



# TECHNICAL UNIVERSITY OF MOMBASA

---

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**DIPLOMA IN MEDICAL SCIENCES**

**AML 2212 : RESEARCH METHODS**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE:** Pick Date May 2016

## **Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, examination pass and student ID*

This paper consists of **TWO** Section(s). Attempt ALL questions.

**Circle the correct answer in section A.**

1. The process of drawing a sample from a population is known as \_\_\_\_\_.
  - a. Sampling
  - b. Census
  - c. Survey research
  - d. None of the above
  
2. The nonrandom sampling type that involves selecting a convenience sample from a population with a specific set of characteristics for your research study is called \_\_\_\_\_.
  - a. Convenience sampling
  - b. Quota sampling
  - c. Purposive sampling
  - d. Snowball sampling
  
3. In which of the following nonrandom sampling techniques does the researcher ask the research participants to identify other potential research participants?
  - a. Snowball

- b. Convenience
- c. Purposive
- d. Quota

4. When evaluating tests and assessments, “reliability” refers to asking ourselves which of the following questions?

- a. Does it measure what it is supposed to measure?
- b. Are there ways to avoid subjective judgments when measuring something?
- c. Does it give consistent results?
- d. Does it measure multiple constructs?

5. Which of the following is not an ethical guideline for conducting research with humans?

- a. Getting informed consent of the participant
- b. Telling participants they must continue until the study has been completed
- c. keeping participants’ identity anonymous
- d. Telling participants they are free to withdraw at any time

6. What is the median of the following set of scores?

18, 6, 12, 10, 14 ?

- A. 10
- B. 14
- C. 18
- D. 12

7. The most frequently occurring number in a set of values is called the \_\_\_\_.

- a. Mean
- b. Median
- c. Mode
- d. Range

8. Which measure of central tendency takes into account the magnitude of scores?

- a. Mean
- b. Median
- c. Mode
- d. Range

9. Computer database searches can be done

- A. With a computer cd-rom drive
- B. At the library
- C. Online
- D. All of the above

10. A research proposal.....

- A. Should be detailed
- B. Should be given to others for review and comments
- C. Sets out the rationale for a research study
- D. All of the above

11. An ordinal scale is:

- a. The simplest form of measurement
- b. A rank-order scale of measurement
- c. A scale with equal intervals between adjacent numbers
- d. A categorical scale

12. People who are available, volunteer, or can be easily recruited are used in the sampling method called \_\_\_\_\_.

- a. Simple random sampling
- b. Cluster sampling
- c. Systematic sampling
- d. Convenience sampling

13. In an experiment to find out if taking ginseng increases IQ scores, the IQ scores would be the.....

- a. independent variable.
- b. a control variable.
- c. an extraneous variable.
- d. the dependent variable.

14. In which part of the proposal are research participants discussed in detail?

- a. Literature review
- b. Methods
- c. Appendix
- d. abstract

15. What must Research participants give before they can participate in a study?

- a. Guidelines
- b. A commitment
- c. Informed consent
- d. Private information

16. The act of publishing the same data and results in more than one journal or publication refers to which of the following professional issues:

- a. Partial publication
- b. Duplicate publication
- c. Deception
- d. Fallacy

17. What is it called when the participants are not revealed to anyone but researcher and staff?

- a. Confidentiality
- b. Anonymity
- c. Ethics
- d. Discretion.

18. Which is the process of gathering evidence supporting inferences based test scores?

- a. Validation
- b. Validity
- c. Reliability
- d. Prediction

19. When each member of a population has an equally likely chance of being selected, this is called:

- a. A nonrandom sampling method
- b. A quota sample
- c. A snowball sample
- d. random sampling

20. Which of the following types of sampling involves the researcher determining the appropriate sample sizes for the groups identified as important, and then taking convenience samples from those groups?

- a. Proportional stratified sampling
- b. Quota sampling
- c. One-stage cluster sampling
- d. Two-stage cluster sampling

21. Which of the following is not part of data processing?

- a. categorizing
- b. coding
- c. preparing master sheets
- d. preparing questionnaires

22. Which of the following is not included in a work plan?

- a. Activities
- b. Responsibility
- c. Time
- d. budget

23. Which of the following is not included when describing the study population in a proposal?

- a. Describe the hypothesis
- b. Mapping of area
- c. Showing accessibility of area
- d. Cooperation by community area

24. Which of the following is not included in the preliminary pages of a research report?

- a. Literature review
- b. Table of contents
- c. Acknowledgements
- d. Abstract

25. The kind of research that addresses a situation problem or phenomena existence is.....

- a. Exploratory
- b. Analytical
- c. Inferential
- d. Descriptive

26. Which of the following is a primary data source

- a. Journals
- b. Observation
- c. Hospital records
- d. Textbooks

27. Which of the following is not included in the title page?

- a. Name
- b. Title
- c. Purpose of research
- d. Method of sampling

28. Which of the following is not an example of type of measurement for medical history?

- a. Physical findings
- b. Diagnosis
- c. Medication
- d. Level of education

29. A.....is a subset of the population

- a. Parameter
- b. Statistic
- c. Sample
- d. data

30. Which of the following is not a type of nonrandom sampling?

- a. Cluster sampling
- b. Convenience sampling

- c. Quota sampling
- d. Purposive sampling

31. ....means to acknowledge the source of information.

- a. Sampling
- b. Referencing
- c. Plagiarism
- d. accusation

32. Which of the following verbs should not be used when stating objectives?

- a. to determine
- b. to compare
- c. to verify
- d. to appreciate

33. Which of the following should not be considered when stating objectives ?

- a. specific
- b. realistic
- c. time bound
- d. reliable

34. Which of the following is not an example of a nominal scale ?

- a.sex
- b.divorced
- c. single
- d. grade III disease

35. The .....population is from where a sample is actually collected from.

- A, target
- b. study

c. sampling frame

d. sample

36. The kind of sampling where individuals are put in groups before sampling is done is called .....

- a. purposive
- b. random
- c. systematic
- d. stratified

37. Which of the following is not considered when planning for data sorting and analysis?

- a. Operationalization of information
- b. Performing quality-control checks,
- c. Data processing, and
- d. Data analysis.

38. ....is the principle that obliges us to take positive steps to help others pursue their legitimate interests.

- a. Justice
- b. Beneficence
- c. Maleficence
- d. autonomy

39. ....is an ethical value where all subjects in any research project are always told the truth

- a. Confidentiality
- b. Fidelity
- c. Autonomy
- d. veracity

40. What must Research participants give before they can participate in a study?

- a. maintenance fee
- b. Guidelines
- c. Informed consent
- d. Private information

SECTION B (60 MARKS)

1. Describe the non-probability sampling methods giving relevant examples (20 marks)
2. Describe the different methods used in data collection (20 marks)
3. What are the possible sources of bias during data collection (20 marks)