



“Investing in Africa’s Future”

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

DEPARTMENT OF PUBLIC HEALTH AND NURSING

NSHS 204: RESEARCH METHODS and ethics

END OF SECOND SEMESTER EXAMINATIONS

APRIL/MAY 2026

LECTURER: MR. E. CHIKAKA

DURATION: 3 HOURS

INSTRUCTIONS

ANSWER **ALL** QUESTIONS FROM 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

SECTION A: (40 MARKS) ANSWER ALL QUESTIONS

QUESTION 1

- a. Define research and outline four characteristics of good research. [4]
- b. State the purposes of research in health. [4]
- a. Differentiate between population and sample in research. Provide an example. [2]

QUESTION 2

- a. List and briefly describe the main steps of the scientific method used in research. [4]
- b. Differentiate between basic research and applied research, giving one example of each. [4]
- c. State and explain two major types of data used in quantitative research. [2]

QUESTION 3

- a. Identify any four types of quantitative research designs and briefly describe their purpose. [4]
- b. Define literature review. [2]
- c. Explain the purposes of conducting a literature review. [4]

QUESTION 4

- a. Explain the ethical principles guiding responsible research conduct. [6]
- b. Briefly describe two qualitative research methods commonly used in social science research. [4]

SECTION B: ANSWER ANY 3 QUESTIONS (60 MARKS)

QUESTION 5

- a. Discuss in detail the key differences between qualitative and quantitative research designs. [10]
- b. Describe the triangulation design in mixed methods research and its importance. [10]

QUESTION 6

- a. Explain the steps involved in reviewing literature for a research study. [10]
- b. Discuss the ethics of writing and citation of sources in research reporting. [6]
- c. Explain the consequences of plagiarism and data falsification in research. [4]

QUESTION 7

- a. Discuss five probability and non-probability sampling techniques, indicating one advantage of each. [10]
- b. Explain key considerations in determining sample size in a quantitative study. [4]
- c. Outline the major methods of data collection in qualitative research and discuss their advantages. [6]

QUESTION 8

- a. Explain how measures of central tendency and variability are used to summarize data. [10]
- b. Discuss the use and interpretation of hypothesis testing, confidence intervals, and p-values in statistical analysis. [10]

QUESTION 9

- a. Outline and explain the major components of a research proposal (Chapters 1–3). [10]
- b. Discuss the key elements of a research report, distinguishing between qualitative and quantitative formats. [10]