



(University of Choice)

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

STAR ANNEX

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR
SECOND YEAR SUPPLEMENTARY/SPECIAL
EXAMINATIONS**

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN GLOBAL HEALTH AND TRAVEL
MEDICINE**

COURSE CODE: NCG 210

COURSE TITLE: RESEARCH METHODS

DATE: THURSDAY 6TH OCTOBER 2022 TIME: 8 AM -11AM

INSTRUCTIONS TO CANDIDATES

1. Question Enter your examination number and course code in the space provided in the answer sheet
2. All questions are compulsory.
3. For Part One MCQ, write the correct answer in the answer sheet provided
4. Each MCQ is 1 mark
5. For Part Two, Short answer questions, answer each question following each other
6. For part three, Long Answer questions, answer each subsections following each other

MMUST observes ZERO tolerance to examination cheating

SECTION A (MULTIPLE CHOICE QUESTIONS 20 MARKS)

1. Which of the following is NOT one of the characteristics of an Action Research?
 - a. It is situational
 - b. It is a small scale intervention
 - c. It is a reflective inquiry
 - d. It takes place in sterile environment
2. Which research project is an example of basic research?
 - a. Control of dengue in Palawan
 - b. Improve agricultural crop production
 - c. An examination of the effect of nutrients on the growth of fish in lakes within five different watersheds
 - d. Improve the energy efficiency of homes, offices or modes of transportation
3. All are the importance/value of research EXCEPT
 - a. Improving practice
 - b. Improving important policy issues
 - c. Reduce knowledge about issues
 - d. Develop student research skills
4. Provide insights and understanding of the problem at hand.
 - a. Qualitative Research
 - b. Grounded Theory
 - c. Statement of a hypothesis
 - d. Quantitative Research
5. It is a one-one-one discussions designed to provide a detailed picture of individual participant's views about their interest.
 - a. In-depth Interview
 - b. Focus Group
 - c. Photo Ethnography
 - d. Observation
6. It is based on data that cannot be measured or counted but can be collected and interpreted through observation.
 - a. Qualitative research
 - b. Quantifiable research
 - c. Quantitative research
 - d. All Scientific research
7. Using someone else's work to help you without their permission is:
 - a. citations
 - b. friendship
 - c. research
 - d. plagiarism
8. Why do you have to cite your sources?

- a. You need to give credit to the original authors of the information
 - b. It is a part of MLA format
 - c. Mrs. Stein says so
 - d. All of the above
9. **This refers to a paper and pencil data gathering method wherein the subject or respondent completely answers a series of questions.**
- a. interview method
 - b. question and answer method
 - c. methodology
 - d. questionnaire
10. **A remark, statement or comment based on something one has seen, heard or noticed.**
- a. Hearsay
 - b. Gossip
 - c. Observation
 - d. Noticed Actions
11. **The extent of the area or subject matter that something deals with or to which it is relevant.**
- a. Limitation
 - b. Scope
 - c. Methodology
 - d. Literature
12. **This refers to the information or content from different sources related to the topic.**
- a. Literature
 - b. Methodology
 - c. References
 - d. Sources
13. **It is also known as "fundamental" or "pure" research.**
- a. Basic Research
 - b. Applied Research
 - c. Action Research
 - d. Formal Research
14. **Which of the following is NOT one of the characteristics of a Basic Research?**
- a. It is based on the belief
 - b. It is explanatory in nature
 - c. It involves collection and analysis of data to develop or enhance theory
 - d. It examines the usefulness of theory in solving practical educational problems
15. **Focused on immediate application, not on the development of a theory, not upon general application.**
- a. Basic Research
 - b. Action Research
 - c. Formal Research

- d. Applied Research
- 16. Which of the following is an example of an Applied Research?**
- Searching how did the universe begin
 - Finding the specific genetic code of a fruit fly
 - Treat or cure a specific disease
 - Development of a theory
- 17. Concerned with application of a theory to the solution of a problem.**
- Applied Research
 - Action Research
 - Formal Research
 - Basic Research
- 18. The sources you used on your research are-**
- Sources
 - References
 - Literature
 - Result
- 19. Which ONE of the following is the benefit of using simple random sampling?**
- We can calculate the accuracy of the results.
 - The results are always representative.
 - Interviewers can choose respondents freely.
 - Informants can refuse to participate.
- 20. Which ONE of the following is the main problem with using non-probability sampling techniques?**
- The expense.
 - The results are never representative.
 - Human judgement error.
 - Informants can refuse to participate.

SECTION B (SHORT ANSWER QUESTIONS) (40 marks)

- Differentiate between the following terms (8marks)
 - an independent and dependent variable
 - case control and retrospective cohort
 - sample and population
 - probability sampling and nonprobability sampling
- Outline the 7 (**seven**) basic steps of the scientific method (research) (7 marks)
- Write short notes on
 - Cohort studies (3 marks)
 - Cross-sectional studies (2 Marks)
 - Case control (2 marks)
- Explain any 4 (**four**) ethical principles that govern research (8 marks)

SECTION C (LONG ESSAY QUESTIONS) (40 marks)

1. A researcher is interested in finding out why students at the university decide to take a course in Global Health. He is going to use a self-report questionnaire. But since it is difficult to interview all the students, he/she decides to select a representative sample to which he/she will administer the questionnaire. Describe any 5 sampling techniques he/she can use to achieve the objective. (20 marks)
2. A researcher has conducted an independent measures design experiment to investigate whether chewing gum influences concentration. She recorded how many changes were detected in a 'spot-the-difference' puzzle by people chewing gum when completing the task, compared to those who were not. (20 marks)
 - a. Name two variables present in the experiment. (2)
 - b. Outline 3 strength and 3 weakness of using experimental design. (6)
 - c. What is a quasi-experiment? (2)
 - d. Explain the difference between a true experiment and a quasi-experiment. (4)
 - e. Why would a quasi-experiment not be appropriate for this study? (2)
 - f. State a strength and a weakness of using quasi experiments. (4)