

MAY 2014
EPS 222S
RESEARCH METHODS IN EDUCATION
40 MINUTES

CANDIDATE'S INDEX NUMBER

UNIVERSITY OF CAPE COAST
INSTITUTE OF EDUCATION

TWO-YEAR DIPLOMA IN BASIC EDUCATION (SANDWICH)
SECOND YEAR END-OF-SECOND SEMESTER EXAMINATIONS, MAY 2014
PHASE 3

MAY 8, 2014 RESEARCH METHODS IN EDUCATION 9.00 AM – 9.40 AM

This paper consists of two sections, A and B. Answer ALL the questions in section A and TWO questions in section B. Section A will be collected at the end of the first 40 minutes.

SECTION A
(40 Marks)

Answer ALL the questions in this section

For questions 1 to 30 each stem is followed by four options lettered A to D. Read each question carefully and circle the letter that corresponds to the correct or best option.

1. Which one of the following statements about research is true?
 - A. All problems are researchable.
 - B. All research problems must fit the requirement of the scientific method.
 - C. Any problem built entirely around activity is a research problem.
 - D. Whenever a statistical formula is used to organize, arrange and present data, it is research.

2. The purpose of educational research is to
 - A. collect data on educational phenomena.
 - B. determine educational phenomena.
 - C. state educational phenomena
 - D. understand and explain educational phenomena.

3. The following statements are characteristics of research **except**.....
 - A. research begins with an issue.
 - B. research demands a plan.
 - C. research requires clear statement of problem.
 - D. research is vertical.

4. The method of knowing which involves observing specific instances and then generalizing from the instances is known as.....
 - A. deduction.
 - B. induction.
 - C. logic
 - D. syllogism.

5. The section of a research report that presents inferences derived from the finding is known as
- A. conclusion.
 - B. recommendations.
 - C. results.
 - D. summary.
6. The abstract should accurately, completely and concisely capture the following essentials of the study **except**.....
- A. conclusions.
 - B. implications.
 - C. methodology used.
 - D. results of the study.
7. An English Teacher gave a class test to her pupils. She realised, after grading the test that every student in the class scored 20%. What will be the standard deviation of the score distribution, if 20 students took part in the test.
- A. 20.
 - B. 0.2.
 - C. 0.
 - D. 0.
8. An example of a categorical variable is.....
- A. achievement.
 - B. aptitude.
 - C. gender.
 - D. height.
9. Researchers usually sample from.....
- A. accessible population.
 - B. available population.
 - C. random numbers.
 - D. target population.
10. A true experimental design is distinguished by.....
- A. researcher control over most extraneous variable.
 - B. random assignment of subjects.
 - C. stronger internal validity.
 - D. stronger external validity.
11. In conducting research which of the following steps should generally be taken first?
- A. Deciding on kind of literature to review.
 - B. Formulation of working hypothesis and/or research questions.
 - C. Formulation of the topic to be researched into.
 - D. Formulation of research problem.
12. A distinguishing feature about a variable is that it
- A. contains different values or amounts.
 - B. is confounding or extraneous.
 - C. is independent or dependent.
 - D. varies in relation to defined characteristics.

13. An extraneous or confounding variable
- contains an infinite number of values.
 - is unobservable.
 - is used to mediate the independent variable.
 - is related to the dependent variable.
14. Each of the following is a criterion for a good research problem **except** that the problem.....
- indicates the type of research.
 - involves variables capable of being precisely defined and measured.
 - is about ideals and values.
 - is amenable to study through scientific investigation.
15. The null hypothesis states that there is
- a small chance of a difference between groups.
 - a statistical difference between the groups.
 - no difference between the groups.
 - no chance for a difference between the groups.
16. The features that best characterizes experimental research is the
- making of exact measurement.
 - repetition of observation.
 - systematic variation of conditions.
 - the existence of extraneous and confounding variables.
17. Which of the following factors should **not** influence the decision when one is selecting a problem for research.
- Is the problem amendable?
 - Will I be able to prove that my previously held beliefs are true?
 - Will solution to the problem advance knowledge in my field of study?
 - Will the study lead to the development of other investigations?
18. A study is mainly seeking knowledge about nature for the sake of understanding it better. What type of research is this study?
- Action research.
 - Applied research.
 - Basic research.
 - Evaluation research .
19. Which of the following research topics is **not** researchable?
- What is the relationship between length of school day and BECE scores of JHS.
 - One good turn deserves another.
 - Attitude of basic education in teachers towards the use of continuous assessment.
 - Are girls performance in Mathematics better than boys at the JHS level?
20. All the following are characteristics of the scientific knowledge **except**.....
- control of bias.
 - objectivity.
 - unwillingness to alter beliefs
 - verification.
21. Which of the following type of research can be undertaken by a classroom teacher to solve his/her problems in the classroom?
- Action research.
 - Applied research.
 - Basic research.
 - Evaluation research.

22. The most effective way to organize a review of literature is
- to begin with the most recent studies.
 - to structure paragraphs chronologically.
 - to start with the primary sources.
 - by themes and sub themes.
23. What type of conclusion are warranted from descriptive studies?
- Causal.
 - Causal comparative.
 - Current characteristics.
 - Relationship.
24. Which of the following is **not** a skill needed by a case study investigator?
- He/she must have a grasp of the issues he/she is studying.
 - Lack of bias.
 - Needs to be a good listener and observer.
 - The investigator should not be flexible.
25. Examining research data with the view to correcting mistake in it is termed.....
- coding.
 - editing.
 - scoring.
 - none of the above.
26. When the elements of a population are grouped into sub-population and samples selected from the sub-population, it is known as sampling.
- cluster
 - snowball
 - convenient
 - purposive
27. If you have socio-economic background as a variable in your research work, how will you categorise the different backgrounds?
- Good, average and low.
 - High, average and low.
 - Lower, middle and upper.
 - Rich, middle, and poor.
28. The score that put a distribution exactly into two equal parts is called?
- Mean.
 - Median.
 - Range.
 - Scale.
29. What is the range in the following set of scores? 76,30, 15, 89, 50, 12, 60, 13, 23, 81, 41.
- 77
 - 60
 - 41
 - 12
30. Which of the following sampling procedure requires a sampling frame?
- Convenience.
 - Purposive.
 - Quota.
 - Stratified.

For questions 31 to 36, write the correct or most appropriate responses in the spaces provided.

31. The way of knowing that involves going through or doing something or feeling something is known as
32. Which method of knowing has the search for new knowledge as its limitation?
.....
33. The type of research feasible to be carried out at the school level by the classroom teacher to solve a local problem is.....
34. A research problem that can be answered by collecting and analyzing data is said to be
35. A research problem can be stated in a question form and in a
36. State any **two** forms of observation that can be used in Action Research.
 - (a)
 - (b)

Questions 37 to 39 are statements followed by True and False. Read each statement carefully and indicate whether it is True or False by circling the letter of the correct option.

37. The result of a study should not be necessarily presented in the order of the research questions or hypothesis.
 - A. True
 - B. False
38. When preparing a table to present a data in a research report, all column lines should **not** be allowed to appear.
 - A. True
 - B. False
39. The data analysis section of a proposal must indicate how each hypothesis is to be tested.
 - A. True
 - B. False