MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
SECOND YEAR FIRST SEMESTER

SCHOOL OF BUSINESS AND ECONOMICS
MSC. ECONOMICS

COURSE CODE: ECO 8107

COURSE TITLE: RESEARCH METHODS

DATE: 8/2/2024   TIME: 1430-1630 HRS

INSTRUCTIONS TO CANDIDATES

1. Answer **QUESTION ONE** and any other **FOUR** questions Time **3 hours.**

*This paper consists of **FOUR** printed pages. Please turn over.*

QUESTION ONE (20 MARKS)

a) Establishing causality is difficult, whether conclusions have been derived inductively or deductively.

    i.   Explain and elaborate on the implications of this statement.

                                     (4 marks)

    ii.   Why is ascribing causality more difficult when conclusions have been reached through induction?   **(4 marks)**

    iii.   Correlation does not imply causation. Illustrate this point with an example.   **(4 marks)**

b) How to distinguish his research problem from a symptom (**4 Marks**)

c) While designing your research project instrument, how will you try to ensure that the instrument has;

    i.   Stability   (**1 mark**)

    ii.   Equivalence   (**1 mark**)

    iii.   Internal consistency   (**1 mark**)

    iv.   Content validity   (**1 mark**)

    v.   Predictive validity   (**1 mark**)

    vi.   Construct validity   (**1 mark**)

QUESTION TWO (20 MARKS)

a) Explain the four qualities of good research   **(8 marks)**

b) What is research design? Given your understanding of a good research design. Is a single research design suitable in all research studies? If not, why?   (**8 marks**)

c) There are different types of research, explain citing relevant examples

                                         (**4 marks**)

QUESTION THREE (20 MARKS)

a) Why do social scientists use or try to use experiments? What are the potential benefits and drawbacks of experiments in social sciences research?   (**10 Marks)**

b) You have been asked to determine how hospitals prepare and train volunteers. Since you know relatively little about this subject, how will you find out? Be as specific as possible.   (**10 marks)**

QUESTION FOUR (15 MARKS)

a) Explain the four functions of concepts in research   (**4 marks)**

b) What are the primary threats to internal validity? Identify and describe the different methods of controlling threats to internal validity.   (**10 marks)**

c) Explain the role and types of theories in research   (**6 marks)**

QUESTION FIVE

a) A certain population is divided into five strata so that $N1 = 2000$, $N2 = 2000$, $N3 = 1800$, $N4 = 1700$, and $N5 = 2500$. Respective standard deviations are: $s1 = 1.8$, $s2 = 4.0$, $s3 = 4.8$, $s4 = 4.8$, $s5 = 8.0$ and further the expected sampling cost in the first two strata is KES 1000 per interview and in the remaining three strata the sampling cost is KES 1500 per interview. How should a sample of size $n = 660$ be allocated to the five strata if we adopt proportionate sampling design; if we adopt disproportionate sampling design considering (i) only the differences in stratum variability (ii) differences in stratum variability as well as the differences in stratum sampling costs.   (**12 marks)**

b) Tabulate the different measurement scales, showing; the data characteristics for each; basic empirical operation for each; and hypothetical examples for each. (**8 marks**)

QUESTION SIX

a) Citing relevant examples discuss probability and non-probaility sampling techniques (**10 marks**)

b) Discuss the role of ethics in research (**10 marks**)

QUESTION SEVEN

a) Examine the merits and limitations of the observation method in collecting material. Illustrate your answer with suitable examples. (**8 marks**)

b) What three operations are involved in the demonstration of causality? Identify and discuss each operation. (**6 marks**)

c) Explain the sources of measurement errors in research. (**6 marks**)

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