



“Investing in Africa’s Future”

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES [CHANS]

DEPARTMENT OF PUBLIC HEALTH AND NURSING [DPHN]

NSHS 204: RESEARCH METHODS AND ETHICS IN HEALTH CARE

END OF SECOND SEMESTER EXAMINATIONS

APRIL/MAY 2025

LECTURER: MR. E. CHIKAKA

DURATION: 3 HOURS

INSTRUCTIONS

ANSWER **ALL** QUESTIONS IN SECTION A AND ANY **THREE (3)** FROM SECTION B

THE MARK ALLOCATION FOR EACH QUESTION IS INDICATED AT THE END OF THE QUESTION

CREDIT WILL BE GIVEN FOR LOGICAL, SYSTEMATIC AND NEAT PRESENTATION

EACH QUESTION SHOULD START ON A FRESH PAGE

SECTION A ANSWER ALL QUESTIONS

[40 marks]

QUESTION 1

- a. Define research and explain its role in healthcare decision-making. [4]
- b. Identify and describe the main steps of the research process. [6]

QUESTION 2

- a. Differentiate between **quantitative and qualitative research**, providing an example of each in healthcare. [4]
- b. Explain the **importance of a literature review** in health research. [6]

QUESTION 3

Define research ethics and explain the three fundamental principles of the Belmont Report. [10]

QUESTION 4

Discuss the role of **Institutional Review Boards (IRBs) or Ethics Review Committees (ERCs)** in health research. [10]

SECTION B ANSWER ANY THREE (3) QUESTIONS

[60 marks]

QUESTION 5

- a. A hospital administrator wants to improve patient wait times in the outpatient department.
 - i. Formulate a research problem statement for this study. [5]
 - ii. Propose an appropriate research design and justify your choice. [5]
 - iii. Identify two ethical considerations that must be addressed in this study. [5]
- b. List and explain any five (5) methods of analysing data that you have learnt [5]

QUESTION 6

A hospital administrator wants to evaluate patient satisfaction with outpatient services.

- i. Design a data collection strategy using both qualitative and quantitative approaches. [5]
- ii. Explain how a survey questionnaire can be constructed to collect reliable data. [5]

- iii. Discuss the role of statistical software (such as SPSS, STATA, EXCEL) in analyzing the collected data. [5]
- iv. Discuss two statistical tests commonly used in healthcare research and their applications. [5]

QUESTION 7

- a. Research ethics play a crucial role in healthcare management studies.
 - i. Discuss the principles of research ethics and how they apply to management research. [5]
 - ii. Explain the importance of confidentiality and data protection in health services research. [5]
- b. Ethical issues may arise at any point in the research process. Reflecting on the principles of ethics in health research, make a list of ethical issues that you think should be considered at each step in the eight-step research process model. [10]

QUESTION 8

- a. A researcher is investigating the effects of lifestyle factors (diet, exercise, and smoking) on hypertension among adults in Zimbabwe.
 - i. Identify the **independent and dependent variables** in this study. [5]
 - ii. Which **sampling technique** would be most suitable for selecting participants? Justify your choice. [5]
 - iii. Explain one **statistical method** that could be used to analyze the data. [5]
- b. “A researcher has to work as a judge and derive the truth and not as a lawyer who is only eager to prove his case in favour of his plaintiff.” Discuss the statement pointing out the objectives of the research. [5]