

DECEMBER 2023
EBS 339
INTRODUCTION TO RESEARCH
METHODS IN EDUCATION
1 HOUR 30 MINUTES

Candidate's Index Number
Signature: _____

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
THIRD YEAR, END-OF-SECOND SEMESTER EXAMINATION, DECEMBER 2023

20TH DECEMBER 2023 INTRODUCTION TO RESEARCH 2:00 PM – 2:30 PM
METHODS IN EDUCATION

This paper consists of two sections, A and B. Answer ALL the questions in Section A and TWO questions from Section B, Section A will be collected after the first 30 minutes.

SECTION A
(20 MARKS)

Answer ALL the questions in this Section.

Items 1 to 20 are stems followed by four options lettered A to D. Read each item carefully and circle the letter of the correct or best option.

1. How do you judge the depth of any research? By the
 - A. research duration.
 - B. research objectives.
 - C. research title.
 - D. total expenditure on research.
2. Which of the following is the **most appropriate** reason for reviewing the existing literature?
 - A. Because without it you could never reach the required word count
 - B. To find out what is already known about your area of interest.
 - C. To help in your general studies.
 - D. To make sure you have a long list of references.
3. Which type of research focuses on exploring and understanding complex social phenomena through in-depth interviews and observations?
 - A. Experimental
 - B. Observational
 - C. Qualitative
 - D. Quantitative

4. In this type of research, the researcher directly manipulates one or more independent variables to observe their effects on a dependent variable.
 - A. Correlational
 - B. Descriptive
 - C. Experimental
 - D. Historical
5. Which of the following depicts the primary focus of action research?
 - A. Conducting experiments in a laboratory setting
 - B. Generating theoretical knowledge
 - C. Historical analysis
 - D. Solving practical problems and improving practices
6. In a study examining the impact of different teaching methods on student performance, the type of teaching method (Method A, Method B, Method C) is an example of which type of variable?
 - A. Categorical
 - B. Continuous
 - C. Dependent
 - D. Independent
7. A research problem should be specific to
 - A. avoid data collection and analysis.
 - B. ensure a clear and focused research study.
 - C. facilitate a broader exploration of multiple topics.
 - D. guide the researcher toward predetermined conclusions.
8. Which of the following is an example of a discrete variable in a research study?
 - A. Height of students in years
 - B. Number of students in a classroom
 - C. Temperature in degrees Celsius
 - D. Weight in kilograms
9. What is the key characteristic of purposive sampling in research?
 - A. It includes every element in the population of interest.
 - B. It is the same as stratified sampling.
 - C. It selects participants randomly from a population of different characteristics.
 - D. Participants are chosen based on specific criteria or characteristics.
10. A researcher is examining the relationship between the *type of exercise* (aerobic, strength training, or flexibility) and changes in participants' heart rates. The *type of exercise* is an example of which type of variable?
 - A. Dependent
 - B. Independent
 - C. Intervening
 - D. Mediating
11. When formulating a research problem, it is important to ensure that it is
 - A. based on the researcher's personal interests.
 - B. broad and all-encompassing.
 - C. feasible and researchable.
 - D. kept secret until the research is complete.

12. The variable *blood pressure* (e.g., low, normal, high) is an example of which type of variable?
- Categorical
 - Continuous
 - Nominal
 - Ordinal
13. Which of the following is **not** a characteristic of a good research problem statement? It is
- relevant to the field of study.
 - researchable and can be addressed through data collection.
 - specific and clearly defined.
 - too broad and covers multiple research questions.
14. Which of the following is a common source of research problems?
- Data analysis techniques
 - Existing research literature
 - Personal opinions and biases
 - The research methods chosen
15. Which of the following is an example of a research problem statement?
- Are you addicted to social media and celebrities?
 - Facebook, Twitter, and Instagram are popular social media platforms.
 - What is the impact of social media usage on teenagers' mental health?
 - What is the name given to people who use social media in Ghana?
16. What is the **most significant** reason for conducting a literature review when defining a research problem? To
- choose the research methods.
 - find answers to the research problem.
 - gather and analyze data for the research problem.
 - identify existing knowledge and gaps in the field.
17. In a research study, a random sample of 150 students is selected from each grade level (1st grade, 2nd grade, 3rd grade) in a school. What type of sampling is **most appropriate** to use?
- Convenience
 - Simple random
 - Snowball
 - Stratified
18. A researcher is studying the impact of a new drug on blood pressure. The null hypothesis for this study would likely be the new drug will
- cure all blood-related problems.
 - have no effect on blood pressure.
 - increase blood pressure.
 - reduce blood pressure.
19. When conducting hypothesis testing, if the p-value is less than the level of significance (alpha), what is the typical course of action? hypothesis
- Accept the null
 - Accept the research
 - Reject the null
 - Reject the research

20. Which of the following statements is **true** regarding a literature review? It
- A. does not require referencing another research.
 - B. helps build a theoretical framework for the research.
 - C. is typically the shortest section of a research paper.
 - D. presents the researcher's original study findings.