	nifica	nt becau	se it:	

- A. influences theology.
- B. Builds on previous research.
- C. Challenges existing theory.
- D. Addresses multidisciplinary concerns.
- 16. In a research proposal, the investigator notes that written permission has been obtained from three local hospitals to access patients for the proposed study. This is an example of what aspect of a study?
  - A. Reliability
  - B. Methodology
  - C. Ethics
  - D. Feasibility

## 17. The dependent variable is:

- A. A stimulus or activity that is varied by the researcher.
- B. The quality, property, or characteristic identified in the problem
- C. A characteristic or element of the human subjects involved in the study
- D. The response or outcome that the researcher wants to understand
- 18. Identify the independent variable in the following hypothesis:" Cancer patients who receive music therapy complain less frequently of pain and require less pain medication than cancer patients not receiving music therapy."
  - A. Relaxation therapy
  - B. Complaints of pain
  - C. Pain medication use
  - D. Music therapy

- 19. The statement below is an example of which of the following? "In this study, pain is reflected as a score between 0 and 10 on the Post-operative Pain Rating Scale."
  - A. Problem statement
  - B. Conceptual definition
  - C. Associative hypothesis
  - D. Operational definition

## 20. Which of the following represents a primary source?

- A. The results of a computer search related to the primary topic of interest
- B. A report of a study written by the researcher who did the study
- C. A published summary of the relevant research in a primary care area
- D. A thesaurus that identifies key words to use in a computer search

# 21. Jabulile has a weight of 65 kg. What type of variable does her weight signify?

- A. A continuous variable
- B. A discrete variable
- C. A nominal variable
- D. An interval variable

#### 22. A study that determines the efficacy of measles vaccine is referred to;

- A. Epidemiological research
- B. Health systems research
- C. Clinical research
- D. Bio-medical research

The following statements relate to question 23 – 25

#### State whether the following is an independent or dependant variable

- 23. Length of hospital stay
- 24. Relaxation therapy
- 25. Low back massage

#### **QUESTION 2**

- 2.1. State what particular design is reflected in the following research purposes
- a. The purpose of the study was to describe health-promoting lifestyle behaviour among a sample of 187 Swazi women.
- b. The purpose of the study was to examine the relationship of two factors-self-efficacy and social support to self-management in individuals with epilepsy.
- c. The purpose of the study was to examine the effects of ovarian hormone cessation, hormone supplementation, and dietary fibre composition on body weight, appetite and intestinal transit. (3 marks)
- 2.2. Research title: "Knowledge and practices related to drug abuse among young people in one of the communities in Manzini"

Based on the research title write a hypothetical problem statement for the topic

(6 marks)

- a. Describe the significance of the study
- (4 marks)
- b. Which research design would you choose for the study and why?
- (3 marks)
- 2.3. How would an external examiner determine a good literature review of study X?

(4 marks)

- 2.4. State the type of sampling used in the following statements
- (5 marks)
- a. Five hundred nurses were randomly selected from a list of all registered nurses in Manzini region
- A sample of 10 PLWA participants was obtained by asking 3 participants to identify friends living with HIV to participate in the study
- c. The researcher obtained a list of all certified registered nurses, picked a random starting point, then select every twenty-fifth individual to participate in the study.
- d. Subjects with a history of having asthma were recruited to provide relevant information to develop a theory of asthma management
- e. Gender was used to ensure equal representation of males and females in a sample of 100 individuals

TOTAL - 25 marks

#### **QUESTION 3**

- 3.1. How would you encourage discussion when facilitating in a Focus Group Discussion? (4 marks)
- 3.2. A researcher plans to study the effects of health education on the level of participation of two communities on male circumcision campaign. Explain how the researcher would conduct the study.

  (4 marks)
- 3.3. What type of study design was used by the researcher and explain the reason for your answer (2 marks)
- 3.4. Using experimental studies is a challenge for human subjects. Explain this argument. (5 marks)
- 3.5. Discuss the advantages and disadvantages of using available information in data collection (5 marks)
- 3.6 How would you ensure quality checks in research data? (3 marks)
- 3.7. When should a researcher use interviews with low degree of flexibility? (2 marks)

TOTAL - 25 marks

**GRAND TOTAL - 75 MARKS**