



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

**FIRST YEAR FIRST SEMESTER EXAMINATIONS
FOR DEGREE OF MASTER OF SCIENCE IN
COMMUNITY NUTRITION AND DEVELOPMENT**

CITY CAMPUS

PCN 815: RESEARCH METHODOLOGY

Date: 1st February, 2018

Time: 9.00 - 12.00pm

INSTRUCTIONS:

- Follow the instructions as attached



INSTRUCTIONS:

- This paper is made up of three (3) sections, A, B, and C
- Section A has 10 marks and is composed of Multiple Choice Questions (MCQs)
- Section B has 10 marks and is composed of Short Answer Questions (SAQs)
- Section C has 40 marks and is composed of Long Answer Questions (LAQs)
- Answer ALL questions in sections A and B in the spaces provided in the question paper
- Answer any TWO (2) questions in section C (each question = 20 marks) in the answer booklet provided.

ANSWER SHEET FOR MCQ QUESTIONS

REG. NO _____
COURSE CODE AND TITLE _____
SECTION _____

	a	b	c	d	e
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

SECTION A

ANSWER ALL QUESTIONS IN THIS SECTION

Choose the correct answer(s) that apply to each of the following questions (10 Marks)

MCQ1. Which of the following is the research that is done to examine the findings of someone else using the "same variables but different people"?

- A. Exploration
- B. Hypothesis
- C. Replication
- D. Empiricism
- E. None of the above

MCQ2. _____ is the idea that knowledge comes from experience.

- A. Rationalism
- B. Deductive reasoning
- C. Logic
- D. Empiricism
- E. None of the above

MCQ3. Which scientific method focuses on testing hypotheses developed from theories?

- A. Deductive method
- B. Inductive method
- C. Hypothesis method
- D. Pattern method
- E. All of the above

MCQ4. A condition or characteristic that can take on different values or categories is called _____.

- A. A constant
- B. A variable

- C. A cause-and-effect relationship
- D. A descriptive relationship
- E. None of the above

MCQ5. Ethics is the set of principles and guidelines that help us to uphold the things we value.

- A. True
- B. False
- C. Partly true
- D. Partly false
- E. None of the above

MCQ6. Which of the following generally **CANNOT** be done in qualitative studies conducted in the field?

- A. Getting informed consent
- B. Keeping participants from physical harm
- C. Maintaining consent forms
- D. Having full anonymity rather than just confidentiality
- E. None of the above

MCQ7. Systematic error is associated with:

- A. Reliability
- B. Validity
- C. Confidence Interval
- D. Confidence level
- E. None of the above

MCQ8. Which of the following would generally require the largest sample size?

- A. Cluster sampling
- B. Simple random sampling
- C. Systematic sampling
- D. Proportional stratified sampling
- E. All of the above

MCQ9. Attrition generally occurs in research where _____.

- A. You do demographic research
- B. The study fails
- C. Some participants do not complete the study
- D. The study is very brief
- E. None of the above

MCQ10. The use of multiple observers to allow cross-checking of observations to make sure that the investigators agree with what took place is known as _____.

- A. Interpretive validity
- B. Researcher bias

- C. Multiple operationalism
- D. Investigator triangulation
- E. None of the above

SECTION B

ANSWER ALL QUESTIONS IN THIS SECTION (TOTAL=10 MARKS)

SAQ11. (a) Distinguish between a null hypothesis and alternative hypothesis using illustrations where necessary. **(2 marks)**

(b) Identify **TWO (2)** types of errors in hypothesis testing and state their relevance in decision making on test statistics. **(2 marks)**

(c) Symbolically represent null and alternative hypotheses. **(2 marks)**

SAQ12. a) Compare and contrast between a review article and a research article. **(2 marks)**

b) Provide distinguishing descriptions for *latent variables*, *observed variable* and *moderating variables*. **(2 marks)**

SECTION C (40 MARKS)

Answer question one (1) and any other one (1) question in this section (20 marks each)

LAQ13. A nutrition student was asked to set up an experiment to determine the effect of caffeine on anxiety level of students in high school. The student decided to divide the high school students into two groups and each student was assigned to each group at random. Both groups were followed for a period of 1 month and information on anxiety levels taken on daily basis. **(20 marks)**

a. What type of study design is described above? **(1 mark)**

b. Identify **TWO (2)** validity issues the student would consider important for the study. **(2 marks)**

c. Describe **FOUR (4)** threats for each of the validity issues identified in (b) **(8 marks)**

(4 marks)

d. Outline the five errors likely to be associated with the study design described above. **(5 marks)**

- e. Explain what other alternative design the student could use to study the effect.
(2 marks)

LAQ14. Discuss exhaustively **FIVE (5)** steps you would follow to design a good structured questionnaire. (20 marks)

LAQ15. Discuss **FIVE (5)** basic ethical principles for researches involving human participants, giving relevant example. (20 marks)