

UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

FINAL EXAMINATION

DECEMBER 2012

COURSE CODE: HSC 403

COURSE TITLE: HEALTH SYSTEMS RESEARCH

TIME ALLOWED: 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**

QUESTION 1

MULTIPLE CHOICE QUESTIONS

INSTRUCTIONS:

In your answer sheet, write the alphabet corresponding to the appropriate answer. For example: 16 = A.

1. One of the following identifies the specific aim or goal of a study based on the identified problem?

- A. Purpose
- B. Literature review
- C. Significance
- D. Assumptions

2. A crucial resource for researchers conducting a literature review would be:

- A. A secondary source.
- B. An academic library.
- C. Lay literature
- D. A research mentor

3. When the total population appears to be very large, the researcher may decide to get a representative sample and make the research findings still valid and acceptable.

Question: This type of sampling uses the technique whereby the population is divided into areas or sections and then taking random sample from each section.

- A. Systematic sampling
- B. Stratified sampling
- C. Cluster sampling

D. Purposive sampling

4. A researcher is interested in studying stress and coping among caregivers of elderly stroke victims. The researcher designs a study where data collection takes place in the caregiver's home. This would be an example of which type of research setting?

- A. Natural field
- B. Highly controlled, field
- C. Partially controlled, laboratory
- D. Highly controlled, laboratory

5. A 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

6. A study reflected pain as a score between 0 – 10 on the Post-operative Pain Rating Scale. This statement is an example of;

- A. Problem statement
- B. Conceptual definition
- C. Associative hypothesis
- D. Operational definition

7. A careful appraisal of the strengths and weaknesses of the study is:

- A. Research proposal
- B. Action Research
- C. Research critique
- D. Evidence-based practice

8. A pharmacology trial concluded that a new Anti – Retroviral drug reduced side effects when in reality it did not; this is an example of:

- A. Type I error
- B. Type II error
- C. Type III error
- D. Type IV error

9. Which of the following is NOT a method of quantitative research?

- A. Grounded Theory Research
- B. Correlational Research
- C. Quasi-Experimental Research
- D. Experimental Research

10. Which of the following is a qualitative research design where lived experiences of individuals are examined in their "life-world"?

- A. Ethnography
- B. Ethology
- C. Phenomenology
- D. Grounded theory

11. Phenomenological study involves all the following features, EXCEPT

- A. Bracket out
- B. Intuition
- C. Analysis
- D. Manipulation

12. Characteristics of qualitative research design are;

- A. Flexibility
- B. Use of mixed methodologies

- C. Ongoing analysis to formulate subsequent strategies
- D. All of the above

13. The following are factors that determine feasibility of a study EXCEPT;

- A. Time required
- B. Costs
- C. Priority problem
- D. Administrative support needed

14. Literature review is;

- A. Comparing and contrasting arguments, themes and methodologies with the research under study
- B. Annotated bibliography of previous studies
- C. Summary of sources from previous studies listed one by one
- D. A summary of findings from previous studies

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

Question: A retrospective study would involve nurses 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 period

(15 marks)

TRUE AND FALSE QUESTIONS

THE FOLLOWING STATEMENTS ARE EITHER TRUE OR FALSE IN YOUR ANSWER SHEET PLEASE WRITE T IF THE STATEMENT IS TRUE OR WRITE F IF THE STATEMENT IS FALSE.

16. Simple random sampling – Is the type of sampling where, data are collected from anyone available e.g. those who are present in the emergency room at one time or another

.....T.F.

17 In an experimental study a researcher controls the independent variable but subjects cannot be randomly assigned to treatment conditions

.....T.F.

18. If during data collection, a participant refuses to participate despite previous consent you should proceed as previous consent has been obtained

.....T.F.

19. Level three (3) category of research question starts with “Why”.....

.....T.F.

20. Sampling does not affect validity of a study.....T.F.

(5 marks)

INSTRUCTIONS:

MATCH EACH OF THE FOLLOWING CONCEPTS WITH CORRESPONDING STATEMENTS E.G. 21. A

NO:	CONCEPT	ALPHABET	MATCHING STATEMENT
21	Hawthorne effect	A	Information about what a person already knows or has learned.
22	Opinion Surveys	B	Interference by a third variable so as to distort the association between two variables
23	Confounding factor	C	Organizing data into categories that cannot be rank ordered such as gender
24	Nominal variable	D	Human subjects change their behaviour because they are being studied
25	Knowledge Tests	E	An assessment of how a person or group feels about a particular issue

(5 marks)

TOTAL = [25 MARKS]

QUESTION 2

A. Situation:

It has been noted that more women are dying of cervical cancer in the Lubombo region which has a high prevalence of HIV. You want to conduct a study to determine the possible causes of this observation.

(i) State the most appropriate research topic for the above mentioned study

(2 marks)

(ii) Develop a null hypothesis from your topic

(2 marks)

(iii) Mention the most appropriate study type which could be suitable for the study

(1 mark)

(iv) If you were to write a research problem what areas would you cover for this study? Mention five issues

(5 marks)

B. A student who was interested in conducting a prospective or longitudinal study to determine the effects of diabetes to children born from diabetic mothers dropped it because of challenges;

Give five (5) challenges which the student might have experienced;

(5 marks)

C. Differentiate between structured and unstructured questionnaires.

State three (3) aspects of each

(6 marks)

D. Change the following statements into researchable questions.

(i). Age has an effect on convalescence

(2 marks)

(ii). Missing clinical practicals has an effect on nursing care

(2 marks)

TOTAL [25 MARKS]

QUESTION 3

A. Explain five areas in which a research design focuses on;

(5 marks)

B. After conducting a focus group discussion (FGD) on the perspectives of young people about drug and alcohol abuse; you are tasked to analyze the content of the group discussion by undertaking five (5) activities. Give details of the (5) essential activities

(5 marks)

C. A final year nursing student decides to engage in a study to perceptions of mothers on male circumcision among newborn babies. After reviewing literature she notes that little or no information is documented on the area of concern. She decides to use the descriptive approach.

Explain the descriptive approach she decides to use.

(5 marks)

D. You are tasked to review records or conduct desk review of Populations Most at Risk of HIV.

Explain what would be advantages (2) of the approach and what would be the challenges (3)

(5 marks)

E. At the end of your proposal you are required to attach a work plan and budget. Explain the important five (5) components needed to be stipulated in the budget and why.

(5 marks)

TOTAL (25 marks)

GRAND TOTAL = 75 MARKS