



(UNIVERSITY OF CHOICE)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**SECOND YEAR, FIRST TRIMESTER EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN HEALTH PROFESSIONS  
EDUCATION**

**COURSE CODE: HPE 208**

**COURSE TITLE: INTRODUCTION TO RESEARCH I**

**DATE: MONDAY 15<sup>TH</sup> DECEMBER 2014**  
**12.00PM**

**TIME: 9.00 AM-**

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**INSTRUCTIONS TO CANDIDATES**

**ANSWER ALL QUESTIONS**

**SEC A: MULTIPLE CHOICE QUESTIONS (MCQ) 20 MARKS**

**SEC B: SHORT ANSWER QUESTIONS (SAQ) (40 MARKS)**

**SEC C : LONG ANSWER QUESTIONS (LAQ) (40 MARKS)**

**TIME: 3 HOURS**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

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**Section A: Multiple Choice Questions ( MCQ)**

1. A study that generates knowledge which directly influence clinical practice is :
  - a. Basic research
  - b. Applied research
  - c. Qualitative research
  - d. Prospective research
2. A framework means ;
  - e. The conceptual underpinning of a study
  - f. Concepts at very high levels of abstraction
  - g. Integrated set of concepts that present a view of phenomena.
  - h. Symbolic representation of concepts or variables
3. Which of the following is an outcome variable?
  - a. Independent
  - b. Extraneous
  - c. Dependent
  - d. Causal
4. A statement outlining the reasons for carrying out a study is ;
  - a. Purpose
  - b. Rationale
  - c. Objective
  - d. Significance
5. Indicate whether the following statements are True or False
  - a. External validity is the extent to which the effects detected in the study are a true reflection of reality.
  - b. Content validity is the extent to which the measure adequately the various dimensions of a concept under investigation.
6. Research that describes the lived experience is :
  - a. Grounded theory
  - b. Phenomenology
  - c. Historical
  - d. Ethnography
7. A symbolic representation of concepts or variables and their interrelationships refers to;
  - a. Model
  - b. Framework
  - c. Construct
  - d. Theory
8. Ex post facto/correlation study means;
  - a. Phenomena in the study is linked to the phenomena that occurred in the past
  - b. Study is conducted after variations in independent variable have occurred
  - c. Investigating what might in future
  - d. Data are collected at more than one point in time
9. A sampling method that uses groups rather than individuals is referred to as

- a. Stratified
  - b. Systematic
  - c. Cluster
  - d. Network
10. A study in which data collection is done both before and after the intervention is;
- a. Factorial
  - b. Cross-over design
  - c. Pre-test-post test
  - d. Randomized- block design
11. The measurement scale with an absolute zero point is;
- a. Nominal
  - b. Ordinal
  - c. Interval
  - d. Ratio
12. The extent to which the effects detected in the study are a true reflection of reality refers to:
- a. External validity
  - b. Internal validity
  - c. Content validity
  - d. Face validity
13. A variable that that provides a link between the independent and dependent variables is;
- a. Intervening
  - b. Confounding
  - c. Extraneous
  - d. Antecedent
14. The following are measures of variability;
- a. Range, standard deviation
  - b. Range, median
  - c. Mode, median
  - d. Mode, mean
15. The following are examples of inferential statistics;
- a. Standard deviation, variance
  - b. Correlation, regression
  - c. Variance, Range
  - d. T-test, standard deviation
16. Indicate whether the following statements are True or False
- a. Research questions are interrogative statements rather than declarative.
  - b. Qualitative research is used to test theories
  - c. The sample in qualitative research is large
  - d. Life histories are narrative self-disclosures about individual life experiences
17. Match items in column A to statements in column B
- Column A
- i. A process by which specifics are inferred from general principles

- ii. Specifies not only the existence but the direction of a relationship
- iii. System of organizing concepts
- iv. Building theories

Column B

- A. Directional hypothesis
- B. Information gathered
- C. Deductive reasoning
- D. Inductive reasoning
- E. Qualitative research
- F. Quantitative research
- G. Theory
- H. Concepts

18. Descriptive study designs include:

- a. Prevalence and incidence studies
- b. Prospective and retrospective studies
- c. Time series and pre-test post-test studies
- d. Randomized clinical trials and Solomon four designs

19. An experimental study in which there is manipulation of more than one independent variable:

- a. Pre-test –post-test
- b. Factorial
- c. Cross-over design
- d. Solomon four group design

**Section B: Short Answer Questions ( 40 marks)**

- 1. State five purposes of research (5 marks )
- 2. State five factors that contribute to errors in research(5 marks )
- 3. Explain three major ethical issues in research (6 marks)
- 4. State five sources of data in health professions (5 marks )
- 5. State three ethical responsibilities of a researcher during research (3 marks )
- 6. Outline three strengths and three limitations of experimental research ( 6marks )
- 7. State five ways of ensuring credibility in qualitative research (5marks)
- 8. State five disadvantages of using a questionnaire for data collection (5marks)

**Section C: Long Answer Questions (40 marks)**

- 1. Describe the differences between qualitative and quantitative researches (20 marks)
- 2. Discuss the components of research methodology (20 marks)