AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT
BSC HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT
END OF JANUARY-APRIL 2023 SEMESTER EXAMINATIONS

UNIT CODE: HMD 221

UNIT NAME: Introduction to Research Methods

DATE: Wednesday 12th April 2023
TIME: TWO HOURS   START: 4:15 PM-6:15 PM

INSTRUCTIONS:

1. ATTEMPT **ALL** QUESTIONS IN SECTION A AND ANY **TWO** QUESTIONS IN SECTION B.
2. Do not write on the question paper

SECTION A: SHORT ANSWER QUESTIONS. 6 QUESTIONS. ANSWER ALL. TOTAL 30 MARKS

1. Below are a number of terms we have studied. Define each with a sentence or two. Each definition is worth 0.5 point.   (5Marks)

    i.   Internal validity
    ii. External validity
    iii. Target population
    iv. Negative correlation
    v.   Scientific method
    vi. Research
    vii. Research methods
    viii. Generalizability
    ix. parsimonious
    x.   probabilistic

2. Distinguish the following terms as used in research methods: descriptive, relational and causal   (6 marks)
3. Differentiate between the following terms as used in research methods.   (5 marks)
    i.   Cross-sectional versus longitudinal
    ii. Non-experimental versus non-experimental
    iii. Attribute versus variable
    iv. Independent versus dependent variable
    v.   Correlational versus causal
4. Compare and contrast non-probability and probability sampling, give 3 statements for each.   .
   .   (6marks)
5. With the help of diagram explain the terms deductive and inductive as used in research methods.   .
   .   (6Marks)
6. Explain why studies with good internal validity often have poor external validity? Give an example of a situation where enhancing internal validity might impair external validity   (3marks)

SECTION B: LONG ANSWER QUESTIONS. 3 QUESTIONS. ANSWER ANY TWO. TOTAL 40 MARKS

7. A health system researcher is interested in the relationship between salaries and motivation. She states the following hypothesis in the description of her study:

   Health workers who earn a higher salary are high performers and have high self-esteem than those who earn less salary.

   a) What are the variables in this study?   (2 marks)
   b) What would be good names for the variables? Identify the independent variable(s) and dependent variable(s).   (4 marks)
   c) Describe how each variable varies (i.e., whether the variable is categorical or continuous). Provide justification for why each variable varies the way you describe.   (14 marks)

8. Critically appraise five research design methods that you can use in solving health-related issues.   (20Marks)

9. Answer the following questions

   a. Discuss 5 types of validity   (5marks)
   b. Discuss 5 threats to internal   (5marks)
   c. Explain why studies with good internal validity often have poor external validity? Give an example of a situation where enhancing internal validity might impair external validity.   .
   .   (10marks)